LIST OF ABBREVIATIONS AND ACRONYMS

ABBREVIATION	MEANING
AIDS	Acquired immune deficiency syndrome
CDC	Centers for Disease Control and Prevention
CHC	Community health centre
DBE	Department of Basic Education
DoE	Department of Education
DoH	Department of Health
DSD	Department of Social Development
FGI	Focus group interviews
HCT	HIV counselling and testing
HIV	Human immunodeficiency virus
ISHP	Integrated School Health Policy
LO	Life Orientation
MCDMCH	Ministry of Community Development, Mother and Child Health
MDG	Millennium Development Goal
NICE	National Institute for Health and Care Excellence
NSP	National Strategic Plan
PHC	Primary health care
PMTCT	Prevention of mother-to-child transmission
SBHC	School-based health centre/ clinic
SBS	School-based support teams

SDG	Sustainable Development Goals
SEM	Social Ecological Model
SEP	Social Ecological Perspective
SGB	School governing body
SHS	School health services
SMT	School management teams
SONA	State of the Nation Address
SRH	Sexual and reproductive health
STD	Sexually transmitted disease
STI	Sexually transmitted infection
ТВ	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations International Children's Emergency Fund
WBOT	Ward-based outreach team
WHO	World Health Organisation
YFC	Youth-friendly clinic
YFS	Youth-friendly services

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CHAPTER 1

BACKGROUND AND ORIENTATON OF THE STUDY

1.1 INTRODUCTION

Currently there is no cure yet for HIV (Human immunodeficiency virus), but, if detected early enough, there is effective antiretroviral treatment available so that people with HIV can live a normal, healthy life. Still, HIV remains a critical global health problem. In 2016, it was estimated that 36.7 million people were living with HIV and AIDS (Acquired immunodeficiency syndrome) worldwide of whom 1.8 million were children. The prevalence of HIV among adults was 0.8% (Kaiser Family Foundation 2017:1; Joint United Nations Programme on HIV/AIDS (UNAIDS) 2017a:1). Around 30% of the same people did not know that they were living with the virus. Also in 2016, there were approximately 1.8 million new HIV infections – which was a decline from the 2.1 million new infections reported in 2015 (UNAIDS 2017a:6). In spite of this decline, much more needs to be done to improve the knowledge of HIV as well as HIV testing among adolescents and young adults.

According to Kanekar (2011:11), the extent of sexual transmitted infections/human immunodeficiency virus/acquired immune deficiency syndrome (STI/HIV/AIDS) among adolescents and teenagers is reaching alarming epidemic levels worldwide. UNAIDS (2017b:8) reports that with 59% of new infections occurring among young people aged 15 – 24 years, young women are especially at risk of becoming part of the newly infected HIV positive statistics in this age group since 15% of all women identified as living with HIV were between 15 and 24 years old. It is estimated that globally 11.8 million people between the ages 15 and 24 were living with HIV in 2007(Enobong and Itohowo 2013:139). Of this 11.8 million people living with HIV an estimated 2.1 million were adolescents between the ages of 10 and 19 years in 2016 (The United Nations Children's Fund (UNICEF) 2017b:3).

About half of the new HIV infections worldwide occur in young people, including school-going teenagers. Reporting on the current status and progress of HIV and AIDS, UNICEF (2017b:3) states in 2016 approximately 610 000 young people between the ages 15 to 24 were newly

infected with HIV. Of these newly infected cases, 260 000 were adolescents between the ages of 15 and 19 who lived in sub-Saharan Africa. The sub-Saharan region is said to be the region most affected by HIV (UNICEF 2016a:5). South Africa (SA) as well faces this critical public health problem – it is ranked number one in the world with 7.1 million people living with HIV and AIDS in 2016 (Avert 2016; Odendaal and Lewin 2014:4; Kaiser Family Foundation 2017:2).

According to Statistics South Africa (StatsSA) (2017:7), the total number of people living with HIV and AIDS in SA increased from 4.94 million in 2002 to 7.06 million in 2017. Furthermore, for 2017, an estimated 12.6 % of the total South African population was HIV positive. HIV and AIDS education as a prevention measure has been on the increase ever since the realisation of the pandemic (Omage and Omage 2013:311). Indeed, various HIV and AIDS prevention programmes have proven to effectively reduce infection worldwide. On the other hand, such prevention programmes have evidently not reduced the infection rates in South Africa, especially among young people. The World Health Organization (WHO) (2016:8) associates the increase of HIV infection among women between the ages of 15 and 24 with various social factors as well as insufficient access to education and sexual and reproductive health services. Omage and Omage (2013:311) further indicate that in spite of continuous education and awareness programmes, the increasing rate of the youths' involvement in unsafe sex and other practices that expose them to HIV infection, keeps on escalating. UNAIDS/UNICEF (2017:4) reports there has been an increase in AIDS-related deaths among adolescents for the past decade as opposed to a decrease among all other age groups. "At the current pace, a projected 35,000 adolescents will die from AIDSrelated illnesses in 25 countries in 2020", amongst the 25 countries, South Africa is included (UNAIDS/UNICEF 2016:4). Therefore, there is a need for HIV and AIDS health promotion interventions that specifically support the reduction of new infections among youths.

In South Africa, HIV and AIDS prevention falls within the scope of primary health care (PHC) programmes. In the South African National Strategic Plan (NSP) for HIV, TB and STIs 2017 – 2022, eight goals are documented. The first goal is set to accelerate the prevention activities in order to reduce new HIV and TB infections as well as new STIs (South African National Aids Council (SANAC) (2017:XIV). The objective of this goal is to reduce new HIV infections to less than 100 000 by 2022 through combination prevention interventions. This will be realised through a number of activities including revitalising information, education and communication programmes in schools, health workplaces and community settings (SANAC 2017:XIV).

In public schools, HIV and AIDS prevention programmes has been offered as part of the Life Orientation school curriculum (Department of Education (DoE 2002a; IRIN/PlusNews Report 2008;

Mukoma, et al 2009:38; International Bureau of Education (IBE) 2012; Fatoba 2013:3). According to the foreword by Motsoaledi and Motshekga in the Integrated School Health Policy, there were more than 12 million learners enrolled in public schools in South Africa in 2012 (NDoH and DBE 2012:3). In 2016, there were nearly 19.4 million learners enrolled in South African schools, a marked increase of the national enrolment of learners (Statistics South Africa 2016:50). Preventive interventions that target adolescents present an opportunity to reduce the future burden of HIV and AIDS. These interventions further allow time for maximum impact on health to be achieved in the coming years (Salam, Haroon, Ahmed, Das and Bhutta 2014:9). The effectiveness of school-based HIV prevention programmes are therefore of critical importance, as the message about HIV and AIDS prevention can reach a large number of young people.

HIV and AIDS, sex education and life skills exist in schools as part of the wider Life Orientation curriculum which was implemented in 2002 (DoE 2002b:, IRIN/PlusNews Report 2008, Mukoma, et al 2009:38). In addition, a number of other programmes such as Stepping Stones, Healthwise, Sex Education Curriculum (SATZ) and the Tshwane Peer Education and Support Programme (Harrison, Newell, Imrie, Haddinott 2010:4) are available as co-curricular HIV and AIDS prevention programmes. However, it has been observed that there are challenges in meeting the objectives of the HIV and AIDS education programme. A body of knowledge has developed over the past decade based on the monitoring and evaluation of school-based HIV and AIDS prevention programmes. Studies indicate a lack of involvement of stakeholders, insufficient knowledge and skills of educators together with inappropriate values and beliefs of educators as barriers to effective implementation (Iyer, Clarke and Aggleton 2014:127; Nqaba 2014:20, 47-49; Madiba and Mokgatle 2016:7).

Mkhize (2013) quotes the Minister of Health, Dr Aaron Motsoaledi, who spoke at the launch of the 5-year Strategy of Nursing where he highlighted the indispensable role of nurses in the fight against HIV and AIDS: "The nursing services are the heartbeat of primary health care, it might be easy to forget that the nursing fraternity helped achieve something we couldn't have in three years – (increasing) life expectancy from 56 to 60 years. People may wonder what it has to do with nursing, but in terms of expanding HIV programmes, we couldn't have done it without nurses." Arguably, this statement may also be true for the success of the school HIV and AIDS prevention programmes.

Nursing services are key to preventing and alleviating the impact of HIV and AIDS. In 2010, in his State of the Nation Address (SONA), the President of the Republic of South Africa, President Jacob Zuma, committed the government to reigniting health programmes in public schools in South

Africa (South African History 2010). This commitment was further emphasised by the current President of the Republic of South Africa, President Cyril Ramaphosa in his SONA on the 16 February 2018. The president committed to take the next critical step to eliminate HIV, confront lifestyle diseases and involve the private sector to mobilise resources to fight the diseases (Mbeki 2018:13). This commitment is in line with the health sector's aim of providing health services to all sections of the population through the primary health care (PHC) approach which embodies all elements of healthcare, with specific emphasis on preventive and promotive healthcare. The president's intent in the SONA gave birth to the Integrated School Health Policy (ISHP) which was launched on 22 October 2012. This policy is also the result of the collaboration and partnership between the National Department of Health (NDoH) and the Department of Basic Education (DBE). The Integrated School Health Policy (ISHP) aims at building on and strengthening the existing school health services. Nurses, especially the school health nurses, need to take a leading role in the school health programme. The following are key strategies outlined in the policy (NDoH and DBE 2012:11) to achieve the policy objectives: health promotion and health education; the provision of an essential package of health services in schools; coordination and partnership; capacity building; and community participation.

The proper implementation of the key strategies in the Integrated School Health Policy (ISHP) and full participation of the various role players involved in the school-based HIV and AIDS prevention programme are critical for the success of the programme. This may further contribute to the achievement of the Sustainable Development Goals (SDGs) which replaced the Millennium Development Goal (MDG) targets (Kutesa 2015:5). However, the ISHP does not provide guidelines for coordination and partnership, capacity building and community participation. To strengthen the Integrated school Health Policy of 2012, the National Adolescent and Youth Health Policy (AYHP) of 2017 aims for a realistic, practical approach to health programming. Despite the emphasis by the AYHP of the commitments of the National department of Health, this policy recognises the critical role of various government departments and agencies in the supportive, streamlined and successful implementation of health programmes (Department of Health 2017:4).

The implementation of the 2030 Agenda for Sustainable Development, which is the official transformative plan of action based on the 17 Sustainable Development Goals, began on 1 January 2016 globally. The SDGs were set to address urgent global challenges over the next 15 years (United Nations (UN) 2016:2). The United Nations (UN) (2016:2) and Sachs (2012:2206) view the SDG agenda as a road map for our people and our planet to build on the successes of the Millennium Development Goals and ensure viable social and economic progress worldwide. The SDG goals seek not only to eradicate extreme poverty, but also to integrate and balance the three

dimensions of sustainable development – economic, social and environmental – in a comprehensive global vision. The issue of HIV and AIDS prevention is covered in Goal 3 of the SDGs. The aim of Goal 3 is to ensure health and well-being for all people of all ages by improving reproductive, maternal and child health; ending the epidemics of major communicable diseases; reducing non-communicable and environmental diseases; achieving universal health coverage; and ensuring access to safe, affordable and effective medicines and vaccines for all (United Nations 2016:4). Therefore, this study will assist to reinforce HIV and AIDS school-based health promotion interventions to empower both role players and learners.

The current study explored the roles and challenges experienced by local role players to implement the school-based HIV and AIDS prevention programme and developed guidelines for local role players to implement the HIV and AIDS prevention programmes in local high school settings.

1.2 PROBLEM STATEMENT

HIV continues to be a major global public health issue. Various strategies and programmes are used across the globe in an attempt to increase awareness and reduce the spread of the HIV and AIDS epidemic (Avert 2017, Oketunji 2016:1). HIV and AIDS prevention programmes can be categorised according to at least three different dimensions: curriculum-based versus noncurriculum-based; interventions with and without characteristics of effective curriculum-based interventions; and adult-led versus peer-led interventions (United Nations International Children's Emergency Fund (UNICEF) 2014:11; UNAIDS Inter-Agency Task Team (UNAIDS IATT) 2008:8). The dimension used in the implementation the HIV and AIDS prevention programme may determine the success of the programme. On the other hand combination of these dimensions may prove beneficial to the programme as well. Currently in Zambia, the Ministry of Education School Health, Nutrition Policy and Guidance is included in the education strategy together with the implementation activities including HIV- and AIDS-related educator training, life skills activities, and HIV and AIDS educator training curriculum for learners with disabilities (UNICEF 2014:). In Kenya as well the national curriculum on HIV and AIDS was established with the assistance of United Nations International Children's Emergency Fund (UNICEF) in 1999 and 2000 (Situma, Yambo and Onyango 2015:35; Duflo, Dupas, Kremer and Samuel 2007:6). These studies concluded that the impact of the programme on the transmission of HIV among students was unclear; this was related to an increase in teen pregnancies outside marriages which may have indicated a higher risk for the spread of HIV and AIDS than a reduction of thereof due to partnership with older men

(Duflo, et al 2007:23). The unclear impact of the programme may be related to the dimension used to implement the programme.

In South Africa as well, the Department of Health developed national strategies for the prevention of HIV and AIDS to guide all departments. In this regard, the government established a policy on HIV and AIDS education. The National Policy on HIV and AIDS for Learners and Educators in Public Schools or Students and Educators in Further Education and Training Institutions was published in 1999 (Department of Education1999a; National Department of Health 2009; National Department of Health 2011). Various issues are addressed in the policy, including general and health safety in schools and the constitutional rights for educators and learners. According to this policy, all schools are to have a planned HIV and AIDS strategy. Schools are urged to establish health advisory committees responsible for developing, promoting and overseeing the implementation of this school plan on HIV and AIDS as well as generally advising the school governing body or council on all health matters including HIV and AIDS. All the provisions in the policy are to assure that proper implementation will result in the realisation of the goal as stipulated. One can posit that if these provisions are followed and all role players get involved, the fight for HIV and AIDS prevention among adolescents may be won as reasoned by Kumalo, Panday and Sithole (2012:np) as well as Thaver and Leao (2012:87-96). However, provisions in a policy without exploring the challenges which the role players experience and finding ways to resolve them, the goal of the policy will not be realised. In the case of the current study the policy on the implementation of the school-based HIV and AIDS programme was the concern. In alignment with the Integrated School Health Policy 2012 and other relevant policies, the National Adolescent and Youth Health Policy 2017, addresses issues of identifying key programmes for adolescents and youths. It also addresses the implementation of such programmes by department of health, interdepartmental programmes with Department of Basic Education, Higher Education and Social Development as well as the implementation partners of the various identified priority programmes (Department of Health 2017:6).

The responsibility for the success of the HIV and AIDS education and prevention programme may not be solely that of the educators in the schools; it has to be a social responsibility that includes every adult the youth comes into contact with, the teenagers themselves and also other adolescents (e.g. peers, friends or church groups) as envisaged by the policy. Community-focused intervention strategies for the prevention of the spread of HIV and AIDS is encouraged (Panday, Kumalo & Dano 2011:np). According to Matsaba (2010:3) and Ferreira, Ebersöhn and Botha (2013:13), collaboration and partnership among all role players are essential because teamwork effect change in all areas. In response to the challenges identified by the researcher, this study

proposes to explore and describe the roles and challenges of the local role players in implementing the school-based HIV and AIDS prevention programme. The identified roles and challenges will guide the development of guidelines to enhance the implementation of the school-based HIV and AIDS prevention programme

1.3 RATIONALE

The adolescents and youth of today are tomorrow's leader, yet the prevalence rate and death rate related to HIV and AIDS is notably high in this age group. Various research studies reveal that the adolescents and youth are predominantly vulnerable to HIV and AIDS. The vulnerability is due to their new exposure sexual activities and increased tendencies for experimentation, lack of accurate health information, lack of sexuality education and rightful intervention program, negative attitude and indulgence in risky behaviours adversely effects the prevention and control of HIV/AIDS (Saad, Subramanian and Tan 2013:195; Das, Sarkar, Nath, Tamuli and Kakoti 2016:1, Ike and Oluwatosin 2016:61). This age group is found in schools in numbers. The school-based HIV and AIDS prevention programme has been inadequately implemented in the majority of schools in South Africa. Many educators lack the skill, knowledge and resources for implementing the HIV and AIDS prevention programme efficiently.

The Integrated School Health Policy (ISHP) was launched by the Minister of Health and Minister of Education on 20 October 2012. The ISHP aims at building on and strengthening the existing school health services, but with some changes. The changes include commitment to close collaboration between role players; the Department of Health (DoH), Department of Basic Education (DBE) and the Department of Social Development (DSD) taking joint responsibility for ensuring that ISHP reaches all learners in all schools; assures the provision of services to learners in all educational phases; that more emphasis is placed on the provision of health services in schools; and a more systematic approach to its implementation is followed. The Integrated School Health Policy (ISHP) 2012 and the National Adolescent and Youth Health Policy (AYHP) 2017 aim to deliver integrated health services to all learners in all age groups; including HIV prevention. Concomitantly, the subject Life Orientation continues to also include HIV prevention.

The roles and responsibilities of the local role players have been clearly outlined in the new Integrated School Health Policy (ISHP) 2012 whereas in previous approaches neither identified role players nor their stipulated roles and responsibilities were addressed. However, up to the present the roles and challenges of these local role players have not been adequately explored to ensure the improved and efficient implementation of the HIV and AIDS prevention programmes in

schools. There are no implementation guidelines from the DoH or education departments to implement the school-based HIV and AIDS prevention programme – particularly in the ISHP.

In Mpumalanga, and specifically in Bushbuckridge, the implementation of the Life Orientation curriculum in schools as a prevention strategy for the spread of HIV and AIDS seems to have limited success as reflected in telephonic interviews the researcher held with five Life Orientation educators. The following challenges were identified with regard to Life Orientation educational subject:

- too few periods per week allocated to Life Orientation classes;
- limited or no material available to use for teaching;
- the unavailability of resources specifically due to the geographical locations of certain schools:
- cultural and religious beliefs of educators and learners;
- the lack of psychosocial support for both educators and learners;
- a lack of training opportunities to enhance the educators' knowledge on HIV and AIDS;
- and absence of school health services in certain schools.

The impact of the Integrated School Health Policy on the health of learners and HIV and AIDS prevention has not been assessed yet. Currently, there is no evidence of decreased HIV and AIDS prevalence among the school-going youth and adolescents in Mpumalanga, only one of the nine provinces in South Africa.

In addition, a gap exists in research on school health nursing and community involvement with regard to school-based HIV and AIDS prevention among young people. The gap identified also encompasses the participation, capacity, collaboration as well as the accountability of the local role players to the implementation of the school-based HIV and AIDS prevention programme in high schools.

Exploring and describing the roles and challenges experienced by local role players in the implementation of the HIV and AIDS prevention programmes in schools and developing guidelines to assist these role players to implement these programmes may assist in achieving the goal to reduce new HIV and AIDS prevention among young people to less than 100 000 by 2022 through combination prevention interventions. The AYHP 2017 as well seek pro-active approaches to health promotion and suggested evidence based comprehensive packages that combine the multiple needs of adolescents and youth; as they may have greater impact on risk behaviours than single interventions and comprehensive packages.

1.4 THE AIM AND RESEARCH QUESTION

The aim of the study was develop guidelines for the local role players in the implementation of the school-based HIV and AIDS prevention programme in Bushbuckridge, Mpumalanga.

The following research question guided the study.

 How will guidelines for role players to implement the school-based HIV and AIDS prevention programme in local high school settings in Bushbuckridge, Mpumalanga be developed?

1.5 RESEARCH OBJECTIVES

The research was conducted in two phases. The following specific research objectives directed phase 1 and 2.

Phase 1 (Empirical phase):

- Explore and describe the roles of the local role players in the implementation of the school-based HIV and AIDS prevention programmes in local high school settings.
- Explore and describe the challenges experienced by the local role players in the implementation of the school-based HIV and AIDS prevention programme in local high school settings.

Phase 2 (Developing guidelines):

 Develop and describe guidelines for local role players to implement the school-based HIV and AIDS prevention programme in local high school settings Bushbuckridge, Mpumalanga.

1.6 DELINEATION OF THE STUDY

The recipients of any school-based HIV and AIDS prevention programme are the learners. Educators have the potential to influence and inculcate the values and virtues of self-control, assertiveness and other life skills that young people need to enable them to cope with the challenges of the pandemic. In addition, educators can facilitate the cascading and uptake of proven interventions.

On the other hand, the youth need to acquire the necessary knowledge, attitude and skills to avoid being infected with HIV and other sexually transmitted diseases. The youth can also act as agents of change in their respective communities by supporting the uninfected, infected as well as those affected by HIV and AIDS. The war against HIV and AIDS can have a positive impact if we arm the vulnerable group of youths with vital information. The study excluded the learners as the recipients of the school-based HIV and AIDS prevention programme. Instead, the study focused on the role players responsible for the implementation of the programme. However, the response of the learners to the programme was evaluated from observations made by the various role players.

1.7 DEFINITION OF KEY CONCEPTS

The key concepts are unique to this study and they may assume other meanings outside the context of this study. The concepts are used throughout this study as per definitions set out below.

- **1.7.1 Local role players:** The Integrated School Health Policy identifies a 'local role player' as a person, group or organisation that has an interest or concern in a local programme. In this study 'local role players' will be school health and school-based support team members who have roles and responsibilities in the local School Health Team or the School-based Support Team as specified in the Integrated School Health Policy on the implementation of school-based HIV and AIDS prevention programmes.
- **1.7.2. Implementation:** 'Implementation' is a deliberate action performed to achieve a goal. In health programmes, the implementation phase refers to the performance of the tasks in the programme action plan (or work plan) and making use of strategies to ensure that these tasks are performed (Clark 2008:371). In this study, 'implementation' will mean performing activities associated with the various roles and responsibilities in the school-based HIV and AIDS prevention programme by the local role players.
- 1.7.3 HIV and AIDS prevention: 'HIV' is the abbreviated form generally used to refer to the human immunodeficiency virus, a virus which causes AIDS. 'AIDS' is an acronym for acquired immune deficiency syndrome meaning a disorder of the immune system characterised by opportunistic diseases. The term 'prevention' is reserved for those interventions that occur before the initial onset of the disorder (Vermont Department of Health 2014). In this study, 'HIV and AIDS prevention' will mean taking action to eliminate or reduce the onset, causes, complications or recurrence of HIV and related diseases as described in the National Public Health Partnership (2006:2).

1.7.4 Programme: A 'programme' is a usually a set of plans to develop or improve a condition. A programme is "normally not time-bound and may comprise a number of projects that are coordinated in order to achieve programme or policy goals" (Clark 2008:367). A programme can consist of a portfolio of related projects. The work done within a programme is typically of an ongoing nature. For the purpose of this study, the school-based HIV and AIDS prevention 'programme' will refer to a set of plans to improve and keep the spread of HIV and AIDS in high schools instituted by the government as a public health prevention strategy with the specific objective of preventing HIV infection and the spreading thereof.

1.8 RESEARCH PARADIGM

A paradigm is a worldview or a general perspective on the complexities of the real world (Polit and Beck 2012:11). Paradigms are often characterised in terms of the ways in which they respond to basic philosophical questions. According to Christensen, Johnson and Turner (2011:10), a paradigm is a framework of thoughts or beliefs by which reality is interpreted. The researcher applied a constructivist philosophical perspective, often called the naturalistic paradigm. The constructivist perspective assisted with the researcher's ability to understand, describe and interpret the roles and challenges experienced by the local role players to implement the HIV and AIDS prevention programme in high school settings.

The philosophical assumptions underlying a constructivist paradigm as applicable to the current study are explained in the sections 1.8.1 to 1.8.3.

1.8.1 Ontology

The relevant question to be answered here is, 'what is the nature of reality?' According to Saks and Allsop (2007:25), ontology refers to the study of the nature of reality and, according to this view, reality is constructed; individuals construct their own reality by associating meanings with certain events. This constructivist-naturalistic paradigm assumes that reality is multiple and subjective; mentally constructed by individuals; and simultaneously shaping and not causing or effecting the phenomenon under study (Polit and Beck 2012:13; Klenke 2008:15). Individuals are constantly in search of understanding and finding meaning in their lives and the world in which they interact. Experiences are continually interpreted to provide meaning. According to Creswell (2009:8), this constructed meaning is subjective and manifold as experiences are dynamic, holistic and individual.

The current researcher believed that a reality was constructed by local role players with regard to school-based HIV and AIDS prevention programmes and her aim with this study was to resolve the challenges for implementation via the construction of guidelines for local role players.

1.8.2 Epistemology

Epistemology is having knowledge about reality. The descriptive method was used to build an understanding of knowledge about reality. Epistemology is related to the inquirer's relationship to the people being researched. In this paradigm, the inquirer interacts with those being researched. The findings of the inquiry are therefore the creation of an interactive process (Polit and Beck 2012:13). According to Bunniss and Kelly (2010:361), knowledge is subjective and there are multiple, diverse interpretations of reality. There is no one ultimate or 'correct' way of knowing.

In this study the relationship of the researcher and the participants was a mutual interdependent relation; the researcher depended on the participants for sharing information and the participants depended on the researcher to generate knowledge from the data collected. The researcher interacted with the local role players in the school health teams for the purpose of data collection and contemplated the new knowledge that was generated through the research process.

1.8.3 Methodology

The methodological assumption has to do with how evidence best will be obtained. According to Polit and Beck (2012:13), evidence is best obtained through an inductive process. In this study the inductive process was aimed at generating a description of the roles and challenges experienced by the local role players and the formulating of guidelines to address the research problem. Bunniss and Kelly (2010:361) assert the methodology in this instance focused on understanding. Inductive reasoning was used and the meaning constructed in the researcher-participant interaction in a natural environment.

1.9 THEORETICAL FRAMEWORK

A theoretical framework "is a distinctive way of organising knowledge schematically in terms of a model to visualise or show a relationship between and among constructs and concepts in the explanation and understanding of a phenomenon". It is an imagined frame according to which the study is developed. Polit and Beck (2012:145) there are theoretical frameworks and conceptual frameworks. These concepts are usually used interchangeably by many researchers. Furthermore,

Polit and Beck (2013:128) define a theoretical framework as the overall conceptual underpinnings of a study based on a theory. It is used to make research findings meaningful and generalisable as well as to establish orderly connections between observations and facts. Meanwhile, Grove, Burns and Gray (2013:689) define a conceptual framework as a set of highly abstract, related constructs that broadly explains phenomena of interest, express assumptions and reflects philosophical stances. In qualitative research, a conceptual framework provides the basis of a study and supports meaningful data collection and arrangement of analysis. In the current study, the researcher used the concept theoretical framework.

The theoretical framework was developed based on the Social Ecological Model (SEM). The concepts and assumptions of the SEM, also known as the Social Ecological Perspective (SEP), were used. The SEM is framework used to examine the multiple effects and interrelatedness of social elements (Hill, Galloway, Goley, Marrero, Minners, Montgomery, Peterson, Ratner, Sanchez and Aroda 2013:3; National Institutes of Health/National Cancer Institute 2017:17). There are various versions of the SEM. For the purpose of this study the levels according to Salis and Owen (2002) were used. The model focuses on five elements, namely the individual, interpersonal, the organisational, community and the public policy elements. These elements are interrelated; they were adapted to enhance the implementation of the school-based HIV and AIDS prevention programme. The elements were identified in this study as role players in institutions and school health teams to collaborate and implement school-based HIV and AIDS prevention programmes.

1.9.1 The individual

In this study, the focus was on the individual, high school educators, nurses, non-governmental organisations (NGOs), School governing body (SGB), the principal as well as the district health manager. This was the first level that helped to identify personal factors that may and were likely to influence the individual on issues pertaining to collaboration to implement school-based HIV and AIDS prevention programmes. According to this model, the factors to consider as influential to the individual is knowledge, skills and attitude (Kathari, Edwards, Yanicki and Hansen-Ketchum 2007:iii16, iii17; Nyambe, Van Hal and Kampen 2016:2). The focus tends to be on changing an individual's knowledge, attitudes, behaviour and skills (Nyambe, Van Hal and Kampen 2016:2).

1.9.2 Interpersonal

In this element the social environment of the individual was the focus. The social environment comprises the relationships, culture and the society with which the individual interacts (Nyambe, Van Hal and Kampen 2016:2; CDC 2013b, Winch 2012:20). This element involves examining the close relationships that may increase the risk of the individual to be exposed to HIV and AIDS

infection and/or be actively involved in the implementation of the HIV and AIDS prevention programmes. The close relationship that may increase the risk of exposure to the individual was examined. The peers, friends, family and social networks are examples of the social circle elements. In this study the focus was on the coordination of services and collaboration among the various role players.

1.9.3 The organisational

The third element explores the organisational settings and social institutions such as schools, School Governing Bodies, and non-governmental organisations in which social relationships occur (Nyambe, Van Hal and Kampen 2016:2; Centers for Disease Control (CDC) 2013b; Winch 2012:21). The focus was on identifying the local role players within these settings and the barriers that existed on this level with regard to collaboration for the successful implementation of the school-based HIV and AIDS prevention programmes.

1.9.4 Community

This element incorporates the cultural values and norms of the community as a determinant of local role players' collaboration The relationships among the community members and the school as the social institutions more often determine the success of the intervention programmes (Winch 2012:31,47; Baral, Logie, Grosso, Wirtz and Beyrer 2013:2). The general cultural values and norms of the schools under study were fore grounded in this study.

1.9.5 Public policy

In this element the national laws as well as sector and school policies were focused on. Public policy on this element referred to legislation, regulatory or policy-making actions that had the potential of affecting the HIV and AIDS prevention programmes in high schools (OPEC 2011:1; Winch 2012:30, Baral, Logie, Grosso, Wirtz and Beyter 2013:2). The education policy and school health policy on HIV and AIDS in schools were of significance as described in the problem statement of this study. The policy (ISHP) as the guide for HIV and AIDS prevention in schools was the focal point.

The application of the SEM framework guided the collection of data as well as the development of guidelines and centred on the five elements of this model, namely the individual; the interpersonal, the organisational, the community and the public policy. This is discussed thoroughly in Chapter 2.

1.10 RESEARCH DESIGN AND METHODOLOGY

The research design is "the overall plan for obtaining answers to the research questions" (Polit and Beck 2012:58). Defined by Christensen, Johnson, and Turner (2015:238) as the outline, plan or strategy used to investigate the research problem, the research design thus specifies how to collect and analyse the data. Liamputtong (2011:303) supports the above definitions by explaining a research design as a logical and systematic planning and directing of a piece of research.

A brief overview of the design follows. The detailed methodology is discussed in Chapter 3.

The study was conducted in two phases. The first phase was the empirical phase in which an exploration and the description of the roles of local role players in health teams regarding the implementation of the HIV and AIDS prevention programmes in school settings were obtained. Phase two focused on the development of guidelines to implement the school-based HIV and AIDS prevention programme.

1.10.1 Phase 1: Empirical phase

The purpose of this phase was to explore and describe the coordinated participation of local role players in relation to their roles and challenges in school health teams to implement HIV and AIDS prevention programmes in school settings. A qualitative, explorative, descriptive design and contextual study was conducted. Its qualitative characteristic offered the researcher an opportunity to uncover the coordination of services among and participation of the local role players to collaborate to ensure the efficient implementation of the HIV and AIDS programme in schools.

1.10.1.1 Qualitative design

Qualitative research is "an investigation of a phenomenon, typically in an in-depth and holistic fashion, through the collection of rich narrative materials" (Polit and Beck 2012:739). On the other hand, Christensen, et al (2015:68) define qualitative research as an interpretive research approach that relies on multiple types of subjective data and investigates people in particular situations in their natural environment. According to this definition, qualitative research is interpretive and thus the researcher will be continually attempting to understand the data from the participant's subjective perspective. Once understanding the insiders' view, the researcher ultimately relates the interpretive-subjective data to the research purpose and research objectives (Christensen, et al 2015:68). In this study, the researcher chose qualitative research to obtain rich information from the participants.

1.10.1.2 Exploratory research

The study was exploratory in nature as the research focused on the implementation of the HIV and AIDS prevention programme, the phenomenon of interest. Rather than simply observing and describing it, the full nature of the phenomenon was investigated as well as the manner in which it manifested and the other factors that were related to it (Polit and Beck 2012:18; LoBiondo-Wood and Haber 2010:198; 21). Exploratory research explores an unknown area of research for the purposes of obtaining new insights, identify key concepts, identify key role players; prioritise social needs, become familiar with unknown situations, conditions, policies and behaviours (Du Plooy 2009:50). In this study the researcher explored the roles and challenges of local role player in the implementation of the school-based HIV and AIDS prevention programmes.

1.10.1.3 Descriptive research

The purpose of a descriptive study "is to observe, describe, and document aspects of a situation as it naturally occurs" (Christensen, et al 2015:16; Polit and Beck 2008:19). The current study was descriptive as the researcher described the roles and challenges of local role players to implement the school-based HIV and AIDS prevention programmes. The researcher aimed to generate new insights utilised to develop guidelines that may help to shape the application of the evidence that would be collected to practice.

1.10.1.4 Research context

The study was conducted in the Bushbuckridge municipal area in Mpumalanga. It is located in the north-eastern part of the province and forms part of the Ehlanzeni District. The area is about 10 250 square kilometers and has a population of 1 689 million, an unemployment rate of 34.46 and population growth of 1.5% annual change (Statistics South Africa 2011). It consists of 135 dispersed villages and rural settlements. The common languages used are Xitsonga, Sepedi and siSwati.

In Bushbuckridge municipality, there are three hospitals, 34 clinics, five mobile clinics and two community health centres (CHCs) servicing the entire Bushbuckridge municipal area. Also, there are 213 primary schools, 199 high schools and four combined schools and further education and training (FET) institutions.

There are four major townships in the area, namely Acornhoek, Bushbuckridge, Mkhuhlu and Thulamahashe. Two areas, Acornhoek and Thulamahashe, were identified by the researcher for

this study based on the differences in infrastructure and wealth in the two areas. Thulamahashe is well resourced while Acornhoek is under resourced and the population class differs; this may have an impact on the implementation of school-based HIV and AIDS prevention programme.

1.10.1.5 Population

According to Polit and Beck (2012:273) and Brink, van der Walt and van Rensburg, (2013:131), a research population "is the entire aggregation of cases in which a researcher is interested." The population is the full set of elements or people from which the sample is selected (Christensen, et al 2015: 428; Grove, et al 2013:44).

In this study the population was the local role players who had a designated responsibility in school health teams in the Bushbuckridge area of the Mpumalanga province. SGB members, NGOs, local clinics, PHC nurses and the health district managers as identified in the Integrated School Health Policy were the local role players.

1.10.1.6 Sampling

A sample is a subset of population elements; it is the most basic units about which data is collected (Polit and Beck 2012:275). According to Klopper (2008:69) and Grove, et al (2013:44), a sample is a subset of the population that is selected for a particular study.

Purposive sampling was used as its aim was to select population elements that would provide rich in-depth information, and thus a typical case sampling will be conducted (Polit and Beck 2008:356). According to Liamputtong (2011:11), purposive sampling refers to the deliberate selection of specific individuals, events, or settings because of the crucial information they can provide that cannot be obtained so well through other channels. In purposive sampling, the researcher selects information from rich cases, or cases that can teach them about the purpose of the study (Grove, et al 2013:365). In qualitative research the idea is to get an in-depth understanding of the phenomenon under study. The participants were selected on the basis that they would supply rich information of their experiences. LoBiondo-Wood and Haber (2010:228) further indicate that the researcher uses his/her knowledge of the population and its elements to handpick the cases to be included in the sample.

In the research site, there were three hospitals, 34 clinics, five mobile clinics and two community health centres (CHCs) that serviced the entire Bushbuckridge municipal area at the time of study. A community health centre and a clinic were purposively selected for the study. One community

health centre serving the high school in Thulamahashe and the clinic serving the high school in Acornhoek was purposively selected.

In each of the two schools, a purposive sample of five educators teaching the subject Life Orientation, one most senior member and four SGB members (identified conveniently by the principal of each school according to their participation in matters concerning the welfare of the learners) were drawn. One voluntary member from the local NGO involved in HIV and AIDS prevention programmes was selected for an individual interview with the assistance of the manager of the NGO.

Primary health care nurses (PHC) were purposively selected for the study; the sample consisted of four nurses from the community health centre, four from the local clinic as well as a senior manager from the local Municipality. The participants were purposively selected as they had indepth understanding of the phenomenon under study.

The researcher requested the principal from each school to identify suitable educators and SGB members for participation in the study. The CHC and the clinic manager were also requested to purposively identify the participants who would provide rich in-depth information on the subject. The sample size was depended on information emerging during the interviews.

1.10.1.7 Inclusion criteria

The educators selected taught Grade 8 to Grade 12 and although they taught Life Orientation as a subject, it was not limited to the learning area. They had to be teaching Life Orientation in the identified high schools for at least a term, but they were not limited to the learning area. The SGB members were active members serving during the time when the study was conducted. The members from the NGO had to have been in Bushbuckridge for at least one year or more.

The nurses had to be PHC registered and trained and/or working in the local community health centre and clinic in the Bushbuckridge area.

Three of the nurses included in the sample were not PHC trained, but had been working at the centers for more than two years and had extensive experience and insight into all of the programmes run from the clinic.

1.10.1.8 Data collection plan and implementation

The data intended to be collected for a study is described by Polit and Beck (2008:384) as 'self-reported' which means it obtained by means of interviewing research participants. Data was collected through semi-structured focus groups and semi-structured individual interviews. Data in a qualitative study are affected by both the data collection plan and how the plan is implemented (Polit and Beck 2008:381). Without high-quality data collection methods, the accuracy and robustness of the conclusions are subject to challenge (Polit and Beck 2008:367).

The focus group interviews were conducted at each of the identified schools settings while the semi-structured individual interviews took place at the identified CHC and clinic. Both the focus groups and individual interviews were done at a time convenient to both the researcher and the participants (Brink, et al 2013:158). The researcher had telephone communications with the principals of the two high schools, the district managers and the operational managers and then visited the schools, the community health centre and the clinic to recruit, select and explain the study process to the participants. The research study and all the information related to the study were explained to the participants during these visits.

The researcher did not do a pilot study, but only tested the data collection instrument for possible flaws and ambiguity using one interview with the clinic nurse (Brink, et al 2013:175). The data collection instruments were found to be well structured with a few editorial corrections. Further discussions on the tool were on the use of probing by the researcher to solicit think description as envisaged from the participants. The group dynamics and control was also discussed.

Questions were asked to assess the coordination of local role players. Questions entailed requesting participants to describe their roles and responsibilities in the health team; the resources that they had available at the time of study and situational factors that supported or impeded on the execution of their tasks. Various communication strategies and probing the participants for more information were used. The focus group interviews as well as the individual interviews were audio-recorded and field notes were taken by an assistant researcher. At the end of the process, all participants were thanked.

1.10.1.9 Data analysis

In qualitative research, data analysis "is a process of examining and interpreting data in order to elicit meaning, gain understanding, and develop empirical knowledge" (Corbin and Strauss (2008) cited in Grove, et al 2013:279).

Polit and Beck (2012:556) describe the purpose of data analysis as organising, providing structure to, and eliciting meaning from the data. On the other hand, Streubert and Carpenter (2011:47) indicate that the purpose of data analysis is to preserve the uniqueness of each participant's lived experience while permitting an understanding of the phenomenon under study. In qualitative research data analysis occurs simultaneously with data collection.

The qualitative analysis of data is supported by several tasks that help manage the mass of narrative data; transcribing the data; developing the category scheme; and organising it (Polit and Beck 2012:557-60).

Verbatim transcriptions of the focus group discussions, individual interviews and the field notes were done as the critical first process for the preparation of the data analysis. The second process was reading through the data again and again followed by the process of coding of the data. Tesch's method of data analysis (1990) was used to provide detailed guidance for the coding process. According to Creswell (2009:186), Tesch provides a useful analysis of the process in eight steps:

- The researcher got a sense of the whole by reading through all the transcription. The researcher randomly picked one transcript and read it trying to determine what it is all about. She jotted down notes in the margin.
- She then systematically went through all the documents trying to find out more information about the topic and again wrote emerging thoughts, ideas and perceptions from the documents in the margins.
- A list of all topics was made and similar topics clustered together.
- The researcher then abbreviated the topics as codes and wrote the codes next to the appropriate segments.
- Identification of the categories was done.
- Finalisation of abbreviations for each category and alphabetising of the codes was made.
- The researcher then assembled the data material belonging to each category in one place and performed a preliminary analysis.
- Finally, if necessary, the researcher recoded the existing data as needed.

After the coding, the fourth step was when the researcher used the coding to generate a description of the setting or people as well as categories or themes for analysis. She then

developed themes and descriptions in step five and, finally, in step six, the researcher made an interpretation or meaning of the data (Creswell 2009:189).

1.10.1.10 Ethical considerations

According to Streubert and Carpenter (2011:61), researchers must observe certain basic principles when conducting any form of research that involves human subjects. Klopper (2008:71) states ethical considerations refer to the protection of the participants' rights, obtaining informed consent and the institutional review process. Brink, van der Walt and van Rensburg (2013:34) identify three fundamental essential principles that guide researchers through the research process: respect for persons, beneficence and justice. These principles are said to be centered on human rights that need to be protected during research (Grove, et al 2013:162).

• The principle of beneficence

Beneficence imposes a duty to the researcher to minimise harm and maximise benefits (Polit and Beck 2012:152). This was done by negotiating access and early clarification of expectations. The researcher communicated telephonically with the school principal and the operational mangers to make appointments to visit the schools and the health centres. The researcher visited the schools and the health centres to explain and clarify the visits for the interviews with the participants. Dates for the data collection were then identified with former in collaboration with the participants.

The right to freedom from harm and discomfort

The right to freedom from harm and discomfort means that the researcher has an obligation to avoid, prevent or minimise harm. The researcher ensured that the participants were not subjected to unnecessary risks of any physical or psychological harm or discomfort. The environment was comfortable and did not expose the participants to any harm in any way (Brink, et al 2013:35; Streubert and Carpenter 2011:61).

Respect for human dignity

This principle includes the right to self-determination and the right to full disclosure. The participants received information on the study prior to their participation, and their consent was obtained before involving them in the study. Each participant signed an informed consent form.

The right to self-determination

The right to self-determination means participants have the right to voluntary choose to take part in a research study. They can decide not to give certain information and withdraw from the study at any time without stating a reason (Grove et al 2013:162; 164). In the current study the researcher provided all participants with all the information pertaining to the study. Each individual participant could freely decide to take part or decline participation without prejudice. They were not coerced since all information regarding the study was made available to them (Grove et al 2013:164).

The right to full disclosure

Polit and Beck (2012:154) refer to full closure as meaning that the researcher has fully described the nature of the study, the individual's right to refuse participation, the researcher's responsibilities as well as the risks and benefits. The researcher provided all the information to the participants and the participants made their own informed and voluntary decision to take part in the study.

• The principle of justice

This principle includes the participants' right to fair treatment and their right to privacy (Polit and Beck 2012:155). The privacy of all the participants was maintained, no names of the participants were put in any of the documentation the researcher used. All participants were treated fairly and equally. There were no participants who received special attention or favours from the researcher.

The right to fair treatment

The right to fair treatment means all participants have the right to equitable distribution of benefits and burdens from the research study. This right also includes fairness in selection of participants (Grove et al 2013:173). The researcher ensured that all participants and those who refused to take part in the study were treated fairly and equally. All participants were served with refreshments after the sessions.

The right to privacy

The right to privacy implies that all the participants have the right not to have their personal life intruded more than it needs to be. Grove et al (2013:170) further explain the right to privacy as inclusive of prevention of invasion of privacy whereby private information and report is shared without the individual's knowledge or against his or her will. The researcher ensured that the privacy of the participants was maintained in confidence at all times; no names were mentioned on any of the materials and documents of the researcher. Anonymity and confidentiality were guaranteed.

The researcher explained all the information about the study and then all the participants who willingly decided they wanted to participate in the current study each signed an informed consent form. Consent and approval from the institutions where the study was conducted as well as the University of Pretoria Health Sciences Ethics Committee was obtained.

The full details of the Phase 1 are discussed in Chapter 3.

PHASE 2

1.10.2 PHASE 2: DEVELOPMENT AND DESCRIPTION OF GUIDELINES

Phase 2 of this study focused on the development and description of the guidelines for local role players to implement the school-based HIV and AIDS prevention programme. A brief overview is provided and subsequent detailed description given in Chapter 7.

1.10.2.1 Development of guidelines

The empirical study in Phase 1 was used as the base for Phase 2. The aim of Phase 2 was to 'translate knowledge' from Phase 1, the empirical phase, into the development of guidelines for the local role players to efficiently implement the school-based HIV and AIDS prevention programme. The guidelines' intent is to promote a comprehensive implementation of the school-based HIV and AIDS prevention programme by the various role players.

The researcher formulated a draft guideline based on the results of the empirical data collected and analysed in Phase 1. She then conducted a Delphi survey in Phase 2 of the study based on

the empirical evidence collected and analysed in Phase 1. The purpose of the Delphi survey was to develop guidelines for the local role players in the implementation of the HIV and AIDS programme in high schools.

Vernon (2009) (cited in Grove, et al 2013:435) describes the Delphi technique as a technique that measures the judgments of a group of experts for the purpose of making decisions, assessing priorities or making forecast. Hsu and Sandford (2007:1) refer to the Delphi technique as a method for "achieving convergence of opinion concerning real-world knowledge solicited from experts within certain topic areas". They further explain the technique as a group communication process which aims to achieve convergence of opinion on a specific real-world issue.

The main objective of using this method to develop guidelines was to use the collected data from all the role players and obtain input from the experts in a group decision making setting in order to ensure that the guidelines are in line with the expectations of the experts in the field of HIV and AIDS prevention in schools.

1.10.2.2 Selection of experts

According to Hsu and Sandford (2007:3), the selection of Delphi participants is generally dependent upon the disciplinary areas of expertise required by the specific issue. In this study the population frame comprised of experts from the education sector, HIV and AIDS prevention experts in schools as well as health professionals in health promotion. The researcher selected a group of experts in education, school health as well as in the health profession to be in the team of experts. The researcher identified a few experts and then used snowball sampling to identify and recruit more experts to participate in Phase 2 of the study.

The Delphi participants met four 'expertise' requirements: knowledge of and experience with the issues under investigation; the capacity and willingness to participate; sufficient time to participate in the Delphi; and effective communication skills (Adler and Ziglio (1996) cited in Skulmoski, Hartman and Krahn 2007:10).

1.10.2.3 Data collection method

The researcher developed closed-ended questions that address the implementation of the school-based HIV and AIDS prevention programme from the empirical data collected in Phase 1 of the study. The guideline development process took place over a number of rounds of experts answering questions and giving justifications for their responses to the draft guidelines. Provision was made to afford the researcher the opportunity between rounds to incorporate the comments of

the panel and revise the guidelines. This process was ceased after a predefined criterion was reached, enabling the group of experts to arrive at a consensus forecast on the guidelines (Grove, et al 2013:436; Hsu and Sandford 2007:2).

1.10.2.4 Data analysis

The data analysis took place in a number of rounds as mentioned in section 1.13.3 above. The different rounds entailed the following:

- In Round 1 the first survey allowed the participants to privately express their opinions on each draft guideline. Their comments and opinions were then incorporated into the guidelines.
- In Round 2 the researcher sent the draft guidelines to the participants, who were asked to review the items summarised by the researcher based on the information provided in the first round. The participants were requested to rate or rank the items to establish priorities among them by using the criteria of validity, reliability, flexibility, clarity and applicability. Areas of disagreement and agreement were identified and the guidelines were updated to incorporate the responses of the panelists.
- In the Round 3 the Delphi panelists received a revised set of guidelines that included the
 items and ratings summarised by the researcher in accordance with the previous round and
 they were requested to revise their judgment or specify reasons for remaining outside the
 consensus.
- In Round 4, the final round, the researcher distributed the list of remaining items, their ratings, minority opinions and items achieving consensus. This round provided a final opportunity for participants to revise their judgment (Hsu and Sandford 2007:3; Underhill 2004:3). The researcher then developed a final summary and feedback report to the group of experts and decision makers.

The guidelines developed will be used to guide the implementation of the school-based HIV and AIDS prevention programme.

1.11 ORGANISATION OF THE STUDY

The study is organised in the following order:

Chapter 1: Background and orientation to the study

Chapter 2: Theoretical framework

Chapter 3: Phase 1: Research methodology

Chapter 4: Data analysis and interpretation

Chapter 5: Discussion of the findings and literature control

Chapter 6: Interpretation of the research findings in relation to the Social ecological model

Chapter 7: Phase 2: Development and refinement of guidelines for local role players to implement the school-based HIV and AIDS prevention programme

Chapter 8: Findings, conclusions, limitations and recommendations

1.12 CONCLUSION

Chapter 1 gave an overview of the entire study. The introduction highlighted an overview of the HIV and AIDS statistics globally; the rate of infection among the youth and adolescents was the focus. Special focus was on the introduction of HIV and AIDS, sex education and life skills in schools as part of the wider Life Orientation curriculum. The role of the school health services in the school-based HIV and AIDS prevention was also fore grounded. Furthermore, the background, purpose, objective and the research design of the study were described. The theoretical framework and the SEM as the model used in the study were outlined in this chapter. A brief overview of the methodology followed in the study was discussed and a short discussion of each of the two phases of the study presented. Phase 1 of the study (the empirical phase) and Phase 2 (the development of the guidelines for the local role players using the Delphi method) were outlined. The chapter that follows, Chapter 2, presents and discusses in detail the theoretical/conceptual framework used in this study.

CHAPTER 2

THEORETICAL FRAMEWORK

2.1 INTRODUCTION

This chapter centres on the theoretical (conceptual) framework that guided this study. The study comprised of two phases. Phase 1 focused on obtaining and analysing the empirical data and in Phase 2 the development of the guidelines was the main focus.

The theoretical framework is the overall conceptual underpinning of a study based on a theory (Polit and Beck 2013:128). In the view of Herrington, McKenney, Reeves and Oliver (2007:6), a comprehensive and well-described theoretical framework provides a solid, sound basis that can assist with achieving the proposed solution. These researchers posit that because theory informs the practical design of guidelines, theoretical frameworks are used to make research findings meaningful and generalisable as well as to establish orderly connections between observations and facts. The researcher decided to use an existing model, the Social Ecological Model (SEM) – also known as the Social Ecological Perspective (SEP) – as the theoretical framework (Nalzaro 2012:s16) for the current study. Her vision was to contribute towards improving the HIV and AIDS prevention education programmes in high schools.

2.2 THE IMPORTANCE OF USING A THEORETICAL/CONCEPTUAL FRAMEWORK

Grove, et al (2013:116) describe a framework as an abstract, logical structure of meaning that guides the development of a study and enables researchers to link the findings to a body of knowledge in nursing. Researchers use frameworks consisting of linked ideas, often gleaned from the literature, to provide a frame of reference within which to conduct investigations. When organising the study, the chosen framework guides the researcher (Brink, et al 2013:26). It provides a context within which a problem is examined and guides the data collection and analysis processes. The theoretical framework assisted the researcher to organise the current study and provided guidance for the interpretation of the findings (Refer to Chapter 6). These interpretations

consequently enhanced understanding of the phenomenon under investigation and strengthened evidence that literature was extensively reviewed to support the findings.

Polit and Beck (2012:128) state the two concepts, theoretical framework and conceptual framework, are oftentimes used interchangeably by researchers. However, asserting that a definite distinction is made between theoretical and conceptual frameworks in various literature sources, Brink, et al (2013:26) attempt to clarify the two concepts by positing that a "theoretical framework is based on the propositional statements resulting from an existing theory" while a "conceptual framework is developed by the researcher through identifying and defining concepts and then proposing relationships between these concepts". Polit and Beck (2012:128) simply maintain that in a study based on a theory, the framework is a theoretical framework and when a study is based on a specified conceptual model, the framework is then seen as a conceptual framework; but, what these authors do affirm, is that both theoretical and conceptual frameworks play several interrelated roles in the progress of science (Polit and Beck 2012:130). For the purpose of this study, the researcher used a theoretical framework.

2.2.1 Benefits of using theoretical frameworks

According to Young, Young, Görg, Heink, Jax and Schleyer (2017:438), theoretical frameworks provide an opportunity to achieve a better understanding of their problem situation. In research, using a theoretical framework offers the researcher a number of benefits. Firstly, researchers are more likely to have their research work accepted as 'quality research' by the broader community of academics, scientists and researchers. Theoretical frameworks immediately clarify the researcher's perspective, approach and what underlying assumptions influenced the research design. Also, theoretical frameworks construct a frame of evidence proving that the researcher reviewed sources of literature to select theories and models relevant to his or her study. From the vast number of theories and models available, the current researcher selected, reviewed and measured the structural appropriateness of quite a number to select a suitable or relevant model for the current study – the relevance implied the theory or model needed to comply with the boundaries and the main dimensions to be studied (Polit and Beck 2012:131).

Secondly, using a framework suggests that researchers understand what they are studying. According to Polit and Beck (2012:131), theories and models can guide a researcher's understanding of natural phenomena as well as why they occur. The current researcher gained more understanding of the five components (Refer to section 2.2) that may impact positively as well as negatively on achieving the health promotion goals of any programme.

Thirdly, when a framework is used researchers will approach the research study with certain underlying assumptions arising from their theoretical perspective. According to Polit and Beck (2012:131), theories are also perceived to be important resources for the development of nursing interventions.

Lastly, theories and conceptual models help to stimulate research and the extension of knowledge by providing both direction and impetus (Polit and Beck 2012:131).

In the current study, the Social Ecological Model (SEM) assisted the researcher to develop tentative statements, which were eventually refined into guidelines that would guide the implementation of the school-based HIV and AIDS prevention programme.

An overview of the framework used in the current study follows.

2.3 OVERVIEW OF THE SOCIAL ECOLOGICAL MODEL (SEM)

The Social Ecological Model (SEM) developed from the work of a number of prominent researchers: Urie Bronfenbrenner's Ecological Systems Theory (1979) which focused on the relationship between the individual and the environment; Kenneth McLeroy's Ecological Model of Health Behaviours (1988) which classified different levels of influence on health behaviour; and Daniel Stokols's Social Ecological Model of Health Promotion (1992 and 2003) which identified the core assumptions underpinning the SEM. The work of primarily the aforementioned together with that of some other researchers was utilised and modified to eventually evolve into what is today referred to as the Social Ecological Model.

The SEM is a framework to examine the numerous effects and interrelatedness of social elements (Stokols 1996:283). This model is used to examine the network of relationships between children, young people, families, community and society at large. Additionally, the model addresses the difficulties and interdependences between socioeconomic, cultural, political, environmental, organisational, psychological, and biological determinants of behaviour (Stokols 1996:283). Ahmed, Bruce and Jurcik (2018:4) are of the opinion that this approach can help practitioners to understand practice problems more clearly and therefore the SEM contributes to the improvement of practice solutions. The researcher realised that this model could assist in finding solutions to improve the implementation of the HIV and AIDS prevention programmes in high schools as it examines multiple factors and the interrelatedness of social elements.

The model focuses on five elements (levels), namely the individual, interpersonal, organisational, community, and the public policy elements. These five levels are interrelated to each other as shown in Figure 2.1.



Figure 2.1 Design of the Social Ecological Model (SEM)

(Source: The Centers for Disease Control and Prevention (CDC), The Social Ecological Model: A Framework for Prevention. http://www.cdc.gov/violenceprevention/overview/social-ecologicalmodel.html (Retrieved April 21, 2014).

2.3.1 The individual

In this study the individual level focused on included high school learners, educators and the community. This is the first level that helped to identify personal factors that could and were likely to influence the individual on issues pertaining to HIV and AIDS prevention programmes. Various factors influence individuals on matters related to their health. Some of these health-related factors include behaviours, beliefs, perceived barriers, motivation, enjoyment, age, gender, level of education, socioeconomic status, employment status, and self-efficacy. According to this model,

the factors to consider as influential to the individual are knowledge, skills and attitude (Kathari, Edwards, Yanicki and Hansen-Ketchum 2007:iii16-iii17). Figure 2.2 illustrates the individual characteristics that influence behaviour.

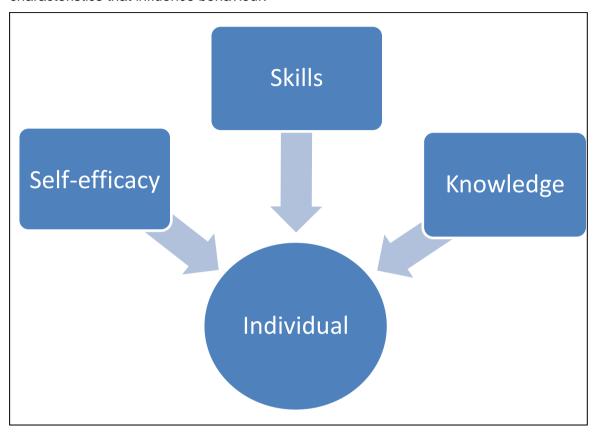


Figure 2.2 Individual characteristics influencing behaviour

In this study, the same factors of the elements of the individual were considered. Hence, the knowledge the individual had on HIV and AIDS prevention, the skills the individual had enabled her or him to fully implement the HIV and AIDS prevention programme as well as the attitudes of the individual towards the programme and HIV and AIDS were key (Winch 2012:47).

Approaches on this level could include empowering the individual through education and mentoring programmes as strategies to bring change. The focus tends to be on changing an individual's knowledge, attitudes, behaviour and skills (Nyambe, Van Hal and Kampen 2016:2).

2.3.2 Interpersonal

In this element the social environment of the individual is the focus. The social environment comprises the relationships, culture and society with which the individual interacts (CDC 2013a; Winch 2012:20). In this study this level of the SEM involved examining all close relationships that

could increase risks to the implementation of the school-based HIV and AIDS programme by the role players. The high school learners' social circle, in other words their peers, friends, family and social networks, influenced their behaviour and contributed to the range of experiences they had had. To ensure the effective implementation of the programme, the relationships all the role players had with each other were examined. On interpersonal level, the focal point centred on the assumption that the social support provided by and to the role players were influenced by their real-life social environment, which subsequently impacted on the implementation of the programme.

The current study concentrated on the roles of the various role players in the implementation of the school-based HIV and AIDS prevention programme. The collaboration of the role players in the implementation of the programme was a vital aspect in the study. Both the roles and the coordinated collaboration of the roles have a direct positive influence on learners exposed to HIV and AIDS prevention programmes in school. In this study, the coordination of services and the interaction of educators, NGOs and nurses were identified as key and principally important in enhancing the success of the programme.

Strategies which could be used and have proven to bring change on the social environment level include community education; support groups, peer programmes, workplace incentives, and social marketing campaigns (Victorian Curriculum and Assessment Authority 2011:4). Collaborative strategies were used in this study to ensure the effectiveness of the programme. However, making use of collaborative strategies is not inclusive of focusing on the aforementioned issues only, but the social environment must also be taken into consideration. (In the previous chapter the need to involve the community, church, peers and the multidisciplinary team to curb the challenges experienced by role players was highlighted). Both the high schools and healthcare facilities tasked with the responsibility of providing an efficient school-based HIV and AIDS prevention programme have no option but to change to meet the needs and goals of the programme.

Figure 2.3 illustrates the close relationships that could increase the risk of the implementation of the school-based HIV and AIDS programme by role players.

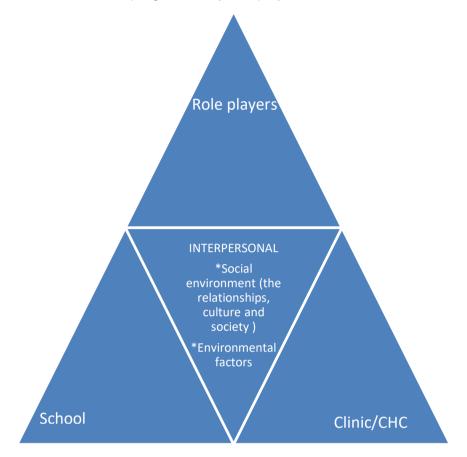


Figure 2.3 Interpersonal relationships between role players and organisations

2.3.3 The organisational settings

The third element explores the organisational settings and social institutions such as schools, churches, workplaces, and neighbourhoods in which social relationships occur (Winch 2012:21; CDC 2013a; Nyambe, Van Hal and Kampen 2016:2). The scrutiny was on identifying the characteristics of these settings that could present barriers to the successful implementation of the HIV and AIDS prevention programmes. Especially the physical environment was focused on to identify physical factors that could influence the implementation of these prevention programmes. Some social institutions have certain expectations that could be barriers to the programme. In other instances, social institutions could make it impossible to implement preventive interventions. The ethos followed in social institutions was therefore of additional significance.

In the current study the schools, clinic and community health centre were the focus areas. These were the organisations identified as the organisational role players involved in the implementation of the school-based HIV and AIDS prevention programme. Together, the interpersonal role players

and organisational role players formed a triangular relationship as illustrated in Figure 2.3 above. The neighbourhood surrounding the schools and the clinic where the study was conducted was indeed taken into consideration, but on a smaller scale as there were no other organisational structures connected to the programme to be included in close proximity of the study sites. Strategies such as social marketing campaigns and the use of social norms were suggested to be used to foster community climates that promote healthy relationships. For the accomplishment of the goals school-based HIV and AIDS prevention programme, there should be healthy relationships between the role players and the organisations.

2.3.4 Community

On this level, the cultural values and norms of the community are of the essence. The relationships among community members and the schools as social institutions more often dictate the success of the intervention programmes (Winch 2012:31; 47; Victorian Curriculum and Assessment Authority 2011:4).

In the current study the general cultural values and norms of the communities surrounding the schools under study were centred on. The cultural values and norms of the role players were also included as they have the biggest role in the implementation and uptake of the programme. The culture, values and norms of the communities may enhance or be obstacles to the implementation of the HIV and AIDS prevention programmes.

The main aim of the strategies that could be used on this level is to promote positive community attitudes and a heightened awareness of the programmes at the schools. This is to uplift and encourage participation by the community; support from the community is vital.

2.3.5 Public policy

On this level the national, state and local laws are the focus (OPEC 2011:1; Winch 2012:30, Baral, et al 2013:2). Public policy refers to legislation, regulatory or policy making actions that have the potential of affecting the HIV and AIDs prevention programmes in high schools (Winch 2012:30). The following are some of the policies that are of significance in the implementation of the school-based HIV and AIDS prevention programme; the National Policy on HIV and AIDS for Learners and Educators in Public Schools and Students and Educators in Further Education and Training Institutions, National HIV and AIDS Life Skills Education Programme, National School Health Policy, South African Children's Act; Revised HIV and AIDS Life Skills Education Programme; Integrated School Health Policy, National Adolescent and Youth Health policy and the Department of Health's Integrated Strategy on HIV, STIs and TB, 2012.

List of research project topics and materials

In the current study all policies and regulations on HIV and AIDS in schools as well as the ISHP were focused on. The involvement of and collaboration with educators and the general public in policy making involving HIV and AIDS education in schools was identified as a strategy to increase the efficiency of the programme. Other strategies included encouraging educators and the public to develop a political will to implement policies as stipulated to foster the success of such policies.

2.4 ASSUMPTIONS AND CORE PRINCIPLES OF THE SOCIAL ECOLOGICAL MODEL (SEM)

The social ecological model is based on four core principles as briefly summarised next.

- **2.4.1 Multiple factors influence behaviours.** This principle implies that "efforts to change behaviour should be based on the understanding of the interrelationship between the four levels of the Social Ecological Model: individual, interpersonal, organisational environment and policy". HIV and AIDS prevention programmes in schools are more likely to be successful when they target multiple components of the Social Ecological Model (OPEC 2011:1).
- 2.4.2 Environments are multidimensional and complex. The implication of this principle is that the various dimensions of the environment and its complexity need to be understood because the interrelatedness of the individual's behaviour to the environment is critically important. Social or physical environments can be described as containing a variety of features or attributes such as the size, temperature, facilities and safety. Environments can also be described in terms of their actual or perceived qualities. While individuals are responsible for instituting and maintaining the lifestyle changes necessary to reduce risk and improve health, individual behaviour is determined to a large extent by the social environment, for example, community norms and values, regulations and policies (Sallis, Owen and Fisher 2008: 469).
- **2.4.3** Human-environment interactions can be described at varying levels of organisation. Human interactions with the environment can occur at individual, small group, organisational, community or population levels. The Social Ecological Model does not just focus on the individual, but includes multiple levels of human interaction with environments. The effectiveness of the HIV and AIDS prevention programme could be enhanced if the differing levels of the human-environment interaction are targeted.
- **2.4.4** The interrelationships between people and their environments are dynamic. Thus, there is a reciprocal relationship between people and their environments. The social, physical and policy environments influence the behaviour of the individual while at the same time the behaviour of the

individual, group or organisation also impacts on the wellbeing of their environments. The environment can control or set limits to the health promotion behaviour that occurs within it. Therefore, making a change in the environment could result in modification of certain health-related behaviours.

2.5 REASONS FOR USING THE SOCIAL ECOLOGICAL MODEL IN THIS STUDY

As indicated in the introduction (refer to section 1.1) the SEM guided the collection as well as the analysis of data in this study. The components which informed the use of the SEM were discussed. Any prevention strategies should include a continuum of activities and in this study the activities were addressed within the multiple levels of the model. These activities should be developmentally appropriate and conducted across the lifespan. This approach is more likely to sustain prevention efforts over time than any single intervention. The Clinical and Translational Science Awards (CTSA) (2011:20) refers to the reaffirmation by Israel, Schulz, Parker, Becker, Allen and Guzman (2003) and Sallis, et al. (2008) that the SEM understands health to be "affected by the interaction between the individual, the community, and the social as well as political environments".

In this study, the school-based HIV and AIDS prevention programme was viewed as an intervention directed to the learner as an individual. Individual interventions oftentimes deal more with changing one's knowledge, attitudes, beliefs and, ultimately, behaviours. The Social Ecological Model recognises the intricately interwoven relationship that exists between the individual and his or her environment. While individuals are responsible for instituting and maintaining the lifestyle changes necessary to reduce risk and improve health, individual behaviour is determined to a large extent by one's social environment which, for example, is constituted by community norms and values, regulations and policies.

The interaction between the learners, educators, NGOs, nurses, parents and the other role players at schools, health establishments or any other social institutions are actions at individual level, but are also the key sources for the support and reinforcement which is needed to ensure the success of the programme.

Furthermore, barriers to healthy behaviours are shared among the community as a whole. As these barriers are lowered or removed, behaviour change becomes more achievable and sustainable. Hence, the most effective approach leading to healthy behaviours is a combination of determined and vigorous effort made on all levels – individual, interpersonal, organisational, community and public policy.

2.6 CONCLUSION

The theoretical framework on which this study was based, the Social Ecological Model (SEM), was discussed. Different theoretical and conceptual frameworks were defined and deliberated on. This served as background to highlight the importance of doing research on, reviewing and choosing a suitable and appropriate framework for a research study. An important aspect mentioned was figuring out what the researcher's thoughts were in relation to the study. The five levels of the SEM as well as the four assumptions thereof were presented and described. The reasons why the SEM was chosen as the model to be used for the study were elaborated on. The researcher also paid attention to the disadvantage of the model in that it lacked specificity of its theorised influences. In Chapter 3 the research methodology used in the study is described in depth.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

This chapter describes in detail the research methodology used for this study and how it has guided the data collection, data analysis and development of the guidelines. The chapter is presented in five main sections: the research design used in the study and rationale for its use; details of the participants in the study and selection criteria used; an overview of the data collection methods used; the analysis of the data; ethical considerations; limitations and a summary of the chapter.

3.2 RESEARCH PARADIGM

3.2.1 Paradigm

A paradigm is a world view, a general perspective on the complexities of the world (Polit and Beck 2012:11). Paradigms are often characterised in terms of the ways in which they respond to basic philosophical questions. According to Christensen, Johnson and Turner (2015:29), a paradigm is "a framework of thoughts or beliefs by which reality is interpreted". These authors further describe paradigm as a set of concepts, values, perceptions, and practices shared by a community that forms a particular view of reality; and a single paradigm is said to be governing and directing with normal science. The current researcher applied a constructivist philosophical perspective, often called the naturalistic paradigm, in this study. The constructivist perspective helped the researcher to understand, describe and interpret the support needs of the educators in the implementation of the HIV and AIDS prevention programme in high school settings.

3.2.1.1 Constructivist naturalistic paradigm

As already indicated, the research paradigm used was constructivism, which is interpretive in nature. This type of research places emphasis on interpreting, deconstructing (taking apart old ideas and structures) and reconstructing (putting ideas and structures together in new ways) (Polit and Beck 2008:15). According to Polit and Beck (2012:15), researchers in constructivist traditions emphasise the inherent complexity of humans, their ability to shape and create their own

experiences, and that the truth is a composite of realities. A naturalistic researcher believes that reality is not a fixed entity but a construction of the individuals participating in the research; reality thus exists within a context and many constructions are possible. Choosing naturalistic constructivism as the framework for investigating the support needs of educators in the implementation of the HIV and AIDS prevention programme in high school settings was a distinctly appropriate choice since meaning is socially rather than individually constructed by people experiencing a phenomenon. The current researcher wanted to interact with the study participants to get an understanding of their constructed realities (Polit and Beck 2012:12).

Naturalistic inquiry takes place in a natural setting in everyday situations over a period of time. Thus, the researcher is able to sift through the information, gain new insights of the phenomenon being studied and, as new questions emerge, to seek further evidence to confirm the insights. The information gathered is reliable as the information is grounded in in-depth inquiry and first-hand information from the participants directly involved in the phenomenon under study (Polit and Beck 2012:15). In this study, the researcher was able to integrate the information gathered to develop descriptions that helped to illuminate the phenomenon under study. Furthermore, Polit and Beck (2012:12) indicate that with a naturalistic inquiry, there are always multiple interpretations of reality that exist in people's minds, and thus there is no process by which the ultimate truth or falsity of the constructions can be determined (Polit and Beck 2008:17). The findings in a naturalistic inquiry are the product of the interaction between the researcher and the participants.

Conversely, a possible limitation of using this paradigm in the current study could imply that using humans as instruments could lead to subjectivity. However, in this case the researcher was able to reveal trivial and obvious findings. The subjectivity resulting from using a small group of participants was a concern to the generalisability of the findings. This was capped by the fact that the data was reliable as it was grounded in an in-depth inquiry.

The researcher conducted a qualitative, explorative, descriptive design and contextual study following the naturalistic paradigm. Sandelowski (2010 cited in Grove, et al 2013:66) labels a study as a specific type (grounded, phenomenology or ethnographic) which implies "fixed categories of research with distinct boundaries that are permeable". According to Grove, et al (2013:27, 66) qualitative, exploratory and descriptive studies are conducted to address an issue or problem in need of a solution. Qualitative Exploratory descriptive research is usually done to describe unique issues, health problems or situations that lack clear descriptions or definitions (Grove, et al 2013:92). HIV and AIDS prevention programmes in high schools is a unique issue that needs to be fully described and understood. While unique, the programme has been found to be a worthy and proven strategy for providing information to young people on HIV and AIDS. Furthermore school-

based HIV and AIDS education programmes were found to result in in significant changes in knowledge and attitudes that affect sexual behaviour of young people, ultimately reductions in sexual health challenges including; teenage pregnancies sexual transmitted infections and HIV and AIDS (Sarma and Oliveras 13:20). This study was done with a specific population and a specific goal in mind, namely to create a programme or intervention to benefit the population. The researcher's goal was to develop guidelines to enhance the efficiency of the implementation of the HIV and AIDS prevention programme in high schools. The exploratory descriptive qualitative researcher identifies a specific lack of knowledge that can be addressed only through seeking the viewpoints of the people most affected (Grove, et al 2013:66). In this study the researcher sought the viewpoints of educators, nurses, and school governing body (SGB) on the HIV and AIDS prevention programme in high schools. The perspectives of the participants are of value to the exploratory descriptive researcher because it informs the development of interventions related to the phenomenon under study (Polit and Beck 2008:238).

3.2.2 Major assumptions of the constructivist naturalistic paradigm

An assumption is "a basic principle that is believed to be true without proof or verification" (Polit and Beck 2012:12). Assumptions attempt to respond to general and basic philosophical questions. Next, the assumptions in response to the ontological and epistemological questions asked in a constructivist naturalistic type paradigm are summarised.

3.2.2.1 Ontology

In this assumption, the answer is to respond to the question, "What is the nature of reality?" This paradigm assumes that reality is multiple, subjective, and mentally constructed by individuals who view the world not as an objective reality, but rather as subjective mental constructions, selected, built and enhanced by individuals based on their experiences. These mental constructions are simultaneously shaped, not causing or affecting the phenomenon under study (Polit and Beck 2012:13, Klenke 2008:15). Reality is "flexible because several interpretations are possible and probable between different human beings" (Polit and Beck 2012:12).

Individuals constantly search for understanding and meaning in their lives and the world in which they interact. Experiences are continually interpreted to provide meaning. According to Creswell (2009:8), this meaning is "subjective and manifold as experiences are dynamic, holistic and individual". Saks and Allsop (2007:25) further refer to ontology as "the study of the nature of reality". Thus, in accordance with this view, reality is constructed and individuals construct their own reality by associating meanings with certain events. The current researcher believed by using the subjective perspective to explore the reality of the participants' experiences of the phenomenon that ways could, and would be, found by them to resolve the challenge under study. Each

participant was given the opportunity to present her or his perspective of the phenomenon constructed from his or her own experience.

3.2.2.2 Epistemology

Epistemology is related to the inquirer's relationship with the people being researched. In this paradigm, the inquirer interacts with those being researched. The findings of the inquiry are therefore the creation of an interactive process (Polit and Beck 2012:13). According to Bunniss and Kelly (2010:361), knowledge is subjective and multiple, diverse interpretations of reality exist. There is no one ultimate or 'correct' way of knowing.

The relationship between the researcher and the participants in the current study was a mutual and interdependent understanding – the researcher depended on the participants for gathering information and the participants depended on the researcher to illuminate the phenomenon under study. The understanding of the educators with regard to the school-based HIV and AIDS prevention programme was sought. The findings were derived from the outcomes of the interaction between the researcher and the participants.

3.3 RESEARCH DESIGN, RATIONALE AND METHODS

The research design is the "overall plan for obtaining answers to the research questions" (Polit and Beck 2012:58). Defined by Christensen, et al (2015:238) as the outline, plan or strategy used to investigate the research problem, the research design thus specifies how to collect and analyse the data. Liamputtong (2011:303) supports the aforementioned definitions and further explains that a research design is the logical and systematic planning and directing of a piece of research.

This study was done to explore the roles and challenges of local role players in the implementation of the school-based HIV and AIDS prevention programme and developing guidelines to achieve the goals of HIV and AIDS prevention in Bushbuckridge, Mpumalanga –one of the nine provinces in South Africa.

The study was conducted in two phases. Phase one addressed the roles and challenges of local role players in the implementation of the school-based HIV and AIDS prevention programme and Phase two covered the development of the guidelines for the local role players to implement the programme efficiently.

PHASE 1: EMPIRICAL PHASE

In Phase one a qualitative, explorative, descriptive design and contextual study was conducted. Its qualitative characteristic offered the researcher an opportunity to uncover the coordination of services among and participation of the local role players to collaborate to ensure the efficient implementation of the school-based HIV and AIDS programme in high schools.

3.3.1 Qualitative design

Qualitative research "is an investigation of a phenomenon, typically in an in-depth and holistic fashion, through the collection of rich narrative materials". (Polit and Beck 2012:739). Christensen, et al (2015:68) define qualitative research as an interpretive research approach that relies on multiple types of subjective data and investigates people in particular situations in their natural environment. According to this definition, qualitative research is interpretive and therefore the current researcher continually attempted to understand the data from the participants' subjective perspectives. Once the researcher understood the insiders' view it allowed her to ultimately relate the interpretive-subjective data to the research purpose and research objectives (Christensen, et al 2015:68). In this study, the researcher chose qualitative research to obtain rich information from the participants.

Qualitative research was chosen as the best method because a variety of methods may be used for collecting data (LoBiondo-Wood and Haber 2010:123). The researcher used individual interviews, focus group interviews and made use of field notes to collect data from the participants. Furthermore, qualitative research provides depth to and an opportunity to obtain details of the phenomenon under study; a qualitative design creates openness, investigations are conducted under natural conditions and, more importantly, it is flexible and fluid in its approach (Grove, et al 2013:290).

3.3.2 Exploratory research

This study was exploratory in nature as the research focused on the implementation of the HIV and AIDS prevention programme, a phenomenon of interest. Rather than simply observing and describing it, the full nature of the phenomenon was investigated as well as the manner in which it is manifested and other factors that are related to it (LoBiondo-Wood and Haber 2010:198; Polit and Beck 2012:18; 2008:20-1). Exploratory research explores an unknown area of research for various purposes: obtaining new insights; identifying new key concepts; identifying key role players; prioritising social needs; and becoming familiar with unknown situations, conditions,

policies and behaviours (Du Plooy 2009:50). In this study the researcher explored the roles and challenges of local role players for the implementation of the school-based HIV and AIDS prevention programmes. The School Health Policy provided the core guidance during the study as it assisted the educators, nurses, parents as well as the NGOs to understand and undertake their roles in the prevention of HIV and AIDS in schools.

3.3.3 Descriptive research

The purpose of a descriptive study is "to observe, describe, and document aspects of a situation as it naturally occurs" (Christensen, et al 2015:46; Polit and Beck 2008:19). This study was descriptive as the researcher interviewed the participants on their role and function with regard to the implementation as well as the prevention of HIV and AIDS in schools. The roles and challenges of local role players to implement school-based HIV and AIDS prevention programmes were described to ensure that the prevention programme was efficiently implemented. The researcher aimed to generate new insights that were utilised to develop guidelines that could help to shape the application of the collected evidence in practice.

The researcher gained insight and developed understanding of the situation after exploring the various roles and challenges of the role players. The researcher was as well able to describe the roles and challenges experienced by the role players in implementing the school-based HIV and AIDS prevention programme as the descriptive design seek to provide answers to questions and provide a comprehensive summary of the phenomenon under study.

The study was conducted in two phases. The first phase was the empirical phase where the exploration and description of the roles of local role players in health teams regarding the implementation of the school-based HIV and AIDS prevention programmes in school settings were done. Phase two focused on the development of guidelines to implement the school-based HIV and AIDS prevention programme.

3.4 RESEARCH SETTINGS/CONTEXT

The study was conducted in the Bushbuckridge local municipal area in Mpumalanga, one of South Africa's nine provinces. Bushbuckridge municipality is a category B municipality that forms part of the five local municipalities of the Ehlanzeni District municipality family in Mpumalanga. It is bordered by the Mopani District Municipality of Limpopo (another province) to the north, by Mozambique to the east, by Mbombela Local Municipality and Nkomazi Local Municipality to the south, and by ThabaChweu Local Municipality and Maruleng Local Municipality to the west. It is located in the North-Eastern part of the province and forms part of the Ehlanzeni District. Figure 3.1 is a map of the Bushbuckridge local municipality.



Figure 3.1 Bushbuckridge local municipality (Source: The Local Government Handbook: MP325)



The area is about 10 250 square kilometres and has a population of 1 689 million, an unemployment rate of 34.4% and a population growth of 1.5% annual change (Statistics South Africa 2011). It consists of 135 dispersed villages and rural settlements. The three most common languages used are Xitsonga, Sepedi and siSwati.

Table 3.1 further illustrates the Bushbuckridge municipality population statistics according to the 2016 Community survey Census in South Africa (Community survey 2016).

Table 3.1: Bushbuckridge municipality population statistics (Community survey 2016)

Population	546 215
Age Structure	
Population under 15	39.9.00%
Population 15 to 64	55.30%
Population over 65	4.9%
Dependency Ratio	<u>JL</u>
Per 100 (15-64)	81.0
Sex Ratio	
Males per 100 females	85.5
Population Growth	
Per annum	0.32%
Labour Market	
Unemployment rate (official)	N/A
Youth unemployment rate (official) 15-34	N/A
Education (aged 20 +)	
No schooling	16.2%
Higher education	5.7%

Matric	32.6%
Household Dynamics	
Households	136 780
Average household size	4.00 people
Female-headed households	53.0%
Formal dwellings	96.3%
Housing owned	81.7%
Household Services	
Flush toilet connected to sewerage	6.2%
Weekly refuse removal	4.2%
Piped water inside dwelling	7.4%
Electricity for lighting	96.5%

The highest population number in the Bushbuckridge local municipality is the youth. From age 34 and below they constitute 339 340 residents. The high statistics require the municipality to coordinate programmes to meet the needs of the youth and support them in all aspects of their life of which education and health are considered very important.

In Bushbuckridge municipality, there are three hospitals, 34 clinics, five mobile clinics and two community health centres (CHC) that service the entire Bushbuckridge municipal area. Also, there are 213 primary schools, 199 high schools with combined schools and FET institutions counting four.

There are four major townships in the area, namely Acornhoek, Bushbuckridge, Mkhuhlu and Thulamahashe. Two areas, Acornhoek and Thulamahashe, were identified by the researcher for this study based on the differences in infrastructure and wealth in the two areas. Thulamahashe is well-resourced, and Acornhoek is under-resourced. The researcher had a special interest in these two areas as she grew up in Acornhoek and currently resides in Thulamahashe. Figure 3.2 illustrates the locations of the different areas in the Bushbuckridge municipality.

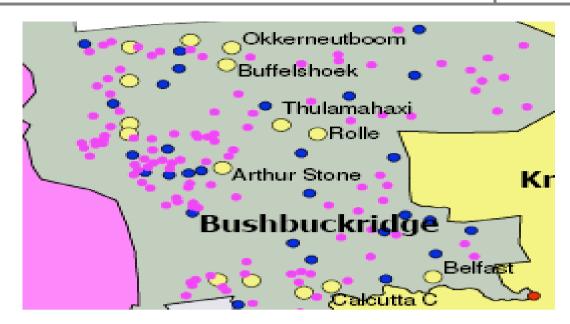


Figure 3.2: Map of Bushbuckridge municipality

According to Dr Olive Shisana, as quoted by Van der Linde (2013), Mpumalanga is the province with the second highest HIV prevalence levels – that is over 20%. Mpumalanga has 34.6% prevalence rate following KwaZulu-Natal the highest rate of 37.4 % (Van der Linde 2013; Fokazi 2012). In Bushbuckridge, the HIV rate is higher than in all other municipalities in Mpumalanga. Having an effective school-based HIV and AIDS prevention programme in these areas may reduce the high HIV prevalence.

3.5 POPULATION

According to Polit and Beck (2012:273), a research population is "the entire aggregation of cases in which a researcher is interested in". The population is the full set of elements or people from whom the sample is selected (Christensen, et al 2015:428; Fox and Bayat 2012:30).

In this study the population was the local role players who had a designated responsibility in the school health teams in the Bushbuckridge area of Mpumalanga. SGB members, NGOs, local clinics, PHC nurses and the health district managers were identified in the Integrated School Health Policy as local role players and thus the researcher also identified them as the population for this study. Not only was this in line with the School Health Policy, but specifically choosing this population was an endeavour to openly show support for the proper implementation of the School Health Policy.

3.5.1 Sampling

Klopper (2008:69) and Grove, et al (2013:44) concur that a sample is a subset of the population that is selected for a particular study. A sample "is a subset of population elements which are the most basic units about which data is collected" (Polit and Beck 2012:275).

Purposive sampling was used as its aim is to select population elements that will provide rich indepth information. Therefore, a typical case sampling was conducted (Polit and Beck 2008:356). According to Liamputtong (2011:11), purposive sampling refers to the deliberate selection of specific individuals, events or settings because of the crucial information they can provide but which cannot be obtained so well through other channels. In purposive sampling, the researcher selects information from rich cases, or cases that can teach them about the purpose of the study (Grove, et al, 2013:365). In qualitative research the idea is to attain an in-depth understanding of the phenomenon under study. The participants must be selected on the basis that they will supply rich information of their experiences. LoBiondo-Wood and Haber (2010:228) further indicate that the researcher uses his or her knowledge of the population and its elements to handpick the cases to be included in the sample.

A community health centre (CHC) and a clinic were purposively selected for the study. A community health centre serving the high school in Thulamahashe and a clinic serving the high school in Acornhoek were purposively selected. The distance from the school to the CHC is about 5000 metres and the one from the clinic to the school approximately 600 metres. Thus, access, coordination and collaboration of the health services were easier.

In each of the two schools, a purposive sample of five educators, most senior member of the staff and SGB members who were conveniently identified by the principal of each school according to the former's participation in matters concerning the welfare of the learners, was drawn. Two voluntary members from the local NGO involved in HIV and AIDS prevention programmes was selected with the assistance of the manager of the NGO.

Primary healthcare nurses were purposively selected for the study; the sample consisted of four nurses from the community health centre, four from the local clinic as well as a senior manager from the local municipality. From the nine nurses sampled, three were not PHC trained, but had been working at the centers for more than two years and had extensive experience and insight into all of the programmes run from the clinic.

The researcher requested the most senior member of each school to identify educators and SGB members who should participate in the study. The CHC and the clinic operational managers were also requested to purposively identify participants they believed would have the knowledge and experience to provide rich in-depth information. Both males and females were included in the study. The sample size was not statically determined but depended greatly on information that emerged during the interviews as well as the request from the study supervisors to add on the sample that was initially sampled.

3.5.2 Inclusion criteria

The educators selected taught Life Orientation as a subject to Grades 8 to 12, but not limited to the learning area; they taught Life Orientation in the identified high schools for at least a term, but not limited to the learning area. The SGB members served as active members during the time of study. The members from the NGO had to have been in Bushbuckridge for at least one year and above. The nurses were professional nurses and/or trained in primary healthcare working in the CHC and the clinic that serve the local identified high schools in the Bushbuckridge area. Three of the nurses included in the sample were not PHC trained, but had been working at the centers for more than two years and had extensive experience and insight into all of the programmes run from the clinic.

3.6 DATA COLLECTION METHODS

The data collection is described by Polit and Beck (2008:384) as "self-reported" implying it is obtained by means of interviewing research participants. Data was collected through semi-structured focus group interviews (FGIs) and semi-structured individual interviews. FGIs was done to elicit textual and structural descriptions of the experiences of the local role player as well as to provide an understanding of their common experiences (Creswell 2013:81). The researcher used focus groups interview in order to be able to explore the attitudes, feeling and beliefs of the participants during the group interaction. The group interaction may create a platform and atmosphere where all the participants may open up and give responses as needed.

According to LoBiondo-Wood and Haber (2010:275) interviews are used to clarify the task for the respondent or to obtain more personal data from the respondent. In this study semi-structured individual interviews were used to obtain more personal data from role players on their roles, challenges and needs in the implementation of the school-based HIV and AIDS prevention programme. Semi-structured interviews were used as they are more flexible. The researcher expressed respect to the participants by politely communicating with them, explaining and responding to their questions. This was done to establish rapport and building a trusting

relationship with the participants. According to Streubert-Speziale and Carpenter (2011:34) the participants being interviewed may choose to disclose only what they think is socially acceptable and it will affect the quality of the data obtained. The individual interview with the nurses was the ideal method to use because of the flexibility of interviews. Health care delivery would not be affected as interviews were done when the nurses have finished seeing patients and during their break, are flexible.

Data in a qualitative study is affected by both the data collection plan and how the plan is implemented (Polit and Beck 2008:381). "Without high-quality data collection methods, the accuracy and robustness of the conclusions are subject to being challenged" (Polit and Beck 2008:367).

3.6.1 Pilot study

The interview guide (research instrument), was tried and tested to make sure it would be clearly understood by all participants as well as to assure the ability of the researcher to use the instrument efficiently (Brink, et al 2013:175). A trial interview was done at a clinic with three professional nurses. The review was done with the assistance of the supervisor, the co-supervisor and other PhD scholars. The feedback was used by the researcher to revise, rephrase as well as clarifying items in the instrument. The result of the instrument test was not used in the main study except for clarifying and revising the items identified.

3.6.2 Data collection strategies

The researcher used focus group interviews and semi-structured individual interviews as strategies to collect data. Both the focus groups and individual interviews were done at a time and venue convenient for both the researcher and the participants (Brink, et al 2013:158).

3.6.2.1 Focus group interviews

Polit and Beck (2010:341) refer to focus group interviews as "a discussion with a group of 5 – 10 people whose opinions and experiences are solicited simultaneously". The interviewer guides the discussion according to the topic guide. Focus group sessions are carefully planned talks that take advantage of group dynamics for accessing rich information in a cost-effective way. The researcher conducted semi-structured focus group discussions. Instead of making use of specific questions, in a semi-structured focus group discussion the researcher has a list of topics to cover (Polit and Beck 2008:766; Du Plooy 2009:198).

Two focus group interviews were done – one at each of the identified schools. The FGIs were conducted with the assistance of a trained research assistant. The FGI comprised of the senior staff member from each of the schools, the educators identified by the principal of each school, and educators who were part of the SGB. The participants from the NGO were not available on the day the FGI was done. In consultation with the supervisor, a decision was taken that the participants will form part of the individual interviews. Each of the two groups met once at the designated school and each discussion lasted between 50 and 55 minutes. The venue where the discussion took place was identified by the school, but the researcher ensured that privacy was maintained, the environment was appropriately comfortable and safe, known to the participants and thus accessible, and that no outside noise or disturbances would interrupt the proceedings (Grove, et al 2013:274). The FGI in school A was conducted a day before the schools closed for the holidays and the one in school B was booked for the day the school closed. This timing was fortunate as no classes meant there was no learners thus less noise from outside.

The purpose of conducting the FGI in the schools was to ensure that the discussion took place in the participants' natural setting so that realism may be enhanced. At the beginning of the FGI, the researcher introduced herself, the research assistant and the topic to the participants. The consent forms were then signed by the participants. An interview guide (refer to Appendix D) containing open-ended was used to guide the discussion and appropriate follow-up questions were asked (LoBiondo-Wood and Haber 2010:275; Grove, et al 2013:271). An audio-recorder was used to record the progress of the interview once the group had anonymously given consent for the interview to be recorded. Field notes were be taken by the research assistant during the interviews and the participants were observed throughout and notes written down accordingly (Polit and Beck 2012:548). Questions were asked to assess the coordination of the local role players. The participants were requested to describe their roles and responsibilities in the implementation of the HIV and AIDS prevention programme in schools, the resources that were available at the time and the situational factors that supported or impeded on the execution of their tasks.

The following are the main questions that were asked during the focus group discussion: 'Do you have an HIV and AIDS prevention programme in your school?'; 'What is your role in the implementation of the school-based HIV and AIDS prevention programme?'; 'What are your challenges in implementing the HIV and AIDS prevention programme?'; 'Tell me of any legislation governing your functioning as the role players in the HIV and AIDS prevention programme'; and 'Who are the local role players with whom you collaborate to implement the programme?' (Refer to

Appendix D). The techniques of probing, paraphrasing and clarification were used by the researcher throughout the interviews.

Towards the end of the discussions, participants were asked if they had ideas or suggestions they believed could be developed or initiated to enhance the programme implementation or improve the services. The participants were thanked after the focus group discussion and refreshments served (Grove, et al 2013:275).

The audio-recordings were transcribed verbatim by the researcher. The researcher took the transcribed data back to the participants for verification. The transcribed data was ultimately explored for themes and categories to initiate the interpretation and discussions of the issues under investigation. Field notes were used to support the recorded information during discussions and the data analysis.

3.6.2.2 Semi-structured individual interviews

Liamputtong (2011:43) defines a semi-structured individual interview as a face to face or one-on-one interaction between the researcher and the participant. Grove, et al (2013:271) refer to interviews as "an interaction between the participant and the qualitative researcher that produces data as words". Interviews as a method of data collection is advantageous as it allows the interviewer to clarify all the ambiguous answers the participants may give. In addition, it provides an opportunity to probe for further clarification. In a semi-structured interview the researcher has a list of topics to cover rather than specific questions (Polit and Beck 2008:766; Du Plooy 2009:198). These are organised around a set of open-ended question; hence, the researcher will ask open-ended questions with follow-up probing questions (LoBiondo-Wood and Haber 2010:275; Grove, et al 2013:271).

The researcher conducted semi-structured interviews with the district health manager, the PHC nurses and professional nurses and the NGOs. The interviews were conducted at their various places of work. With the assistance of the operational managers, the researcher identified and recruited the participants at the CHC and the clinic. A private environment that was comfortable, free from outside noise and disturbances was prepared for conducting the interviews. The researcher followed the same welcoming process as for the FGI; she introduced herself and the purpose of the study to the participant and every participant was requested to sign a consent form.

The interview guide (Refer to Appendix C) guided the interviews and appropriate, relevant follow-up questions were asked (LoBiondo-Wood and Haber 2010:275; Grove, et al 2013:2710). Interviews were conducted until data saturation was reached and no new themes were emerging. Interviews were conducted for approximately 45 to 50 minutes with each participant. With the permission of the participant, an audio-recorder was used to record the progress of every individual interview. Field notes were taken during the interviews while the researcher also observed the nonverbal communication and gestures of the participants. These she recorded as written data on a notepad (Polit and Beck 2012:548).

The same questions were asked during every individual interview: 'Do you have a HIV and AIDS prevention programme that you are rendering to the school next to your unit?'; 'What is your role in the implementation of the school-based HIV and AIDS prevention programme?'; 'What are your challenges in implementing the HIV and AIDS prevention programme?'; 'Tell me of any legislation governing your functioning as the role players in the HIV and AIDS prevention programme'; and 'Who are the local role players with whom you collaborate to implement the programme?' (Refer to Appendix C). Various communication strategies such as probing, clarification and paraphrasing were used to confirm and verify what has been said, encourage participants to provide more information, clarify something about the issue under discussion or to elaborate on an interesting point raised by the participant.

According to Creswell (2013:105) data saturation is the situation of obtaining the full range of themes from the participants, to the extent that no new data will emerge when interviewing additional participants. In the current study data saturation was reached after two focus groups in School B, one focus group in school A and two interviews with the NGOs. Meanwhile, with the interviews, data saturation was reached after three individual interviews.

The recordings were transcribed verbatim by the researcher. The researcher took the transcribed data back to the participants for verification. The transcribed data was ultimately explored for themes and categories to initiate the interpretation and discussions of the issues under investigation.

All the participants were thanked after the interviews and refreshments served (Grove, et al 2013:275).

3.6.2.3 Field notes

Christensen et al (2015:377) describes field notes as notes taken by the researcher during (or immediately after) one's observations in the field. The researcher and the research assistant took field notes during the FGIs and individual interviews of the verbal as well as nonverbal communication of the participants. The researcher kept a journal of reflections after conducting the FGIs and individual interviews. Observations related to the study were made while conducting the data collection. The notes strengthen the validity of the data collected during the analysis of the data.

3.7 DATA ANALYSIS METHODS

In qualitative research, data analysis is a process of examining and interpreting data in order to elicit meaning, gain understanding and develop empirical knowledge (Corbin and Strauss (2008) as cited by Grove, et al (2013:279). Polit and Beck (2012:556) describe the purpose of data analysis as to organise, provide structure to, and elicit meaning from the data. In the view of Streubert and Carpenter (2011:92), the purpose of data analysis is to "preserve the uniqueness of each participant's lived experience while permitting an understanding of the phenomenon under study". In qualitative research data analysis occurs simultaneously with data collection.

Verbatim transcription of the focus group discussions and individual interviews were done by the researcher immediately after the completion of the interviews. The field notes were done as a critical step for the preparation of the data analysis during the data collection period. Tesch's method of data analysis (1990) was used to provide detailed guidance for the coding process, though there was a slight diversion from the method. According to Creswell (2009:186), Tesch provides a useful analysis of the process in eight steps. The researcher gets a sense of the whole by reading through all the transcriptions; the current researcher went through the documents trying to find out what it was all about and wrote her thoughts down in the margin. After making a list of topics, similar topics were clustered together. The researcher then abbreviated the topics as codes and wrote the codes next to the appropriate segments. Next in Tesch's method the identification of the categories is done; the finalisation of abbreviations for each category and alphabetising of the codes are made. The researcher then assembles the data material belonging to each category in one place and performs a preliminary analysis. Lastly, the researcher recodes the existing data.

The researcher also made use of an independent coder to further code the data. The coder was given the transcripts of both the focus group interviews as well as the individual interviews to independently analyse and code the entire data sets. The co-coder came up with codes, themes,

categories and subcategories after the analysis. A meeting was then held between the researcher and the co-coder to compare, contrast, discuss as well as making adjustments of the data codes. This was done to ensure the highest possible coding consistency across data collected (Polit and Beck 2012:559)

In the data analysis process of the current study, after the coding, step four was done. The researcher used the coding to generate a description of the setting or people as well as categories or themes for analysis. In step five the researcher developed themes and descriptions; and in the final step six the researcher made an interpretation or meaning of the data (Creswell 2009:189).

3.8 TRUSTWORTHINESS

According to Liamputtong (2011:20), rigour or trustworthiness refers "to the quality of qualitative inquiry and is used as a way of evaluating qualitative research". Rigour is the soundness of the research (Klopper 2008:69). Qualitative researchers are required to ensure the trustworthiness of their research. Lincoln and Guba (1985a) as augmented by Lincoln and Guba (1994) proposed four criteria for the developing the trustworthiness of qualitative inquiry. The same criteria are also identified by (Polit and Beck (2012:745). Based on these criteria, the quality of the data collected in this study was ensured through adherence to the following criteria – credibility, dependability, conformability, transferability and authenticity.

Credibility

Credibility refers to confidence in the truth of the data and interpretation of it (LoBiondo-Wood and Haber 2010:130; Polit and Beck 2012:585). Credibility addresses the truth of the findings and involves two aspects, viz "the study is carried out in a way that enhances belief in the findings and steps are taken to demonstrate credibility in the research report" Lincoln and Guba 1985b:294). According to Sandelowski (2010 cited by Krefting 1990:216), "qualitative research is credible when it presents such accurate descriptions or interpretations of human experiences that people who also share that experience would immediately recognise the description".

Participant feedback: To ensure the credibility or the truth value of the study data and interpretation thereof, the researcher validated the key points with the participants at the end of each interview and presented it back to them to assure accuracy of the information. This is called member checking or participant feedback (Krefting 1990:219; Christensen, et al 2011:364). The member check refers to a "process whereby data, analytic categories, interpretations, and

conclusions are tested with members of those stakeholding groups from whom the data were originally collected" (Lincoln and Guba 1985b:314).

Data triangulation: Multiple or various data sources must be used as a strategy to ensure credibility as well as to build a coherent justification of the themes (Creswell 2009:190). The researcher obtained data from numerous sources – the educators, the SGBs, PHC nurses, the district health manager and NGOs. Focus group interviews as well as individual interviews were used to collect data. The researcher interviewed various role players – the educators, the SGBs and PHC nurses. She observed the participants during the interviews and took field notes in a special journal to reflect on, describe and interpret her own thoughts and experiences after the interviews (Krefting 1990:218; Christensen, et al 2011:364).

Dependability

According to Polit and Beck (2012:585), dependability refers to "the stability (reliability) of the data over time and conditions". Dependability refers to the stability of the data. For the data to be dependable, it is important that the data does not change over time or in different conditions (Berglund 2017:59). This criterion is met once the researcher has demonstrated the credibility of the findings. Lincoln and Guba (1985b:298) describe dependability as being underpinned by the idea of "consistency" of the research findings. This description is emphasised further by Mertens and McLaughlin (2004:107) that the research findings are consistent and employed to "attest to the quality and appropriateness of the inquiry process". The dependability question to be considered is: "Would the findings of a study be repeated if it were replicated with the same or similar participants in the same or similar context?" (Berglund 2017:59; Krefting 1990:221). It is proposed by Christensen, et al (2011:364) that dependability relates to the consistency of findings and can be enhanced by a single audit and or an external audit where an outside expert is used to assess the quality of the study. To ensure dependability, the current researcher adhered to the criteria closely. She made use of an independent coder to code the data and reviewed the tapes to assure that the interview techniques were consistent. The researcher included a thick description of the methodology and made use of different methods for collecting data (Krefting 1990:221).

Confirmability

Confirmability refers to objectivity, "the potential for congruence between two or more independent people about the data's accuracy, relevance or meaning" (Streubert and Carpenter 2011:49; Polit and Beck 2012:585). According to Berglund (2017:60), Confirmability refers to "the data being accurate to the information the responders provided". This criterion is concerned with making sure

that the data collected represents the information the participants provided and the interpretation thereof is not invented by the researcher. In this study the researcher kept all the memos and detailed records of the study methods as well as recordings of meetings with the participants (Polit and Beck 2012:588). The researcher also used low-inference descriptors by using descriptions that were very close to the participants' words or were direct verbatim quotes (Christensen, et al 2011:365).

Transferability

According to Polit and Beck (2012:585), transferability "refers to the potential for extrapolation, the extent to which the findings can be transferred to or have applicability in other settings or groups". This is the ability to generalise from the findings to larger populations. Streubert and Carpenter (2011:49) further explain transferability as meaning "fittingness" – in other words, determining whether the findings "fit" with potential users of the findings. Meanwhile Lincoln and Guba (1985a:298) indicates that transferability draws on the notion of "applicability" of the research outcomes; i.e. the outcomes maybe transferred and/or applied to another situation with similar conditions of a study. Using purposive sampling to select the sources allowed the current researcher to secure the participation of sources with different backgrounds and experiences. The researcher collected data until data saturation was achieved. Finally, she provided a thick description and the actual quotes of the participants for the data analysis and discussions (Krefting 1990:217; Christensen, et al 2011:365).

Authenticity

Authenticity refers "to the extent to which researchers fairly and faithfully sow a range of realities" (Polit and Beck 2012:585). "Authenticity emerges in a report when it conveys the feeling or tone of the participants' lives as they are lived". In this study, authenticity was achieved by reporting on the mood, feelings and experiences identified during the data collection activities. This was recorded by both the researcher and the research assistant in the field notes and journal.

3.9 CONCLUSION

In this chapter the research design and methodology were thoroughly presented and discussed. The rationale for using a qualitative design with an explorative and descriptive approach in this contextual study done in the Bushbuckridge local municipal area in Mpumalanga was given. The purposefully selected two settings, the community health centre serving the high school in Thulamahashe and a clinic serving the high school in Acornhoek, were sufficiently described as

was the population and sampling of participants. The inclusion criteria were stated. Data collection was done via semi-structured focus group interviews and semi-structured individual interviews in the natural settings where participants felt comfortable and at ease. All participants willingly signed informed consent. The data collected was transcribed verbatim, and Tesch's approach to themes and coding formed the basis of the data analysis. With the data analysis, the issues to ensure trustworthiness were discussed and clarified.

Chapter 4 deals with the data analyses and interpretations.

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION

4.1 INTRODUCTION

This chapter presents the analysis, description and interpretation of the findings of the data collected from the study carried out to develop guidelines for local role players to implement the school-based HIV and AIDS prevention programme in Bushbuckridge, Mpumalanga. The frame of reference for the study was to explore the roles and challenges of local role players in the implementation of the school-based HIV and AIDS prevention programmes as required by the Integrated School Health Policy (ISHP). In addition, guidelines had to be developed to ensure the effective, efficient and relevant implementation of the school-based HIV and AIDS prevention programme.

The study was designed to collect data using focus group interviews (FGIs) and individual face to face interviews. The FGIs data was collected at two schools, school A with eight participants and school B with eleven participants. Participants in both schools consisted of senior members of the school personnel and Life Orientation educators and those who were part of the SGB and identified by the principal of each school. The semi-structured individual interviews were conducted with one of the senior members in the district health, five primary healthcare (PHC) nurses working in the community health centre (CHC), four professional nurses working in the clinic, and two NGO members as indicated in Chapter 3.

The documentation and analysis process aimed to present data in an enabling way to identify trends and relations in accordance with the research objectives. In turn, the identified roles and challenges in accordance with the research objectives would enable the researcher to develop guidelines for local role players to implement the school-based HIV and AIDS prevention programme in Bushbuckridge.

4.2 PHASE 1

This was the empirical phase and addressed the roles and challenges of local role players in the implementation of the school-based HIV and AIDS prevention programme. After briefly restating the data analysis process, the findings of the two methods of data collection are presented and discussed as a single unit of analysis (refer to Table 4.1).

4.2.1 Empirical data analysis and presentation of findings

In qualitative research data analysis is a process of examining and interpreting data to elicit meaning, gain understanding, and develop empirical knowledge (Corbin and Strauss (2008:47) cited by Grove, et al 2013:279). In this study, the researcher organised, gave structure, and elicited meaning from the data provided by the participants in accordance with the purpose of data analysis as described by Polit and Beck (2012:556). The researcher applied a constructivist philosophical perspective (often referred to as the naturalistic paradigm) in an attempt to understand, describe and interpret the roles and challenges experienced by the local role players to implement the school-based HIV and AIDS prevention programme in high school settings.

The recorded FGIs and semi-structured individual interviews were transcribed verbatim. The transcripts were coded using Tesch's method of data analysis as described in Creswell (2009:192) (Refer to Chapter 3). Kreuger, Neuman, Robson (2011:408) view the analysis and interpretation of data as a process; the products of the analysis thereof provide the bases for interpretation and analysis. It is an important exercise to go through in a study. Robson (2011:468) states the central requirement in qualitative analysis is clear thinking on the part of the analyst. The current researcher was able to analyse statements, produce valid arguments as well as initiate logical discussions. The findings of the two methods of data collection were presented and discussed as a single unit of analysis. This was done to enrich the analysis and to avoid repetition.

Managing the mass of raw, transcribed data meant ordering it systematically and methodically into manageable chunks to attain themes, categories and subcategories (Polit and Beck 2012:557-60). A theme is described by Polit and Beck (2012:562) as "an abstract entity that brings meaning and identity" to how a situation or experience is at present and how it is manifested. Thus, the capturing of themes, categories and subcategories unifies the nature or basics of the situation or experience into a meaningful whole (Polit and Beck 2012:562). Field notes taken during the interviews in the current study augmented the interpretation of the meaning of participants' words.

In this study the information obtained from the single unit data analysis was of sufficient quality to be turned into themes, categories and subcategories that pertained directly to roles of the local role players in the implementation of the school-based HIV and AIDS prevention programmes, the challenges they experienced and the guidelines needed to ensure the effective implementation of these programmes.

4.2.2 Theme 1: The roles of local role players in school-based HIV and AIDS prevention programme

HIV and AIDS health services are aimed at meeting the needs of all learners who are affected by knowing or staying with a person/s living with HIV and AIDS or learners who are living with HIV and AIDS themselves. The services offered by nurses, educators or NGOs are related to the promotion, prevention and initiation of treatment and appropriate follow-up. All participants in the study were asked about their current roles in the school-based HIV and AIDS prevention programme offered for learners. The enquiry centred on what the service exactly is, its content, the method or strategy used for HIV and AIDS education, skills needed as well as information sources.

Three (3) major themes were identified. Eleven (11) categories and 35 subcategories substantiated the three themes. The combined findings are presented first in a summarised table format in Table 4.1. The combined findings are reported, interpreted and rich descriptions of the themes, categories and subcategories are given. The verbatim quotes used to support the findings as interpreted by the researcher are written in italics. Operational introductions, clarities and/or definitions for each category are given.

TABLE 4.1: THEMES, CATEGORIES AND SUBCATEGORIES DERIVED FROM FOCUS GROUP INTERVIEWS AND SEMI-STRUCTURED INDIVIDUAL INTERVIEWS

THEMES	CATEGORY	SUBCATEGORIES
4.2.2 THEME 1: THE ROLES	4.2.2.1 HIV and AIDS	Youth-friendly clinic
OF LOCAL ROLE	health services	Clinic visits
PLAYERS IN SCHOOL-	(nurses)	Screening and health
BASED HIV AND AIDS		education(to learners and
PREVENTION		educators)
PROGRAMME	4.2.2.2 HIV and AIDS	Life Orientation and health
	education(nurses,	education
	educators and NGOs)	Life skills education
		Information sessions
		Counselling
		School health programmes
		and campaigns
	4.2.2.3 Collaboration	Role players
	(referral system)	Role fulfilment
	between role players	
	and services	
	4.2.2.4 Monitoring and	Short term effects of the
	evaluation: Educators'	programme
	and nurses' views of	Long term effects of the
4	the programme	programme
	4.2.2.5 Monitoring and	evaluation: Educators', nurses' and
	NGOs' view on the parents' roles and responses towards the	
	HIV and AIDS programm	·
4.2.3 THEME 2:	4.2.3.1 Departmental	Insufficient departmental
CHALLENGES WITH	challenges	support and time for
SCHOOL-BASED HIV AND		preventive services
AIDS PREVENTION		
PROGRAMMES		
		Health and education

			departments: Life Orientation
			not a priority
			not a phonty
1000			
4.2.3.2	Inadequate	•	Ineffective presentation skills
resources			of educators (e.g. lack of real
			life examples)
			Lack of visual educational aids
		•	
			and appropriate venues
		•	Community factors: e.g. child-
			headed families and poverty
4.2.3.3	Personal	•	Lack of trained dedicated staff
	r ei Sui idi		
barriers			 infrequent services delivery
		•	Insufficient knowledge and
			application of policies and
			guidelines
			Insufficient collaboration
			between role players
		•	Educators' barriers towards
			HIV and AIDS education
			(sensitive issue)
			,
		•	Cultural and religious beliefs
		•	Lack of parental
		•	Lack of parental

				understanding of the school
				_
				HIV and AIDS programme.
			•	Parental barriers towards
				sexual education
4.2.4 THEME 3:	4.2.4.1	Adequate	•	Appropriate educational aids
SUGGESTIONS AND	resources			and venues
NEEDS FOR SCHOOL-				
BASED HIV AND AIDS				Human rassurass amnauar
PREVENTION			•	Human resources – empower
PROGRAMME				all role players with knowledge
				and skills
			•	Human resources – ensure
				collaboration between role
				players
				,
				Human resources – ensure
				sufficiently trained dedicated
				staff
				Stan
			•	Dedicated prevention
				programmes with monitoring
				and evaluation (M &E)
			•	Consistent involvement of the
				school health team (SHS)
			•	Involvement of multi-
				disciplinary team
				disciplinary tourn
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List of research project topics and materials

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		•	Involvement of the nongovernmental organisation (NGO)
4.2.4.2 population	Target	•	Include primary schools
		•	Involve community, church and parents
		•	Include educators

4.2.2.1 Category 1: HIV and AIDS health services (nurses)

HIV and AIDS health services (nurses) emerged as the first main category of theme 1; the roles of local role players in school-based HIV and AIDS prevention programme. It was subdivided into three subcategories: youth-friendly clinic; clinic visits; and screening and health education (to learners and educators) as shown in Table 4.2.

The nurse participants in the study indicated that it was their responsibility to provide HIV and AIDS health services to the learners. The findings revealed health services were provided in the form of a youth-friendly clinic and clinic visits. Screening and health education formed part of the services and activities rendered by nurses in youth-friendly clinics and during clinic visits.

Table 4.2: Category 1 –HIV and AIDS health services (nurses)

CATEGORY	SUBCATEGORIES
4.2.2.1 HIV and AIDS health services	Youth-friendly clinic
(nurses)	
	Clinic visits
	Screening and health education(to
	learners and educators)

• Youth-friendly clinic

The participants were professional nurses from the clinic and the community health centre. The clinic is close to the high school in Acornhoek and the community health centre (CHC) is near the high school in Thulamahashe. They all confirmed the services they provided were youth-friendly and that rendering sexual and reproductive health services (SRH) was part of the role they fulfilled in the implementation of the school-based HIV and AIDS prevention programme. The following quotes from the clinic nurses verify this finding:

"We run a youth-friendly clinic in this clinic every day. In this clinic we only see the youth and most of them are from the nearby school." (Clinic Participant no. 3)

"We are having a youth-friendly clinic which is run especially during the weekends, so we teach the youth about STI, HIV, TB and family planning." (Clinic Participant no.1)

"We are having a youth-friendly clinic which is run especially during the weekends." (Clinic Participant no. 2)

A youth-friendly clinic (YFC) is a clinic offering integrated healthcare for the youth – meaning the approach to care in the clinic encompasses the following key components of what is regarded as youth-friendly clinical services: confidentiality, respectful treatment, integrated service, culturally appropriate care, free or low-cost services, and easy access (WHO 2012a:30). Making health services adolescent friendly: developing national quality standards for adolescent-friendly health services OR Adolescent friendly health services: an agenda for change. Sexual and reproductive health services (SRH) offered in a youth-friendly clinic consist of an education and counselling component, contraceptive services, STI/HIV testing and treatment, and attending to other health concerns linked with physical intimacy. These clinics actively promote parent/child communication

regarding the latter's sexuality. Providing a health service that is youth-friendly is a key strategy for improving young people's health (Geary, Gomes-Olive, Kahn, Tollman and Norris 2014: I).

Participants from the CHC agreed that providing youth-friendly services is a pivotal role nurses fulfil in the implementation of the HIV and AIDS prevention programmes in local high schools. These participants expressed their roles as youth-friendly counsellors, advisors and educators in the following ways:

"Oh, we have a youth-friendly clinic every day in the CHC ... there are guys here who are particularly dealing with the youth." (CHC Participant no. 1)

"We do not have a formal programme but we do go for just lessons to teach, to give them health educations...sometimes in a while. But most of the time we do call, we have the children comes on weekends, Saturdays, for health education concerning prevention. And each and every time when each client comes to the clinic we counsel them on HIV and then we offer them HIV testing; which is a daily thing." (CHC Participant no. 3)

"We screen them when they come to the youth-friendly clinic, but one thing for sure, we educate them." (CHC Participant no.2)

Both the clinic and the CHC could be accessed by learners during the week or over a weekend – although at the CHC only on a Saturday – when screening, counselling and testing for HIV and AIDS and health education regarding STIs and family planning services were provided in an informal way. Casually educating high school learners in a setting they have easy access to by "guys here who are particularly dealing with the youth" links unmistakeably to the observation made by Geary, Gomes-Olive, Kahn, Tollman and Norris (2014:I) that sexual and reproductive health services (SRH) offered in a youth-friendly clinic consist of an education and counselling component, contraceptive services, STI/HIV testing and treatment, and attending to other health concerns linked with physical intimacy. The nurses in Bushbuckridge clearly endeavoured to do their utmost to accommodate the learners' sexual health needs which included specifically health-related HIV and AIDS issues. Providing a health service that is youth-friendly is a key strategy for improving young people's health (Geary, et al 2014: I).

From literature it seems as if confidentiality – which linked to anonymity and privacy – is a major issue among learners. Learners who feel confident and at ease with educators tend to open up when talking about sexual health and personal issues with adults or experienced professionals

they feel they can trust. This is an important aspect of learners' SRH and HIV and AIDS educational initiatives – learners must *trust* educators; this may lead to increased awareness and knowledge about STIs and may serve to reduce high-risk behaviour (Bana, Bhat, Godlwana, Libazi, Maholwana, Marafungana, et al 2010:157).

Participants from the clinic informed that SRH services were readily available and accessible to the youth from the local high schools over weekends. They confirmed attendance by learners over weekends was fruitful since latter were more willing to visit the clinic over weekends for "personalised care" which they felt was more "confidential". The chances of friends and family members recognising them which could lead to criticism or victimisation were minimal. Participants described learners who attended the clinic over weekends as follows:

"The students [learners] are happy and always willing to come on weekends to the clinic, because they know they will receive personalised care." (Clinic Participant no. 4)

"You know what, on weekends, there are less people and chances that they [are] seen by others or relatives, who may go out and gossip about them, is very small. They are very free." (CHC Participant no.1)

Although the findings indicated that the clinic as well as CHC nurses regarded the services they provided as youth-friendly Sexual Reproductive Health services, questions about the implementation of the Integrated School Health Policy (ISHP) by the relevant institutions and role players were met with ignorance in both the Acornhoek and the Thulamahashe high schools. Quotes from the nurses, educators and NGO members confirmed there was lack of knowledge concerning the guidelines for the school-based HIV and AIDS prevention programme as stipulated in the Integrated School Health Policy (ISHP):

"No we don't know it [ISHP]...." (Participant no 2. FGI School A)

"I have never heard anything about such a policy." (Participant no. 1 FGI School A)

"We don't know of that. Or am I the only one who does not know this policy?" (Participant no. 3 FGI School B)

The above verbatim quotes from the focus group interviews (FGIs) conducted in the high schools signify a lack of knowledge among educators about the ISHP. Conversely, the findings from the

interviews with the nurses working in the CHC and the clinic suggest that while they were aware of the Integrated School Health Policy, they had no accurate information about its content. Further responses from the nurse participants in this regard included:

"I am aware that there is that policy. Yes, I did go through it but I didn't finish you know. I didn't go through it, but the policy is there, I have seen it." (CHC Participant no. 2)

"I didn't get the time to go through it." (Clinic Participant no. 4)

"I haven't had time to go through it, you know ... and the shortage of staff is killing us." (CHC Participant no. 5)

Participants from both the clinic and CHC reaffirmed awareness of the ISHP while at the same time admitting they were ignorant of its content and did not read it, was not an encouraging finding. One participant attributed the lack of time to read the policy to staff shortages, but various other reasons for not knowing its content or reading it were also given:

"I once heard about it, but I have never seen it. You know things reach us late and personally I did not take initiative to look for it." (Clinic Participant no. 3)

"No, maybe if I can say we do not have the school health services or nurses for that programme, so we are sacrificing to be able to spare some times to go and teach them and in that way it will be difficult for us to know about such policies. I think it is more relevant to the school health services. It is just my thinking." (CHC Participant no. 5)

"I know the policy but I have not gone through it. You know I am a nurse even though I am working as NGO, once a nurse [I]always will be [a nurse]. I follow up things that have to do with my profession. No. I don't know it." [Shaking her head to emphasise her point] (NGO Participant no. 2)

The findings revealed that primary healthcare nurses and members of non-governmental organisations were not acquainted with the content of the Integrated School Health Policy. One nurse participant's opinion was that being knowledgeable about the policy and its content was "more *relevant to the school health*" nurses than to nurses working in clinics or community health centres.

In this subcategory the findings imply that there is a belief among current nurses working with youths in high schools that they are rendering youth-friendly services to the latter in spite of the fact that they are not at all familiar with the content of the ISHP. According to the participants, the scope of SRH nurses' work is to meet the needs of learners related to promotive and preventive services, the initiation of treatment, and appropriate follow-up. The assertion of the PHC nurse participants that they did provide youth-friendly services concomitant with their acknowledgement that they had heard, seen or knew about the ISHP but did not know its content predisposes one to ponder whether the services they rendered met the definition of a youth-friendly service as stated by the WHO (2012a:30) or whether the nurses were simply offering a service to the youth in relation to the prevention of HIV and AIDS. The finding that almost all of the participants did not know the Integrated School Health Policy (ISHP) guidelines raises major concerns about the alignment of services currently rendered to the youth.

Clinic visits

Clinic visits are visits learners make to the healthcare facility for issues related to health promotion, prevention of diseases as well as curative services. More than 10 participants from the FGIs and individual interviews identified clinic visits as the platform for meeting the health needs of the learners. Participants in this study shared that clinic visits by the learners were either voluntary (thus, clinic visits were learners' preferred approach) or otherwise it was referrals. The staff shortages were mentioned as one of the reasons for learners' decision to make use of the clinic for SRH reasons. According to the nurses, when the learners made use of the clinic services it benefitted the nurses because it eased the burden of movement to and from the schools for health education or any other health service provision. A participant from the clinic stated:

"But even us, due to shortage, it's difficult for you to leave the patients here [at clinic] and go that side [to the school] but if it's in the morning you don't have a problem." (Clinic Participant no. 3)

Another participant said in relation to the clinic visits:

"Currently, because of shortage of staff ... we have never been to schools. Myself, I have never been to any neighbouring school, but I am aware that there is a need for that. But because of that [staff shortage] we don't manage to go. I will personally recommend clinic visits by the learners and educators as it minimises up and down movement by both parties."(Clinic Participant no. 2)

Another participant added:

"If I am not being instructed to do whatever I wouldn't just stand up and go to school and say, 'Now I am going to do one, two, three and one, two, three'. It is not easy for me to be part of this because I am fully hands-on the patients that are sick unless if the [inaudible 00:13:53]. So that is where I can assist when they come to the clinic. I can be able to manage to offer my services to them." (Clinic Participant no. 4)

The study revealed that nurse participants seemed thankful that learners were visiting the clinics because it was an opportunity for the nurses to ensure that their role in the school-based HIV and AIDS prevention programme was fulfilled. However, the nurse/patient ratio in the clinics was an impediment to the efficient fulfilment of this role. Nurse participants admitted they "have never been to schools" and, if not instructed, they would not go to schools of their own accord because they were "fully hands-on the patients that are sick". Importantly, nurses emphasised they knew there was a need for school visitations, but they could not find the time to visit schools because of the workload in the clinic and not because they did not want to assist learners. This is confirmed by the statements of two nurse participants of whom one "personally recommend clinic visits by the learners" and the other said "I can assist when they come to the clinic. I can be able to manage to offer my services to them".

The participants further voiced they perceived the clinic visits as beneficial to the learners, nurses and educators. They reasoned that when the learners visit the clinic – and not vice versa– they as health educators had the freedom to educate and advise the learners in all areas relating to sexuality, STIs, HIV and AIDS, family planning and other areas of youth reproductive health services without being restricted. Indeed, nurses and NGO participants encountered a problem in schools in that they were obliged to follow certain school guidelines when providing health education at the schools. For example, the school guideline stipulates that only abstinence may be taught to learners. Condom use or any other methods to prevent the spread of HIV and AIDS as well as STIs are not to be mentioned according to the school guidelines (Jackson 2013:18). According to Johnson (2016:82)" Many traditional abstinence programs are medically inaccurate and provide erroneous or negative information about condoms and STIs". It is further reported that the abstinence only education restricts and limits the content and extent of health education provision at schools. In this regard, an FGI participant summarised the current situation with school visits as follows:

"Oh, we have a programme whereby we go to schools – from primary school to high school –where we promote abstinence and in high schools where we meet learners whom we feel and is[are]aware that they are already engaging in sexual activities. We promote the use of condoms, as it will not help to preach about abstinences when we know that they are sexually active." (Clinic Participant no. 3)

The school's guidelines on health that the nurses and NGOs have to follow when dealing with learners are a hindrance. Adhering to the guidelines, nurses give inappropriate information and offer unsuitable interventions to learners because they fit their education to follow the school guidelines. This was unsettling for the participants because most of them voiced their awareness of the risky behaviours the learners were exposed to and were engaging in. Participants articulated their concerns in this regard as follows:

"Because we are aware that maybe school children that they do practice unsafe sex they do have unprotected, sex. So we cannot say they must abstain only, but to also teach them how to prevent. But when we are there we have to preach that [abstinence]. Are we really promoting and giving reliable information to the learners? (CHC Participant no. 2)

"We are living in the same communities with these learners, we see them engaging in risky sexual activities and getting pregnant, but when we get to the school, we have to turn a blind eye and tell them to abstain (NGO Participant no. 1).

A significant discovery made in this study was that in some instances the educators were the ones referring the learners to go for clinic visits. An educator confirmed this arrangement of encouraging learners to visit the clinics as follows:

"We are also supposed to advise the learners to visit different clinics and hospitals where they get more information about certain diseases including HIV and AIDS." (Participant no. 1 FGI School A)

The responses of the participants indicated that clinic visits enabled nurses to give appropriate health education to learners and advise them on dual methods for the prevention of the spread of STIs, HIV and AIDS and pregnancy.

The study findings revealed that nurses are currently fulfilling their role in the school-based HIV and AIDS prevention programme through and during the clinic visits made by learners. In spite of

the challenge caused by staff shortages in the clinic, the responses of the nurses and the NGO suggest that they prefer learners to visit the clinic rather than for nurses to visit the schools. As stipulated in the policy guidelines (ISHP guidelines), nurses and NGOs have to follow guidelines in rendering care. As observed in this study, school guidelines seem to be a stumbling block as opposed to being an enabler to efficient and effective provision of the school-based HIV and AIDS prevention programme.

• Screening and health education (to learners and educators)

Public Health England (2018:2) describes screening as a process of identifying healthy people who may have an increased chance of a disease or condition. Screening aims at reducing the chance of developing serious conditions and improve quality of life through early detection.

Participants in the current study identified screening and health education as HIV and AIDS health services to be rendered to both the educators and learners. They expressed their role in relation to screening and health education as follows:

"As nurses in this clinic, we usually screen the learners for HIV and AIDS when they come for any service in the clinic. We do counselling and testing for HIV....that is what we do for screening" (Clinic Participant no. 1)

"For all the people who come for family planning or any reproductive health service, there are screening tests that are done. In our case we screen the learners and the educators... but the learners are the one at high risk for HIV and AIDS, so it is import that we screen them" (CHC Participant no. 4)

"We sometimes find learners who were coming for something else at the health centre, positive for HIV after we did the screening. And now with the new guidelines, we can start treatment, refer and offer support" (CHC Participant no.1)

Okay, you know it is also very important that we give health education to the learners and young people coming for family planning,...especially those who want injections, they are high risk...so we give health education to give them information about HIV and AIDS" (Clinic Participant no.3)

The nurses affirmed their role in screening the learners and educators for HIV and AIDS as a prevention strategy for HIV and AIDS; as well as rendering a health service HIV and AIDS. They use every opportunity to find to screen the learners and educate on issues related to HIV and AIDS them as well. The information they give during health education to the educators during the screening process, may further empower the educators to be able to pass the accurate information to the learners in class. The nurses offer the educators and learners information, test them and give them treatment where indicated. This is in line with the explanation by Public Health England (2018) of the screening process.

According to the report by Health-e-News (2015) on NHI, the school health teams have screened more than 2800 learners in the poorest schools in the country. It was also reported that the school health teams do not just screen the learners, but also refer and link them to other services through the mobile clinics. This report confirms the finding of this study that nurses screen and refer learners and educators as required.

4.2.2.2 Category 2: HIV and AIDS education (nurses, educators and NGOs)

HIV and AIDS education (nurses, educators and NGOs) emerged as the second main category. It was subdivided into five subcategories: Life Orientation and health education; life skills education; information sessions; counselling; and school health programme s and campaigns.

HIV and AIDS education relates to education focused on the causes, methods of transmission, prevention and consequences of HIV and AIDS given to learners by either educators, clinic sisters, NGOs and/or any other relevant stakeholder.

In this study context, HIV and AIDS education was revealed by participants as one of their roles when asked about their role in the school-based HIV and AIDS prevention programme. Various methods are used by various role players to perform this role. It was additionally found that HIV and AIDS education are presented in various ways.

In Table 4.3 the various presentation forms of HIV and AIDS education for learners are indicated as subcategories extracted from the participants' responses.



Table 4.3: Category 2 and subcategories

CATEGORY	SUBCATEGORIES
4.2.2.2 HIV and AIDS education	Life Orientation and health education
(nurses, educators and NGOs)	Life skills education
	Information sessions
	Counselling
	School health programmes and
	campaigns

• Life Orientation and health education

The Department of Basic Education (DBE) (2011:8) describes the subject Life Orientation (LO) as follows:

... central to the holistic development of learners. It addresses skills, knowledge and values for the personal, social, intellectual, emotional and physical growth of learners, and is concerned with the way in which these facets are interrelated. Life Orientation guides and prepares learners for life and its possibilities and equips them for meaningful and successful living in a rapidly changing and transforming society. The focus of Life Orientation is the development of self-in-society. It promotes self-motivation and teaches learners how to apply goal-setting, problem-solving and decision making strategies. These serve to facilitate individual growth as part of an effort to create a democratic society, a productive economy and an improved quality of life. Learners are guided to develop their full potential and are provided with opportunities to make informed choices regarding personal and environmental health, study opportunities and future careers (DBE 2011:8).

Participants had this to say with regard to the introduction of Life Orientation as a formal school subject:

"Yes, I am aware of LO as an official school subject. I think it is a good subject as it helps in empowering the learners with information that will help them to make decisions related to HIV and AIDS prevention." (Clinic Participant no. 1)

"I am aware of the programme and I like it a lot. A lot of learners are aware of HIV and AIDS issues very early in their lives." (CHC Participant no. 5)

"Ja .[Yes]. Am aware of it, my children share a lot of information with me of which they tell me they learned at school during LO periods." (Participant no. 7 FGI School B).

"Yes, I am aware... and I believe it a good subject as it gives the learners information related to HIV and AIDS." (NGO Participant no.1)

"Yes, this is a good programme that the our department has introduced, and it benefit our learners even though it looks like is not so valued- [njhe]" (Participant no.3 FGI school A)

"I think the department has introduced a good programme in introducing the subject Life Orientation, it is also an excellent programme." (Participant no. 9 FGI School B).

From the above quotes derived from the dialogues with the nurses, NGOs and the senior member in the district, it was found that all the nurse participants were aware that Life Orientation is a formal school subject which also serves as a programme in schools advocating for the prevention of HIV and AIDS. The study participants all believed the introduction of Life Orientation as a school subject was a positive and beneficial way to implement the school-based HIV and AIDS prevention programme. Some of the participants mentioned they heard about the subject from their children. All participants viewed it is an excellent programme for empowering learners with knowledge and, in this study context, knowledge specifically pertaining to HIV and AIDS issues. Learners' decision making skills are significantly improved owing to the subject. The introduction of Life Orientation as a school subject was associated by some participants as an early learning opportunity about HIV and AIDS afforded to young learners who receive "information that will help them to make decisions related to HIV and AIDS prevention".

When participants were asked what their main role in the teaching of Life Orientation was, they made insightful statements:

"Wow sister *I believe we have a big role in the teaching of Life Orientation.*" (NGO Participant no. 2)

"I think our main role is empowering the educators and learners with all the information we know about HIV and AIDS, more especially with the learners as they are [more] open with us than they are with the educators." (NGO Participant no. 1)

The same participant gave more insight into how they assisted the educators when the latter had to cover sexuality topics ("sensitive topics") which they as educators apparently found difficult to present:

"We teach the learners on those sensitive topics, and sometimes we give the educators information about the subject issues concerned and also assist them on how to handle sensitive topics." (NGO Participant no. 2)

"My role is that of passing the knowledge I have about HIV and AIDS to the educators as well as the learners. I see myself as a mentor to the educators and an advisor as well. And lastly is to give/offer them any assistance when there is [are] health-related issues through giving of information." (CHC Participant no. 1)

The majority of participants believed they had an important role to play in teaching Life Orientation; they literally believed they had to be the ones empowering educators with knowledge related to HIV and AIDS. They further asserted their role included functioning as mentors and advisors to the educators; assisting them in handling sensitive subject matters which they were not comfortable to teach and guiding them on how to teach so-called 'sensitive topics'.

The nurse participants clarified their specific role in the teaching of LO as follows:

"Ok, there is a good relationship between us and LO educators in the nearby school. So whenever there is any programme or anything health related that they feel we can intervene or take part in, or there is content that has health issues, she calls us to come give the lessons to the learners. Sometimes she sends questionnaire for us to answer to assist them to understand the topics more. If there is a module on health issues she calls us as well or come to us to inform us that they will be a group of students that will be coming and what content we should teach them to intervene. She calls us and wherever is possible she give you questionnaire to assist the students." (Clinic Participant no. 1)

"It's to give more information to the educators, because they know much on their side, on education stuff, they don't know more on my side. So I can able to help them to teach the kids more for them to understand everything about HIV and anything concerning health." (Clinic Participant no. 3)

"Our major role in LO as a subject is to give information to the learners and educators on HIV and AIDS." (CHC Participant no. 4)

The educator participants in the study had this to say with regard to the role of nurses in the teaching of LO:

"Even go far like getting the nurses from the health centre, because in our school we are near the health centre. Then you get some information from them so that we can help the learners, because they cannot go there directly to the health centre." (Participant no. 2 FGI School B)

"Sometimes we have to ask the nurses from our local clinic to come and teach for us." (Participant 1 FGI School A)

Educators from both the schools indicated acknowledgement of nurses in teaching life orientation. The participants mentioned that they requested nurses from the local clinic and health centre to assist them in teaching the subject as well as obtaining information for their own benefit as educators.

The findings with regard to the role of the NGOs as in the teaching of LO indicated their role was to empower both the educators and learners with knowledge related to HIV and AIDS. They viewed their role as vital since they had to deal with all the sensitive issues that the educators found uncomfortable to handle.

The educators were found to be the main and most active role players in educating and imparting knowledge to the learners. Although theirs was a formal role in that they taught the subject at school, they confirmed the involvement of other role players with adequate knowledge on HIV and AIDS was of vital importance. Nurses were singled out as important role players particularly where health-related matters were concerned because nurses have first-hand information regarding such matters.

Participants responded in the following manner with regard to the content taught in LO about HIV and AIDS:

"Because HIV and AIDS is partly covered, it just form part of the curriculum, the whole LO has a lot of other issues in it." (Participant no. 2 FGI School A).

"Mmmm, it starts at Grade 8 and continues through to Grade 12." (Participant no. 5 FGI School A)

"Yes, it is taught in all the grades, but the content is not the same." (Participant no. 3 FGI School B)

"The causes of HIV and prevention, and the consequences of it." (Participant no. 1 FGI School B)

"As we said it is about the causes of HIV and AIDS and how one does became infected with HIV and what can be done to prevent the spread." (Participant no. 2 FGI School A)

The study findings implied that Life Orientation as a school subject does not centre on HIV and AIDS only, but other topics and issues are covered in the LO curriculum as well. The HIV and AIDS topic is covered from Grade 8 to Grade 12 with the content ranging from causes, modes of spreading, prevention, and consequences. This assertion may raise some concerns if the amount of information the learners are taught is not enough to meet the goals of the DoH and the DBE.

Participants had this to say with regard to the method of presenting the content to the learners:

"Sometimes the clinic staff are giving us a sort of assignment or something to go out and research information with regard to HIV and AIDS and we then give the same assignments to the learners to go out and look for the information." (Participant no. 4 FGI School A)

"We also use the pamphlets of which we used to go around and look for them ourselves the school does not have any." (Participant no. 1 FGI School A)

"Sometimes we have to ask the nurses from our local clinic to come and teach for us." (Participant no.8 FGI School B)

"If I had the time, number one, supposed to give health education, education peer, peer education to educate these kids about HIV and AIDS and the prevention, spread, all those issues of HIV so that they must have that information." (Participant no. 6 FGI School A)

"We are lecturing to them on issues such as unhealthy sexual behaviour which deals about things such as things that can lead them into contracting STIs including HIV and AIDS. What is it that they can do to prevent the contraction of STIs as well as HIV and AIDS." (Participant no. 9 FGI School B)

"Yes, so some other information you want to hear from the learners so you must see to it that you use all the methods that you[can], teaching methods." (Participant no.4 FGI School B)

"Other methods include... role plays, charts, pamphlets and so many other ways." (Participant no.5 FGI School B)

"Sometimes you interact with them informally so that they are free to talk to us about anything." (Participant no. 3 FGI School B).

"It is usually a question and answers style and we also do health talks, where we give them health education and afterwards ask them questions to check if they understood the content." (Clinic Participant no. 1)

From the current study, it was found that various methods of teaching were used at each school. Most of the educators primarily used the traditional teaching methods for Life Orientation. They sometimes gave individual assignments to the learners in attempts to foster active participation and involvement in their learning through information searching. Pamphlets were also given to the learners as a form of giving information.

It was found that educators obtained assignments from the nurses at the clinic and they in turn used the same assignments as learning materials in the classroom. The educators knew nurses are more knowledgeable and experienced in HIV and AIDS healthcare than they themselves. Because the educators wanted to get information and ideas on the presentation of HIV and AIDS, they needed the right people to empower them with information on these diseases which is why they requested the nurses to teach them.

The educators' approach to teaching LO was to be innovative and use different methods of teaching as well as various teaching aids to make the lessons interesting. They engaged the learners in casual classroom conversations to promote active learning, meaning learners are invited to share their knowledge and ideas on HIV and AIDS with peers. Educators are supposed to use pamphlets, but unfortunately there is currently no available supply of these pamphlets. Role plays and charts were found to be methods of choice in the teaching of LO.

Some educators went to the extent of requesting the nurses from the nearby clinic to visit the schools and teach the learners. This may be classified as making use of specialists on the HIV and AIDS subject. Some of the participants believed peer group teaching is the best method for teaching LO.

The nurse participants in the study further indicated that one of their most important roles in Life Orientation is to promote health education. The following are statements mentioned by the nurse participants in this regard:

"It's to give more information to, even to the educators, because they know much on their side, on education stuff, they don't know more on my side. So I can able to help them to how to teach those kids more for them to understand everything about HIV and anything concerning health." (CHC Participant no. 1)

"We also do health talks where we give them health education and afterwards ask them questions to check if they understood the content." (Clinic Participant no. 2)

"We do not have a formal programme but we do go for just lessons to teach, to give them health education ...sometimes[once] in a while." (CHC Participant no. 4)

"Health education, education and education, and then screening... and early treatment." (Clinic Participant no. 3)

"As a nurse we do sometimes use it in schools, give health education to the schools [learners OR educators]." (CHC Participant no. 3)

"They usually go to schools and give health education concerning teenage pregnancy and how to prevent it. I mean the health promoters." (CHC Participant no. 5)

"As NGOs, we have a role to do health education to the learners on various issues of HIV and AIDS and other health related issues like TB, and all..." (NGO Participant no. 2)

Participants felt very strongly that they were the authorised individuals to do health education. It was their belief that they have the information on any SRH and similar health-related issues and therefore they should be the ones empowering and passing on their knowledge to the educators at schools. Their disappointment about being asked to run an occasional informal programme in the schools "sometimes [once] in a while" may point to a deeper desire on the nurses' side to have more time available to provide health education to the educators and learners than the current few random sessions they are afforded. Moreover, in the opinion of the participants educators should concentrate on other educational issues that they know best and leave SRH including HIV and AIDS health education to those who know it best – professional healthcare workers like registered PHC nurses who can educate the learners as well as educators on any health-related topic because it is their field of speciality and they have the knowledge, experience and confidence to

give accurate information on health issues such as sexuality, STIs and HIV and AIDS. Participants associated the role of health education with the health promoters as well as the NGOs.

Finally, the study participants felt that the LO educators have to possess certain special qualities which the former deemed important for the effective teaching of Life Orientation.

• Life skills education

The researcher believes one has to understand what life skills as a subject is before tackling life skills education. The WHO (2003) defines life skills as,

....the abilities for adaptive and positive behaviour that enables individuals to deal successfully with the demands and challenges of everyday life. It represents the psycho-social skills that determine positive behaviour and includes reflective skills such as problem-solving and critical thinking as well as personal skills such as self-awareness and interpersonal skills (WHO 2003).

According to the UNICEF (2004 cited by Roux 2013:40), life skills education programmes that focused on the prevention of HIV and AIDS proved to be more effective in changing learners' behaviours if it included a balanced knowledge, skills and attitudes approach to HIV and AIDS as opposed to prevention programmes that emphasised information alone.

According to the DBE (2011:6), life skills taught in schools is concerned with the social, personal, intellectual, emotional and physical growth of learners and with the way in which these are integrated. It is focused on the holistic development of learners. Hence, in the present day life skills education still encompasses the interpretation ascribed to it by the WHO in the late nineties as promoting the practice and reinforcement of psychological skills that contribute to personal and social development and the prevention of health and social problems as well as the protection of human rights (WHO 2004:3).

Participants in this study proclaimed the following with regard to life skills:

"We used to have this life skill educator, but we don't know what was that woman, because she was contacting the school and came by to support the school in that matter." (Participant no.1 FGI School A)

"Sometimes these learners they go out for mentoring at the clinic with this life skill educator." (Participant no. 3 FGI School A)

"We are fortunate because we do have life skills, not necessary as a subject, but as part of the curriculum whereby some of us as educators have gone for workshops. So the life skills programme helps us in, on how to start with such topics, because if ever you can just get into the class and talk about it, it might be difficult to be direct with the person. I can say we just start as from the outside of the class by just asking them questions about what they see every day, what they hear every day around the HIV and AIDS[issue]."(Participant no. 1 FGI School B).

"In the case of life skills there are topics like decision making and being responsible when it comes to their behaviours. So such topics do help a lot, because they let the learners be aware of being responsible, and the consequences thereafter." (Participant no. 2 FGI School B)

The study found that the educators are responsible for teaching life skills in both high schools – the one in Acornhoek and the one in Thulamahashe. In one of the schools, a life skill educator who is not an educator was stationed at the clinic and was responsible for taking the learners through the life skills education generally.

Most of the educators in the study were very comfortable teaching life skills to the learners; they appeared to have all the skills necessary to effectively pass on knowledge to transform the behaviour of the learners.

Information sessions

Information sessions are opportunities given to learners by the nurses, NGOs and educators to share health information. Participants had the following to say in this regard:

"We have information session sessions with the learners occasionally. The educators and sometimes the clinic staff arrange such sessions." (Participant no. 1 FGI School A).

"They are supposed to. In actual fact, what we normally do, we even invite [the] Department of Health. We have a session where they come in and, you know, speak to these learners, you know, talking to them, showing them the dangers of unprotected sex and all those things. So we still sometimes have a session, although we don't involve the whole school, we might

maybe invite all the Grade 8 learners and then get somebody from the Health Department to come and talk to them." (Participant no.1 FGI School B)

The study confirmed that sessions are organised by educators and also nurses to give health-related information to the learners. The topics covered during these sessions range from education on sexual issues to all kinds of other health-related matters. It was also revealed that the sessions are not provided to all learners in the schools at the same time, but certain grades were selected from time to listen to a spokesperson from the DoH.

Counseling

Counselling refers to the provision of professional assistance and guidance in resolving personal, psychological and health challenges. The participants in the current study identified counselling as one of their roles in the implementation of the school-based HIV and AIDS programme. This is confirmed by their responses below:

"And each and every time when each client/learner comes to the clinic we counsel them on HIV and then we offer them HIV testing; which is a daily thing." (Clinic Participant no. 3)

"Some children... They can even go for counselling sometimes at the clinic." (Participant no.7 FGI School A).

"Some of the educators do actually give them some sort of face to face counselling, The life skill programme that is taking place and then the learners benefit [from]it." (Participant No. 3 FGI School A).

The majority of the nurse participants affirmed their role as counselling the learners was important to them; they affirmed that they counsel the students at every opportunity they get; in fact, one participant stated opportunities for counselling arise daily because every time a learner "comes to the clinic we counsel them on HIV and then we offer them HIV testing". Educators acknowledged the nurses' role as counsellors by stating they refer most of the learners to the clinic for counselling by knowledgeable nurses. On the other hand, some educators admitted to occasionally counselling learners whom they identified as being in need of counselling. They further attested to offering counselling services to learners mingling with and being around other learners who are affected and/or infected by HIV and AIDS.



School health programmes and campaigns

According to the WHO, school health programmes and campaigns are strategic health programmes to prevent important health risks among the youth and engage the educational sector in efforts to change the educational, social, economic and political conditions that affect risk. NDoH and DBE (2012:5) further refer to the World Health Organization (WHO) that defines "a school health programme as a combination of services ensuring the physical, mental and social well-being of learners so as to maximise their learning capabilities". The programmes seek to mobilise and strengthen health promotion and educational activities.

The participants expressed their role in the implementation of the school-based HIV and AIDS prevention programme in relation to school health programmes and campaigns as follows:

"Okay, we do have prevention from-mother-to-child programme. We also have school programme, and yes school health programme. It is a formal programme... there are people allocated to do this who are going around the schools and talking to the children." (Clinic Participant no. 4)

"I don't know the number of schools allocated to the school health, but they [state who 'they' are here] are going out every day to the schools." (Clinic Participant no. 3)

"That programme is there but it is not done by professional nurses from the clinic as such but by the professional nurses from the school health services." (CHC Participant no. 5)

"We run campaigns occasionally with the learners. Usually the educators arrange such campaigns or the clinic arrange more especially during awareness months. You know in December it's the World AIDS day ... so during that times campaigns on HIV and AIDS awareness are planned." (CHC Participant no. 1)

The findings of the study indicated that the district had school health programmes assigned to the school health services. The nurses working in school health services are responsible for teaching learners and educators on issues related to HIV and AIDS. The nurse participants were not aware of the functioning of the school health programmes as run by the school health services.

It was also found that nurses organise and run campaigns for the benefit of learners. The campaign is usually held on a specific day in a specific month of the year and is known as an 'awareness day'. National and/or international health, social or environmental concerns, e.g.is

highlighted via campaigns run by various organisations including the media to create public awareness about the specific issue or concern. In December, as a participant noted, World AIDS Day creates awareness about HIV and AIDS issues worldwide. The participants shared that during such campaigns, nurses screen learners and educate them on various health issues including HIV and AIDS and its prevention.

4.2.2.3 Category 3: Collaboration (referral system) between role players and services

Collaboration and referral system between role players and services emerged as the third main category. It was subdivided into two subcategories: role players and role fulfillment.

In this study collaboration meant various role players cooperated and worked jointly together on the implementation of the school-based HIV and AIDS prevention programme.

The participants revealed the following as their role: identifying the various role players; ensuring collaboration between role players and also ensuring a system of referral between the various services rendered by the identified role players. It further emerged that the role players and the roles they have to fulfill was of essence. Table 3.4 below illustrates category 3 and its subcategories.

Table 4.4: Category 3 and subcategories

CATEGORY	SUBCATEGORIES
4.2.2.3 Collaboration (referral system	Role players
between role players and services	Role fulfilment

Role players

The Integrated School Health Policy identifies a local role player as "a person, group or organisation that has an interest or concern in a local programme" (NDoH and DBE 2012:7). In this study the role players were people involved in the implementation of the school-based HIV and AIDS prevention programme. The participants in the study were asked who the role players involved in the school-based HIV and AIDS prevention programme are and the following are their responses:

"Health promoters, and who else? The members of the multidisciplinary health team, that is, the doctors in case there is a sick learner, nurses PHC and HIV courses trained, educators, parents, preachers, psychologist and social [workers]." (CHC Participant no. 1)

"Except [for] the NGOs, I think there is this about they are also the NGOs, there is this psychologists. There are some of them, and the social workers." (Participant no.10 FGI School B).

"We have members from the Department of Health, a health promoter, the youth desk from the local police station as well as the youth centre." (NGO Participant no. 2)

When they were asked about the collaboration with and between the above mentioned role players, the participants verbalised the following:

"I will say yes as they do phone us to check if the programme is still on and to check the statistics on how many youth[s] [have been] seen." (CHC Participant no. 1)

"Like when there are a lot of teenage pregnancies, in our nearby schools they usually call us." (Clinic Participant no.4)

"Hey, I will say the collaboration is just between the educators and nurses only...and for us [it] is easier as we are very close to each other." (Participant no. 3 FGI School B)

"We are also supposed to advice the learners to visit different clinics and hospitals where they get more information about certain diseases including HIV and AIDS." (Participant no.3 FGI School A)

"And maybe connect them with the people who are relevant. ... Maybe someone who is professional on that field; it could be rape, drug, whatever." (Participant no. 2 FGI School A)

"Okay, there is collaboration and coordination between the nurses, the school, the district health manager, the NGOs. They work together these people." (CHC Participant no. 5)

The following persons were identified as role players by the study participants: health promoters, doctors, primary healthcare (PHC) nurses trained and skilled in HIV courses, educators, parents, pastors/religious leaders, psychologists, social workers, police officers and NGOs. The participants

were convinced that all these people have an important role to play in the implementation of the ISHP programme. They included the parents and pastors or religious leaders because it was their belief learners, although young, are members of the community who take part in all community activities just as adults do. In the opinion of the participants, the prevention of HIV and AIDS needs to start at home with the parents – one participant aptly made reference to the necessity for all role players to work together ("They work together these people.") which therefore includes not only professionals but also parents, families and community members of significance. Parents should know how important it is to initiate communication with their children on HIV prevention. However, if their child has been diagnosed as HIV positive, parents still need to continue caring and supporting their child by, e.g. encouraging visits to doctors and adhering to the ART regimen. Improved collaboration among all role players - medical professionals, public organisations and institutions, people with leadership in communities, and families – will ensure that the continuum of prevention and care benefits learners holistically The participants further asserted that the role players have to work within their specialties or professional roles; they emphasised it was vital because only then will it be possible to cover all aspects of concerns with regard to ISHP delivery and SRH services in the schools.

The findings leave no doubt that the participants strongly supported a referral system where learners with health problems or issues are referred to the right person(or role player); in other words, to the role player who can best advise, attend to and support her or him with her or his specific worry. It also became apparent in their assertion that the participants believed a role player should be knowledgeable and comfortable in his or her role. This was mentioned specifically in relation to the educators who teach Life Orientation.

• Role fulfilment

According to the study participants, they had to fulfil certain roles in the implementation of the school-based HIV and AID prevention programme. The next verbatim quotes serve as examples of how participants perceived role fulfilment:

"Our role, we need to focus more on giving health education." (CHC Participant no. 4)

"Yes, we have our own programme of which we gather information from the health centre to identify new trends in schools and then draw our programmes in relation to the information we find in the clinic." (Clinic Participant no. 2)

"In the afternoon we go back to the facility to do our research. And on Fridays usually we meet to consolidate all the work done in our allocated schools." "Yes I feel so happy with myself as all health issues are tackled based on our research findings in the facility." (CHC Participant no. 2)

"I am supposed to give health education, education peer, peer education to educate these kids about HIV and AIDS and the prevention, spread, all those issues of HIV so that they must have that information." (CHC Participant no. 5)

"The main role of the district manager is to monitor the efficiency and effectiveness of the programme." (Clinic Participant no 1)

"They [district managers)do phone us to check if the programme is still on and to check the statistics on how many youth[s] [have been]seen." (Clinic Participant no.1)

"My role is to give them more information to help educate them about the risk, the benefit and prevention [of HIV and AIDS]."(CHC Participant no. 5)

"The role of the district health manager... I think he/she need to provide information to us so we may be able to go and teach those who need it...they must as well be seen supporting us during our mini campaigns, be visible rather than being in their offices most of the time. We really need their support; they must not just hear about us but see actually what we are doing." (CHC Participant no. 1)

"The role of the district health manager? ...What I saw mostly they only concentrate on giving condoms and doing some road show, that does not have much impact on the people concern[ed]."(CHC Participant no.2)

It seemed as if there was consensus among the study participants that the educators play the most fulfilling role in the school-based HIV and AIDS prevention programme as they are the primary educators of LO. The other role players came in as secondary role players. The nurse participants emphasised that they would be grateful and fulfilled if they were allowed to adequately fulfill their role in providing health education to the learners. They further indicated that they also have a role to fulfill with regard to conducting research on topics or in domains relevant to the school-based HIV and AIDS prevention programme. The participants acquiesced they did not contribute or do enough in terms of the research aspect.

The roles to be fulfilled by the district health manager were fortuitously zeroed in on (means it happened by chance – so good thing as it came out spontaneously). The roles to be fulfilled by the

district health manager revolved around administration, monitoring and evaluation, and support. It was apparent that adequate support from the district health manager was not forthcoming; in fact, participants mentioned that the impact or role of the district health manager is significantly minimal.

4.2.2.4 Category 4: Monitoring and evaluation: Educators' and nurses' view of the programme

Educators' and nurses' view of the programme emerged as the fourth main category. It was subdivided into two subcategories: short term effect of the programme and long term effects of the programme. Table 3.5 below illustrates this category and its subcategories.

Table 4.5: Category 4 and subcategories

Category	Subcategories
4.2.2.4 Monitoring and evaluation: Educators' and nurses' view of the	Short term effect of the programme
programme	Long term effects on the programme

• Short term effect of the programme

The short term effects are the outcomes which can be observed and expressed immediately by the educators, nurses and NGOs after implementing activities of the programme. This may also refer to the immediate changes in knowledge, attitudes and behaviours that may be observed by the role players after the implementation of the HIV and AIDS prevention programme in the schools. The participants' views on the immediate effects of the programme were expressed as follows during the focus group interviews with the educators:

"For some of the learners it is very interesting topic since when they are aware of what is happening around us these days. So they like it, but especially when you talk about these sexual issues, diseases and more especially the HIV part of it, they do like it." (Participant no. 3 FGI School A)

"Yes, they do but some are just crying because they are facing the situations in the homes in this regard." (Participant no.2 FGI School A)

"Sometimes they have HIV themselves, you will see they have the mother or father coming with them to school to report such. Some are HIV positive because they were born with it, but some are orphans because of it." (Participant no. 2 FGI School B)

"Okay, eventually for these learners it is like when you talk about these issues of HIV and AIDS sometimes it is that like for them it is a comedy, they don't take it seriously. When you talk about it and they laugh, when they go they don't participate..." (Participant no.3 FGI School B).

"They [learners] don't think that what you explain to them is real." (Participant no.2 FGI School A)

"Yes, because even if I tell them to practice safe sex, they go and do it." (Participant no. 2 FGI School A)

"So, and then it starts from there, and they are very much interested in certain things." (Participant no.5 FGI School B)

"They can even tell you about their relatives who are infected. So you start from there, trying to help that learner on how to go about the situation." (Participant no.10 FGI School B)

"Even during break they can come; 'Ma'am you were talking about this and that, so how can I do it, because my cousin, whatever, is exactly what you were talking about, it is what I am experiencing at home'." (Participant no.8 FGI School B)

The interviews with the nurses and NGOs yielded the following expressions:

"The attendance is very good, I believe it has to do with the fact that they are free and relaxed, the atmosphere that side [clinic] is very welcoming to them." (Clinic Participant no. 1)

"Ahh it is good, the response is excellent." (CHC Participant no. 1)

"You can see that they enjoy the talks from the way they ask questions and showing more interest in the topic. And in case if you do not know the content and not well prepared for them... ['utatipoyila'/laughing] ...because they ask a lot of questions; hey, yes there is change as they come voluntarily for the testing of HIV, and that means they are taking responsibility of their lives." (Clinic Participant no. 1)

"We always get a positive response from both the educators and the learners. And with the learners, it is more fulfilling as they look at us as their peer[s] and they are able to open up with us, and sometimes we are even able to discover things from the learners that the

educators were able to get from the learners. In other words, the learners are very open with us, and they are freer with us than with their educators."(NGO Participant no. 2)

"In some instances, they even follow us up to the clinic to ask questions of the things they did not understand." (NGO Participant no. 2)

"Presently I don't think it is so effective and efficient as such ... I feel the educators and us has exhausted the information and it feels like the learners are getting a repetition of information and I think they get bored in a way..." (NGO Participant no. 1)

The findings in this subcategory produced views and experiences from participants which varied between positive and negative perspectives of the school-based HIV and AIDS prevention programme. Mixed emotions were also observed by the participants from the recipients of the programme. Learners were found to be interested and liked the programme so much. This was associated with their interest to all sexual related issues. Their interest in the programme was linked to their openness during discussions which heightened their interest to the extent that some learners followed up the conversations with the nurses in the clinic after health education at school. Trusting relationships between the educators, nurses, NGOs and the learners improved drastically to the point where some learners shared confidential information about their families with the professionals.

Unfortunately, some disappointing and displeasing findings also emerged where other learners did not take the information seriously but instead joked about it. Such prejudiced and negative attitudes may contribute to lessen the efficiency of the programme; it may negate the outcomes as the vitally important and essential measures will not be noted, perceived and implemented by these learners.

Furthermore, the participants were confronted with different emotions demonstrated by the mix of learners. Apart from those who exhibited apathy and disinterest, most other learners were happy and thankful for receiving information and acquiring knowledge on sexual and reproductive health (SRH) issues and questions. There were unfortunately also learners who were extremely saddened by the knowledge and responded with tears. The sadness exhibited by these learners was associated with them being either secretly infected and/or affected by parents, family members or close friends living with HIV and AIDS and whose suffering they witnessed daily.

Lastly, but importantly, it was found that some participants got the impression that the programme was starting to lack in originality and freshness. Learners got "bored in a way" as they received the

same information over and over and presented in the same form again and again by the role players.

· Long term effects on the programme

The researcher perceives long term effects as the effects or results achieved and measured a year or several years after the completion of the programme. In this study the effects or outcomes were measured while the programme was still running because the school-based HIV and AIDS prevention programme is on-going. The observation of the participants on the long term effect of the programme was described by some of them as follows:

"Maybe the programme and the challenge of being effective may be that way of we were hoping to see our learners, especially girls, not falling pregnant. So the moment they become pregnant you start to doubt if they learned something, because in life skills we [are]teaching them to abstain. But being pregnant... It is totally the opposite..." (Participant no. 2 FGI School A)

"The number of pregnancies has decreased though." (Participant no.7 FGI School A)

"Ja [Yes] [teenage pregnancy] has decreased a lot and you will find they will be pregnant maybe at Grade 12." (Participant no.6 FGI School A)

"So they have survived [pregnancy, STIs including HIV] from Grade 8 to Grade 12. And that may mean that they planned and maybe they are using protection or abstaining as we taught them." (Participant no. 4 FGI School A)

"I don't see the effectiveness of the programme and neither can I say it is sufficient. The learners are still practising unsafe sex and the HIV statistics of new cases amongst the youth is still high..." (Participant no. 3 FGI School A)

"Eish, actually no it is not effective or sufficient as we are still seeing the negative results from the learners." (Participant no.1 FGI School A)

"Ya I agree with sir... If something is sufficient it is 100%. But...with this it is not." (Participant no.2 FGI School A)

"Although I have just heard that there is one of the learners who were in the programme and she is now pregnant. So you ask yourself, 'What is it that she benefitted from the programme?" (Participant no. 3 FGI School B)

"Jaaa [Yesss] there is a little change but not all the learners are able to stick with the lessons learned...this is evident as we are still having teenage pregnancies from the schools. In some children there is a change, but in some they are resisting..." (NGO Participant no. 2)

"Yes...and that means our lessons to condomise and abstain did not work as well...[giggling]...that can only mean that they are exposed to getting HIV and AIDS."(NGO Participant no. 2)

The findings on the long term effect of the programme were mostly upsetting and disappointing with undesirable outcomes; however, some progress as regards personal growth and self-empowering knowledge were satisfying findings. It was found that female learners still became pregnant even after so much effort has been put into developing life skills and in concentrating on preventive educational sessions and lessons. The pregnancies were also associated with probable exposure to HIV and AIDS as pregnancy is more often than not a result of unprotected sex. The participants also mentioned that new cases of HIV and AIDS among the learners were encountered which simply further discredits the long term effects of the programme. The participants thus questioned the efficiency of the programme; no marked evidence of efficiency thereof was associated with negative long term effects.

4.2.2.5 Category 5: Monitoring And Evaluation: Educators', nurses' and NGOs' view on the parents' roles and responses towards the HIV and AIDS programme

Educators', nurses' and NGOs' view on the parents' roles and responses towards the HIV and AIDS programme emerged as the fifth and final main category. No subcategories were identified from this category.

The views of the participants on the roles and responses of the parents towards the school-based HIV and AIDS programme are presented in their verbatim quotes given below:

"The parents are happy when you teach these children..." (Participant no.1 FGI

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School A)

"Ja,[Yes],even the families is telling them to use a condom, and you will find that this child at home they don't mention a condom at all. It is a contradiction between the parents and the educators. Maybe this education needs to be to both. Parents need to be aware that it is of no use to deny our children to use condoms, yet they are busy, they active sexually. But it is a difficult thing, again, as a mother or father to tell the child [to] use a condom. It is like they are giving them a license..." (Participant no.3 FGI School A)

"Something else you know, per se [in/by themselves]to some parents, because we do have parents who come and report to the school about these cases, but very few." (Participant no.2 FGI School B)

"But when it comes to issues of sexuality and HIV and AIDS prevention, they are very pleased as we involve them fully...they are part of the HIV and AIDS lessons mostly and like with the educators, we encourage them to talk to their children and use the correct language...[giggles]."(NGO Participant no. 2)

The above mentioned NGO participant was very firm that parents have to be involved and should know their roles in increasing HIV risk and vulnerability not only for the sake of their children, but also for them as parents who have to support the former. In this regard, this participant added:

"We do try our very best to explain to them the reason why we are doing this and most of the times, we win them...so talking with them and explaining to them all they need to know...relaxes them and then starts trusting us." (NGO Participant no. 1)

"Outside[in the community]but at the clinic they [parents]didn't, they haven't come so far to say that we are encouraging their children to engage in sex because they, the thing that they are doing, they said that just send those kids as from11, 12 years if when they start menstruating to come to the clinic and they know that when they are in the clinic we do teach them about this stuff ... and even now as the government has introduced HPV injection — which means they[government]are adding more information[for example]that sex can cause cervical cancer. So I think, at the clinic they haven't come, the parents, but I know that outside they are talking, while maybe we're at the stokvels [traditional monthly gathering of African women

used mainly as an investment society (Pharos dictionary 2005:557)]...[they say], 'I've heard at schools they've introduced this and that, they teaching our children to misbehave', like that. So, if they [nurses] teach them [learners]sex now, they are telling them to misbehave?" (Clinic Participant no. 3)

"Most of the parents are of the idea of us talking to their children about HIV and AIDS, they do think that we are exposing or encouraging their children to experiment with sex. But there are other parents who think the sex talks make their children to want to experience what we are talking about." (Clinic Participant no.4)

"Now days I don't see a challenge, because parents of now days they are more open; because even the subject of Life Orientation is helping a lot. Even those parents they know everything about sex. They are not surprised even if you talk to their children. They even encourage more information on their children." (CHC Participant no. 5)

"Some are happy, because they know that their children they are learned[learning], but some they are not happy because isn't it when we teach sex education they will know what to expect and some they want to experience what we are teaching them..." (CHC Participant no. 5)

"Some they are taking the information in good manner, because they know that the information is helping their children. But some are saying that the information, that same information is the one that is making their children to fall into sexual intercourse at young age." (CHC Participant no. 5)

"Yes, the parents accept this programme. They accept it ja, yes they do." (Clinic Participant no. 3)

According to the study findings, almost all the participants viewed the parents as the most important role players because they believed it was the parents' responsibility to raise worthy, credible young men and women. It emerged that they perceived the parents' role as being almost the same as that of the educators, nurses and NGOs, but primarily they believed that educating and teaching must start in the home. Contrary to the participants' collective belief, it was found that parents send their adolescent and high-school-aged children to the nurses in clinics to be educated on reproductive health, STIs including HIV

and AIDS and any other sexuality issues which the parents experienced as uncomfortable topics to handle at home.

With regard to the parents' response to the programme, it was found that the majority accepted and liked the programme. It was also apparent that there were some parents who did not respond positively to the programme. Some believed that when learners receive sex education on HIV and AIDS, no other topic on sexuality should be mentioned, referred to or included in the lesson. According to the parents' way of thinking, including other topics expose their children to the possibility of starting to experiment with everything they learn about.

However, a welcome and positive finding was that equipping the parents with information about the programme proved to be beneficial. It ultimately helped to change the attitude of the parents proving that it is possible for a trusting relationship to develop between the parents and other role players when information sharing occurs.

4.2.3 THEME 2: CHALLENGES WITH SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMMES

The challenges with school-based HIV and AIDS prevention programmes were explored and described as experienced by the various role players in the implementation of the programme. From this theme, three main categories emerged, namely departmental challenges, inadequate resources, and personal barriers as shown in Table 4.6.

Table 4.6: Main category 1 and subcategories

Category	Subcategories
4.2.3.1 Departmental challenges	Insufficient departmental support/time for preventive services
	Health and education departments: Life Orientation, not a priority

4.2.3.1 Category 1: Departmental challenges

These are challenges experienced by the role players but concerns issues related to the two departments responsible for the programme, namely the Department of Health and Department of Basic Education. The study revealed that role players experienced various challenges from both

departments, but two challenges stood out and were consequently identified as subcategories, namely insufficient departmental support for preventive services and Life Orientation as a school subject is not prioritised.

• Insufficient departmental support/time for preventive services

This subcategory included unsatisfactory support from the DoH and the DBE. The support may be in the form of resources as well as giving adequate time to the participants thereby enabling them to render sufficient and focused HIV and AIDS preventative services at the schools. The nurse participants mentioned that:

"I don't think we have support structure. It is only our Department of Health [that provides] support; but if we have Department of Education, because they allow us to go and give their children information." (CHC Participant no. 5)

"Their role?[that of district health manager]. Maybe they can check whether they... have a role. Because I don't know even if we have guidelines, I really don't know." (CHC Participant no. 5)

"No. I don't think so, they are aware of their role in the programme, more especially because of the shortage we are having in this clinic." (Clinic Participant no. 4)

"What I see as a barrier, the most important thing I think the issue of the management. They are concentrating more on clients that are ill than those who are well." (Clinic Participant no. 4)

"Yes. Most of the time they don't think about prevention, going out before it occurs. They all concentrate on the person who is HIV infected, whatever ..." (CHC Participant no.4)

"If there can be some leaders who are, what can I say, who can make the management to be aware that we need people who educate people outside before they get sick." (CHC Participant no. 5)

"We do have those members, they say they are home-based carers, but they are not supported, fully supported by the department[DoH]. They are supported by the NGOs and it

is only for some few years after that we find that they are no more funded. It is not like before..." (CHC Participant no. 4)

"What I saw mostly they only concentrate on giving condoms and doing some road show, but they are not, they are always not that much, that does not have much impact on the people concern." (CHC Participant no.4)

"There is minimal support, from the district, ja[yes]... I can say that." (Clinic Participant no.3) "No, it's not. It is not sufficient. Because, I think, maybe, if maybe they were... we are failing those kids, why? Because we have shortage of staff. We don't have enough time with them even if they are just entered in my room, because I'm thinking of the line and it's a[an] eighthour clinic and I have to close and go home... but...it's not sufficient." (Clinic Participant no.3)

"But even us, due to shortage, it's difficult for you to leave the patients here[clinic] and go that side [school] but if it's in the morning you don't have a problem." (CHC Participant no.3)

"We do not have support." (Clinic Participant no.2)

"We need support from the local offices...Even from higher offices because there is means of transport. Here, it's easy to go back, so if it's XXX [name withheld to guarantee confidentiality] or other schools it's a problem. You have to use your own [transport]."(Clinic Participant no.3)

"We do not have support from the provincial structures in a sense that we do not have school health services that are running well. We have a gross shortage of staff." (Senior Manager Participant no. 7)

In the study it was revealed that there are no adequate support structures from any of the local, district or provincial levels. The role of the district manager was found insufficient and ineffective as it reflected more concern with patient care with minimal or no support given to prevention services. The prevention services rendered by the clinic and CHC nurses were limited to condom distribution. Time and staff allocation for services were found to be the biggest challenge. The scarcity of time and lack of having an adequate number of staff allocated to the programme put additional strain on the already compromised healthcare services.

Health and education departments: Life Orientation not a priority

The participants uttered some statements which implied that the DoH and the DBE were not prioritising Life Orientation as a school-based HIV and AIDS prevention programme. They attested to this as finding follows:

"Eish, this department of ours does not prioritise LO. Or they do not know about it. 'Cause I believe if they knew, they would allocate nurses to be taking care of the programme at the schools." (CHC Participant no. 2)

"I have never heard anybody in the Department of Health –talking about Life Orientation as our responsibility as nurses."(Clinic Participant no.1)

I am facing challenges; we are facing challenges in education. You are not even asked, 'Can you teach LO?' Because of pressure I have to accept it. But for myself[it]is not there.[I do not like teaching it.] Just teaching because I was given a task... So, it is the way people look at it, specialised; they gain experience during their work[with]no adequate training." (Participant 4 FGI School B)

"We don't, we are just educators. Life Orientation and HIV it is special skills. We are just educators." (Participant no. 3 FGI School A)

"No, because it is just a certain chapter from the whole textbook; and only for Life Orientation. So the department will not necessary [necessarily]need to blame it only on the topic of HIV and AIDS, they have to approach the syllabus. So you find out that the time it is restricted." (Participant no.1 FGI School B)

"The problem is I am the HOD for English which is my subject and then Life Orientation is just given to me to have it. So I cannot support my educator, I don't know LO. He is the one who knows Life Orientation." (Participant no. 2 FGI School A)

"Even the principal doesn't see the subject as important. So the subject is not given the attention it needs by allocating the educators who are interested in the subject." (Participant no.1 FGI School A)

"They [senior persons in the school] lack information and management about Life Orientation. The entire management structure that is supposed to be supporting you does

not have the necessary skills or the knowhow with regard to the subject." (Participant no.6 FGI School A)

"Again, I think the department itself is not taking that serious, because other subjects, at the end of the year, especially in matric they write external examination and it is marked outside the school...and they go and mark them somewhere else. But with Life Orientation it is treated like a vocational guidance subject where even the examination is not considered at all. So maybe that is why it is not given necessary attention it needs." (Participant no.2 FGI School A)

"They [department......] demand more than they are giving out, yes. They have got more expectations from us." (Participant no. 5 FGI School B)

"The time allocation of the Life Orientation periods...[is not adequate]" (Participant no. 3 FGI School B)

"Because there is also this exercise. There is a period for exercise practice. It is called PED [physical education]."... (Participant no.4 FGI School B)

The findings of the study were that both the DoH and the DBE are not giving LO the attention that it needs as a programme. The nurse participants verbalised they believed that that the DoH does not know about this programme, because if it did it would prioritise the programme and put systems together enabling the programme to meet its goals.

On the other hand, the educator participants pronounced their dissatisfaction with the DBE in relation to the subject. The participants indicated that the subject is not prioritised by the DBE at all. Their deduction was made on how their experience of how the subject is managed, e.g.in one school the head of department (HOD) for LO was also the HOD for English and had no adequate knowledge of the former subject; however, this HOD was expected to manage the running of the learning programme for the subject. A further indication from the participants on the disinterest in LO shown by the DBE was that the allocation of only a few school periods to the subject as well as splitting the periods between LO education and doing physical exercises (as required by the curriculum for LO) supports the notion that LO is not prioritised. Lastly, the participants felt the fact that no official written examination for the subject in Grade 12 is mandated further decreases the value and importance of the subject.

4.2.3.2 Category 2: Inadequate resources

Inadequate resources came up strongly as a challenge. The participants noted that there is a need for the provision of resources because the current scarcity of resources poses challenges to the implementation of the school-based HIV and AIDS prevention programme. Three subcategories emerged from category 2 as illustrated in Table 3.7: ineffective presentation skills of educators (e.g. lack of real life examples), lack of visual educational aids and appropriate venues and, the third subcategory, community factors, e.g. child-headed families and poverty.

Table 4.7: Category 2 and subcategories

Category	Subcategories
4.2.3.2 Inadequate resources	Ineffective presentation skills of
	educators (e.g. lack of real life examples)
	Lack of visual educational aids and
	appropriate venues
	Community factors: child-headed
	families/ poverty

• Ineffective presentation skills of educators (e.g. lack of real life examples)

In this subcategory the skills of the educators with regard to the way they present the LO content are discussed. The presentation skills of the educators may affect the desired outcome of the programme.

The participants verbalised the following:

"I think even the presentation of the content maybe, I don't know how they are teaching it, but I think somehow, because of culture and tradition being restricted, you can't just talk like exposing the whole thing." (Participant no. 2 FGI School A)

"The problem is that if one can, if we actually want to make the aware of the seriousness and the impact that HIV, HIVAIDS is having in our community...For example, one problem actually like, for example, there is no way I can actually come to school and say that, 'Can you see I am HIV positive, look at me, look at my face, look at my body, look at my height, look at my hair', but when coming to the person of let's say, you want to teach them about

this criminal activities, you can take them to jail and say, 'Can I please have one inmate who can actually tell this boy what is jail about.' There is a serious ... consequences of crime, that person will be able to see and realise that it is true. But there is no way we can go to a hospital, you find them lying in bed and show the school children that, 'You see this person, is HIV positive' or as an educator you stand in front of the class and tell them, 'I am HIV positive.' That person won't be able to actually communicate well with me. There is this problem also that even TB, there is no one that can — unless they happen to hide that person's face — and then you look at this person, this gives a wrong picture of HIV. If you don't like, for example, getting information from other people who are well informed; if you are going to stop taking treatment going to be a problem. But if I can say that I am an example of that; 'Can you see me? I have just waiting for the death. I did follow treatment. Can you see me? Look at me?' They will be able to see that no this thing this is very serious; 'Once you stop taking treatment, if you don't make use of the condom, you will end up in like me."'(Participant no. 3 FGI School B)

"We need models, real life models to emphasise that HIV and AIDS is real." (Participants no.1 FGI School A)

"To add on that, people who come on TV, they are just like you and me, [they say]'I am living with HIV for twenty years', and you look at the person [and]they are fine. So what lesson is that teaching to people who are careless? They think, 'Ah I will be just like her, she is okay, she is occupying a high position...[inaudible 00:24:53] ...and she is living with HIV.' So, the media is not portraying HIV like it really is. It is not like cancer, it is not like these people who are in prison. It is not like that."(Participant no. 2 FGI School B)

"Exactly the attitude of the educator towards the learners and subject, even though there might be some challenges maybe if you find that in the particular class that you are teaching there are someone infected and you have to come up with a way to let the learner feel comfortable." (Participant no. 2 FGI School A)

"Okay, with the those ones that are infected, sometimes they might, more specially when maybe they are in Grade 8, you might find that you have not yet identified those who are infected. So you have to be careful when you talk about it, because they know each other, and may[be] a very sensitive topic. So if ever you come to class and maybe just take it easy, you might find that some of them might laugh to the one who is infected or just pointing. So it means the thing is to be careful before you can start with the lesson or to

come with a way maybe to find out who might be infected or affected." (Participant no.1 FGI School A)

It was revealed that the participants lacked the appropriate skills to deal with the content of sex and sex education. It was also found that some of the educators were not comfortable at all in presenting the subject; as a result, the way of presenting the content was compromised. The lack of skills to and ways to deal with such content were associated with cultural and traditional differences.

The issue of making use of real life models came out strongly from the participants. To them, the media's portrayal of HIV and AIDS positive people as beautiful and successful individuals with "a high position" influences learners' comprehension of the seriousness of HIV and AIDS as a debilitating disease. According to the participants' way of thinking, the negative display of HIV and AIDS and TB patients' real life situation and suffering will sensitise the learners to the severity and seriousness of the condition. Accordingly, they believed that bringing the learners into contact with the everyday life stories of typical, regular people will yield more positive responses from the learners than the so-called success stories propagated by the media. The participants furthermore believed that live models are necessary, especially for the sake of HIV positive learners who are supposed to take treatment because the live model can motivate learners to adhere to their treatment. In this sense, the saying that 'seeing is believing' rings true because learners will actually come into close contact or face to face with a real person who mirrors the reality that regular people who are living with HIV or AIDS endure. The participants wished for people living with HIV and who are at the end stage as well as those who did not take treatment well or lived a risky life style to make an appearance on TV so that learners can actually see and listen to the true consequences are of following a risky life style and/or defaulting on treatment.

It was further found that the attitude of the educators as well as that of learners determined the presentation of the content. The latter was said to be most commonly found in learners who are HIV positive and/or have relatives who are infected by the virus. Moreover, a knowledgeable educator with the right attitude may influence disclosure by the learners that are HIV infected or affected.



• Lack of visual educational aids and appropriate venues

Visual educational aids are any materials, charts, pictures or images that help to enhance a presentation. These materials are dependent on the sense of sight to enhance teaching and learning. Participants raised the following as challenges to the effectiveness of the programme in relation to teaching aids and venues where learning or the programme is run:

"Presently we don't have pamphlets; we had the... for circumcision, the pamphlets for circumcision only, and then the flip charts for STIs including HIV and AIDS." (Clinic Participant no. 3)

"But we don't, it's not practiced [visuals]... even the infrastructure of the clinic it's not allowing us to help. We don't have enough space, and teenagers do need places where they can stay and feel free, they have computers and TVs and DVDs where we can teach them about HIV, so it's, I think it will be a lot for us but the little that they can give us, we can start at any time, for us to have those things." (CHC Participant no.3)

"Like we do not have sufficient space. Like in one of the classes we are having a case whereby there is a learner who is having TB. In the meantime our classes are so congested, we don't have sufficient space to start with ... and the little space that is there do not allow us to take precaution measures that can be effective in addressing health issues when it comes to that." (Participant no.4 FGI School B)

"The resources for HIV prevention, we only have condoms for the moment. Yes, we only have condoms." (CHC Participant no.5)

"We need pamphlets when we are in class and those charts that display all that we are teaching about." (Participant no.5 FGI School B)

"No we don't have anything, if one has any teaching aids you go around yourself to ask from love Life and other areas...as well from the clinic we do find some." (Participant no. 2 FGI School A)

The study found that there was a vast shortage of teaching and learning aids for both the teaching and learning of LO. The current participants expressed there was a dire shortage or absence of the basic resources they needed. Accordingly, they associated the lack of visual and audio aids with

an ineffective programme. The needs were found to range from pamphlets, flip charts, and computers to programmes installed on televisions as well as DVDs for teaching and educational purposes. It was also revealed that at the time of study only the mostly used and always available aid they had was condoms which, in fact, is a total contravention of the school guidelines which stipulate that learners must be taught abstinence only. The participants further shared that the teaching aids which they actually had at their disposal were not supplied by the institution, but they themselves had to go to outside institutions and organisations, e.g. love Life, to request teaching aids.

Further findings in this subcategory related to the shortage of physical resources. The space that they had in the clinic was inadequate; they indicated they need more rooms or a venue where a comfortable and youth-friendly environment for the learners and youth can be created. It was the participants' belief that an environment which is conducive to SRH education and where privacy was guaranteed would be a valuable way of gaining more learners and enhance their confidence in the educators. The participating educators emphasised the issue of the physical environment as well; congestion in the classroom caused overcrowding which they believed renders the programmes ineffective. According to them, overcrowding is especially problematic when it comes to TB and other communicable diseases.

Addressing some challenges regarding the resources, the participants contributed the following information:

"The challenges that we are having I can say even the transport is a problem, because why I am unable to reach them due to this transport problem. Another thing, the fact that there are no professional nurses who are allocated to this programme specifically; it is a challenge, because it is so difficult to go outside. Even the issue of shortage, you know, of [the] facility that contributes on this [shortage of professional nurses with knowledge of the programme]." Clinic Participant no.4)

"I can say yes, the school is nearer like but this is not the only high school that we serve, so we would like to have transport for days the nurses will be going to those schools further than us." (Clinic Participant no.4)

For the nurse participants who wanted to promote the programme at other schools, transport was one of the most challenging resources. They seriously needed transport to extend and promote the

programme and their services further afield. The follow up of cases, e.g., was not possible due to the lack of transport.

Community factors, e.g. child-headed families and poverty

Community factors include social, economic and physical environmental factors which influence the health of a community. As mentioned before, the physical school environment was identified as a challenge that was exposing learners (and thus the community at large) to communicable diseases like TB due to overcrowding in classrooms. Transport was another challenge for nurses in the community. As highlighted by the nurse participants, transport for them to do follow-up visits was verbalised as an obstacle because they were restricted by a lack thereof to promote the programme at other schools in the area. The following verbatim quote supports this finding:

"You see, we have no transport that we may use to go do home visits for those adolescents that we have seen in the clinic" (Clinic participant no.2)

"We sometimes depend on those nurses ..or those care givers if they have transport to go for home visits or do any community work". (Clinic Participant no.4)

"The guy who works with the schools here, has been working in the office because of lack of transport." (CHC Participant no. 1)

"The other day I had to go from home to a crèche on the other side as I could not start at the clinic as the will be no transport for me to go there. Instead I will have to use taxis and that will be not ok, to use my own money to go and do government work." (Clinic Participant no.3)

One of the most challenging community factors identified by the participants as affecting the effectiveness of the school-based HIV and AIDS prevention programme was the high number of child-headed households. One of the focus group participants described how an overflow of money can cause a downward spiral in the moral and physical wellbeing of a once wholesome child-headed household:

"Another challenge that we face is that most of the children that we have here are childheaded families. They [children] are heading families. The parents are not there, they are left alone. For the whole year maybe the parent would come once or twice. What they [parents] normally do, they send money every month. Sometimes they give them a lot of money to an extent that the learners, they don't even know what to do with the money. So that could be one of the causes why the number of infected people is getting higher and higher. Because, like for instance, if they have got more than enough money they go to the taverns and they drink. After drinking then whoever comes [and says], 'Can I go with you?' [the one/s asked say/s]'Yes'. Then the parents are not there. They don't even see; they don't even know what is happening at home. So, for the fact that our learners are heading families it is a challenge on its own. Yes, so we don't know who is supposed to address that challenge."(Participant no. 7 FGI School A)

The participants expressed their concerns with regard to child-headed families. In many cases, children were left to head families on their own while the parents were working away from home returning only once in a while. The children at home are burdened with the responsibility of managing the money their parents send home. The participants believed this to be a huge responsibility for children; indeed, a responsibility they had no experience of. Exposed to risky behaviours and having a lot of money in many instances lead to risky behaviours including drinking. Ultimately, with drinking habits, subsequent participation in risky sexual behaviours is seemingly inevitable. The participants expressed real worries about the fact that the parents were not aware of what was happening in their absence and they [participants] had no solution to this challenge.

Domestic violence issues including rape, incest, abusive physical behaviours and the secrecy associated with it – especially those in rural family households – particularly bothered the participants. A participant revisited an incident that occurred which demonstrated how complicated challenges can become in a community if the delicate balance between trust and mistrust of the healthcare services is disturbed:

"... now if I tell him that I had this experience he won't share with her colleagues, not even their husband. Because I once learned a learner from another school, she had a similar problem and then a educator was teaching this issue of abuse and rape, so the educator invited the learner that if anyone feels he is experiencing these kind of things at home, 'Please feel free to come to me I will keep the secret I promise'. Then this learner went to the educator during break and then she shared the problem with the educator. Then two days after – she used to be brought to school by her father – and seemingly the father was the one who raped the child and the child got infected[with HIV]. So it looks[like]the

educator went and discussed this thing with other educators who also discuss it in class with learners; and when the parent came to pick up the child learners were looking at the parent and that child started to suspect that, 'Ah, it is because they know what is happening.' It created a drift between the parents, because there are issues that are family matters. People address them [matters]as a family and they think it is okay like that. But once it gets out it destroyed the trust. Now the learner was supposed to be transferred to another school. So that is the problem."(Participant no.2 FGI School A)

Rape, incest, family violence, abusive physical behaviours and the secrecy associated with these activities – especially in rural family households – particularly bothered the participants on the one hand but, on the other hand, so did unethical behaviour among trainers, educators or role models of the youth. In the above verbatim quote, one educator broke the trust of a young learner who believed the educator would help her which resulted in a situation of destroyed trust in the educators. Some participants admitted they felt they were not equipped to handle certain personal or sensitive issues relevantly. Clearly, unlike nurses who are aware of upholding and adhering to standard ethical considerations such as trust, fair treatment and confidentiality among others, educators lack knowledge and experience on how to approach sensitive situations with learners and parents in a fair, dignified and respectful manner thereby acknowledging the latter's human rights.

"Because there are those people who are based in the village who do not know anything about their rights, and they live under very poor conditions" Participant no.3 FGI School A). "because these kids have no means to feed themselves and their siblings, they stop coming to school and go and work in the farms" (Participant no.5 FGI School A)

"Some of these kids with no parents and are poor, have relationships with older people so they can get money to buy food and sometimes end up with teenage pregnancy and HIV". (Participant no.6 FGI School B)

There was a learner who was taking ARVs, I called the learner to my office, the poverty they were leaving with was terrible and sometimes she had to take the treatment with no food. (Participant no.4 FGI School A)

The study findings revealed social issues like child-headed families where a risky lifestyle becomes a way of survival for the youth; sexually abusive practices within families where collaboration between educators and parents for the care of learners identified at school are called for; and

impoverished households in rural villages where learners had to survive without basic resources were profound challenges to the effectiveness of the programme. The physical environment of the school was a challenge to the effective implementation of the programme as well. With overcrowded and congested classrooms it was not easy to manage the spread of communicable diseases like HIV and TB.

4.2.3.3 Category 3: Personal barriers

Personal barriers are obstructions put into place by individuals that negatively affect their achievement in specific areas of their lives in general. Personal challenges which pose a threat to the effective implementation of the school-based HIV and AIDS prevention programme emerged as the third main category. The participants identified seven issues/attributes as personal barriers. Table 3.8 below illustrates category 3 and its subcategories.

Table 4.8: Category 3 and its subcategories

Category	Subcategories
4.2.3.3 Personal barriers	Lack of trained dedicated
	staff/services – infrequent services
	delivery
	Insufficient knowledge and application
	of policies/guidelines
	Insufficient collaboration between role
	players
	Educators' barriers towards HIV and
	AIDS education (sensitive issue)
	Cultural and religious beliefs
	Lack of parental understanding of the
	school programme
	Parental barriers towards sexual
	education

• Lack of trained dedicated staff/services – infrequent services delivery

The scarcity of trained staff dedicated to specifically run the school-based HIV and AIDS prevention programme and other services related to the programme was identified by the current participants as a contributing factor to the infrequency of the service offered. The nurse participants made mention of this issue as follows:

"I think we need to do a lot of work. We are working, but I think it is not enough. ... Because when you know nothing about HIV you cannot talk anything that you don't know. ... Yes I have done a two weeks HIV management. It is two weeks only. I did go there. No I don't think it is enough. It is [not] enough at all." (CHC Participant no. 5)

"Not to visit there once or sometimes visits, hai no, they are not making a huge effect expected ... Because there is nobody who is running that, specifically that school health programme. But just because there is no specific person catering this programme I cannot say ... Partially, I do not have that much skill on HIV and AIDS programmes. I have [only]done some HIV and AIDS courses."(Clinic Participant no.4)

"No, no it is not enough because, like I said, I am not nurse initiated management of Anti-Retroviral Therapy (NIMART) trained. I am not PHC nurse. Yes, I have never trained for PHC [primary healthcare] or other things, but I have done even Prevention of mother-to-child transmission (PMTCT) But I have got some information concerning TB and basic HIV and AIDS like that. So through that I am able to give the information through the use of some of the guidelines. I am able to give the information." (Clinic Participant no.3)

The educator participants added the following concerning personal barriers to the effectiveness of the programme:

"They lack information and management about LO ...we are just educators. LO and HIV it is special skills. We are just educators." (Participant no.2 FGI School A)

"Yes, we do not possess the necessary skills and training to facilitate the learning well [almost all other participants nodding their heads in agreement]." (Participants no.7 FGI School A)

"Because we only give the little information that we get from the textbook to the learners. We don't have all the information that we need. When it comes to encouraging those that are already infected we are not clear about what those pills do to the body. We are also not clear on how the pills have to be administered." (Participant no.2 FGI School B)

The study revealed that the role players in the programme were not trained enough to run the programme and they correctly believed that it meant they were not adequately skilled to be effective in the programme. They attended no courses that they believed was needed to effectively run the programme. It was found that the nurses only had basic HIV and AIDS knowledge and

basic counselling skills. The nurse participants confirmed it in their verbatim quotes that did not have the skills needed (such as PHC, NIMART and other skills) to make them effective role players in the programme.

It was further discovered that there were no dedicated staff members for the programme. This implies that there were either no school health services at all or, if available, the school health services did not work well. This situation resulted in infrequent services delivery.

Some of the educators teaching LO were specialists in the subjects they taught but had no extra training that enabled and equipped them to teach LO effectively. It was found that the educators mostly rely on information they find from the textbooks. Only a few educators had extra training – the additional training focused on HIV and AIDS as well as life skills. Unlike with the nurses, specific educators were allocated to teach the subject in spite of the fact that they were not adequately trained.

• Insufficient knowledge and application of policies/guidelines

Having limited or no knowledge of policies and guidelines related to school health and HIV and AIDS as well as not being acquainted with their application was identified as a personal barrier by the participants. The participants confirmed this finding as follows:

"Mm...I don't know it and have not heard of it ...that ISHP you are asking about..." (CHC Participant no. 5)

"No, we do not have guidelines. Because there is nobody who is running that programme, specifically that school health programme. We just give them [learners]the information we see fit, the information from the guidelines that we are using at the facility. ... But I think there is somewhere, the guidelines are there somewhere. But just because there is no specific person catering this programme ... I cannot say..." (Clinic Participant 2)

"Yes, just the general one; the guideline concerned with HIV and AIDS prevention in schools we do not have. I once heard about it, but I have never seen it." (CHC Participant no. 3)

"Yes, we have, as a matter of fact we have two guidelines that we are following, the DoE and DoH guideline...the DoE guideline informs us that when [we]go to[a]school, primary or

high school, we have to talk about abstinence only, nothing else, no condoms, no contraceptives, etc. and the DoH guideline informs us that we [must] give the learners all information for health without limit as they needs it...with no age restriction...No, I don't know of that policy.[Shaking her head to emphasize her words]."(NGO Participant no. 2) "We don't know of that policy but we do have guidelines."(Participant no. 3 FGI School A)

The study found that not all participants knew that the Integrated School Health Policy (ISHP) was one of the guiding policies on the running of the school-based HIV and AIDS programme. The dire lack of knowledge on the ISHP and its content was related to challenges in working through the guidelines stipulated in relation to this policy. It was revealed that they had all the other policies with regard to HIV and AIDS in schools and among the youth and adolescents. With regard to guidelines, it was found that although all the institutions had the guidelines, it was standard practice to use the old guidelines.

Insufficient collaboration between role players

Participants identified the lack of or insufficient collaboration between role players another personal barrier to the effective implementation of the school-based HIV and AIDS prevention programme. The mentioned the following in relation to this subcategory:

"Yes, maybe when we have a programme. Let's take [an example]. We have drawn a programme that maybe we will go in the school on Monday and Friday, maybe you will find that on Friday maybe they are writing a test. You cannot deliver health education when they are busy preparing for themselves." (CHC Participant no.5)

"I think if these people can come together and have training on how to do this; because most of the time even people who are from the district, you will find them doing maybe some road shows, not including the nurses who are around that area. They are overlooking at them. So it is so difficult, you cannot come from somewhere and deliver the message and expect that those people... After you have left they don't have anyone to go to, to support them or to go to ask some questions. If they can form a group and deliver this message, being a group, working together as a team, I think it can help." (Clinic Participant no. 4)

"Lack of collaboration, yes. You can find someone is having a PMTCT programme, So these people they are not working together. That one is taking his own programme to deliver in different ways; but if they can collaborate I think it can work."(CHC Participant no. 4)

CHC Participant no. 3 supported the opinion of CHC Participant no. 4 on the lack of collaboration by stating:

"Yes, because I think here we[nurses]are not involved, in other words we need to be involved in all the stuff and then we'll help... because if they[other role players]are doing it themselves alone, we, they will, they won't get help." (CHC Participant no. 3)

However, this same participant also outlined some of the barriers they as nurses specifically encountered which prevented them from collaborating with the other role players:

"The barriers, the first one is shortage in our side because even if maybe we have organised some meetings with them [other role players]... if there is a short staff, a shortage of staff in the facility, I won't be able, they won't release me to go to that meeting, another thing is a transport, maybe if it's a distance...?" (CHC Participant no. 3)

The study revealed that there was insufficient collaboration between the role players and with other role players. No proper flow of information was identified as one of the causes of the lack of collaboration. All forms of communication between the role players were not effectively used and the consequences were uncoordinated services and services not rendered at all. The insufficient collaboration was found to cause disruption in the continuity of services. The nurse participants were very adamant that specifically nurses – who are trained, experienced and knowledgeable about HIV and AIDS health-related issue – should be included as role players in all forms of communication and collaborative efforts among the other role players. At the same time, the nurse participants acknowledged the two biggest obstacles which prevented them from fulfilling their role were staff shortages and transport issues.

• Educators' barriers towards HIV and AIDS education (sensitive issue)

The personal barriers experienced by educators towards HIV and AIDS education are reflected in the following verbatim quotes from the educator participants:



"I don't think so, because some of the children who are taking treatment [ART] they even highlight that they are afraid to go to school. Some they need to take it in the morning, maybe the time they are supposed to be at school. So they are afraid to go with the treatment, because they are afraid of the educators." (Participant no. 4 FGI School B).

"Okay, with the those ones that are infected [with HIV or AIDS], sometimes they might, more specially when maybe they are in Grade 8, you might find that you have not yet identified those who are infected. So you have to be careful when you talk about it, because they know each other, and [it] may a very sensitive topic. So if ever you come to class and maybe just take it easy, you might find that some of them might laugh to the one who is infected or just pointing. So it means the thing is to be careful before you can start with the lesson or to come with a way maybe to find out who might be infected or affected."(Participant no.1 FGI School B)

"Exactly, the attitude of the educator towards the learners and subject, even though there might be some challenges maybe if you find that in the particular class that you are teaching there are someone infected, and you have to come up with a way to let the learner feel comfortable." (Participant no. 2 FGI School B)

The study revealed that educators regarded HIV and AIDS as a sensitive topic and therefore, in their opinion, it was required of the person who educated the learners on HIV and AIDS to have certain skills and a certain "attitude of the educator towards the learners and subject". So, it was not necessarily the person with the broadest knowledge base who should educate learners, but a person who in addition enjoyed the subject and could relate to the learners on their level as well. According to the participants, most educators in general feel inadequate and uncomfortable when they have to present a lesson on HIV and AIDS. They doubt that they have the right attitude as well as that special skill to deal with these lessons. The current findings also implied that the environment as well dictated to the participating educators to treat teaching HIV and AIDS as a special topic.

• Cultural and religious beliefs

Zimmermann (2017) from Live science defines culture as "the characteristics of a particular group of people, defined by everything from language, religion, cuisine, social habits, music and art". The centre for advance research on language acquisition further defines culture as "shared patterns of behaviours, interactions, cognitive constructs and understanding that are learned by socialization".

It can be seen as the growth of a group identity fostered by social patterns unique to that particular group. Culture encompasses the religion of that particular group and general conduct and behaviour of the group. Culture determines the way of life of that particular group of people."

The ways of life of the participants as well as their religious belief was identified as a challenge to the effective implementation of the school-based HIV and AIDS prevention programme. The following was mentioned by the participants in this regard:

"Yes, yes they[learners] are not free; they are scared they might meet their elderly relatives in the clinic queues." (Clinic Participant no. 4)

"As an African, they do have that problem because they don't know in everything even themselves because in our culture, parents were not taught even while they were still young concerning sex, sexual education ... so but I think it's a good thing because at home as a parent they are not, they are failing to teach their children about sex, and then when the kids find that information on the street, they tend to be rebellious." (Participant no.3 FGI School A)

"I think it's helpful because... as Africans, it is difficult to just sit with your kid and then you talk about sex because you end up thinking that, 'when I get in the room with the father they will think about everything that we have already talked'. But myself, I do talk with my girls about everything. So I think my parents were afraid of that, so but I think it's a good idea, a good thing to teach them, even at home." (CHC Participant no.3)

Even some teachers they don't teach this sexual content as according to their culture and religion... They can't teach that at all (Participant no.1 FGI School A)

"I am facing a challenge here, and others are facing it. My religion does not allow me to talk about sexual matters. It is against my religious belief.. [religious? Inaudible 00:19:57 education]. Can you teach L.O? Because of pressure I have to accept it. But for myself is not there. Just teaching because I was given a... So it is the way people look at it, specialized, they gain during their work." (Participant no.4 FGI School B)

Culture and religion were found to be personal barriers to the implementation of the school-based HIV and AIDS prevention programme. The study findings evidenced that the parents were restricted by their culture to discuss sexual issues with their children. As parents who themselves come from the same cultural background, participants admitted they did not feel free to talk or

teach their own children about sexual issues; so, admittedly, they found it very uncomfortable and hard to educate learners on these same private matters. Learners seemingly did not feel they have the freedom to seek sexual health education because of either their ingrain or the parents' religious beliefs. Learners as well were found to afraid to be seen by elders queuing in sections where reproductive services to the youth were rendered. Most traditionally older societies would associate learners or adolescents standing in a queue for SRH with leading a careless and irresponsible sexual life. Openness in sexual discussions at home by parents and on the appropriate level of the child's understanding, was an idea supported by most participants.

Lack of parental understanding of the school HIV and AIDS programme

Parental understanding of the school programmes is an essential element for assuring the success of the school-based HIV and AIDS prevention programme. If parental understanding is lacking, parents will not be interested in or even consider forming part of the programme. The lack of understanding by parents of the school programmes was identified as a personal barrier. Participants reported the following in relation to parental understanding of the school programme:

"We do try our very best to explain to them the reason why we are doing this. So some they end up understanding what we are up to. Yes." (Clinic Participant no. 4)

"So we don't know how to teach this comfortably and making parents understand ... even the families is telling them to use a condom, and you will find that this child at home they don't mention a condom at all. It is a contradiction between the parents and the educators. Maybe this education needs to be to both. Parents need to be aware that it is of no use to deny our children to use condoms, yet they are busy, they active sexually. But it is a difficult thing, again, as a mother or father to tell the child use a condom. It is like they are giving them a license." (Participant no.2 FGI School A).

"The other thing is that as we are talking about [inaudible 00:31:21] in the college and to parents, educators and learners there is a problem. What if maybe learners can be taught more about this LO subject at school? What is it within the subject itself I am lecturing? What is LO? I don't know LO? But if it, a parent can know and understand as what is LO and then when he or she that is home he or she will begin to say, 'My child I went to your school, they told me about the LO...'." (Participant no.3 FGI School A)

"Outside, but at the clinic they didn't, they haven't come so far to say that, because they, the thing that they are doing, they said that just send those kids as from eleven, twelve years if when they start menstruating to come to the clinic and they know that when they are in the clinic we do teach them about this stuff, because and even now as the government has introduced HPV injection, which means they are adding more information; that sex can cause cervical cancer. So I think, at the clinic they haven't come, the parents, but I know that outside they are talking, while maybe we're at the stokvels that, 'I've heard at schools they've introduced this and that, they teaching our children to misbehave', like that. So if they teach them sex now, they are telling them to misbehave. But they are helping those kids to... to know, because some of them do things, even us because we didn't have time to be taught by parents and even at school, there were no school health nurses and then you had no information, you were blank; but now television and radio do teach those kids."(Clinic Participant no. 1)

The study revealed that most of the parents are misinformed about the programme and the content taught in LO. It was further revealed that some parents believe that the introduction of this programme in schools will promote risky sexual behaviours. These parents are of the opinion that learners would want to experiment after the lessons. The participants clarified that the parents were not exposed to the programme and this lead to a tainted relationship between the educators and the parents. In essence, the lack of support due to the lack of information the parent have may hamper the progress and success of the programme.

Parental barriers towards sexual education

The obstacles created by parents towards sexual education were discussed. The participants had the following to say in this regard:

"Yes, they feel it is not good, but some they feel it is good because they are not able to talk about the subject at their home." (CHC Participant no. 4)

"So if they teach them sex now, they are telling them to misbehave. But they are helping those kids to... to know, because some of them do things, even us because we didn't have time to be taught by parents and even at school, there were no school health nurses and then you had no information, you were blank; but now television and radio do teach those kids." (Clinic Participant no.1)

"Some parents do not believe in sex education for various reasons. So if they hear we are having lessons on sex education, others get angry as it is against their beliefs as well." (Participant no.2 FGI School A)

The study revealed that the attitude of parents towards sex education needed to be addressed in order for them to understand how important proper and correct information sharing with young adolescents can promote healthy SRH health and prevent their children from getting infected with HIV. It was mentioned that some parents became very angry towards educators who taught sex education. It was further revealed that most of the parents believed that teaching learners about sex would ignite in latter an interest to start experimenting with sexual activities. The participants observed that parents almost never formed part of the team delivering sex education; according to their perceptions, it seemed as if the media in the form of radio and television had taken over the role of the parents. Culture was mentioned as one of the reasons why parents did not want to become involved in educating their children about sex. Although the absences of parents in the team may hamper the effectiveness of the programme, it was found some parents seemed happy and satisfied with sex education at school for their adolescent children because it relieved them of the pressure of teaching their children about sexual and reproductive matters.

4.2.4 THEME 3: SUGGESTIONS AND NEEDS FOR HIV AND AIDS PREVENTION PROGRAMME

Suggestions and needs for HIV and AIDS prevention programmes emerged in THEME 3. This theme explored and discussed suggestions and needs necessary to improve the implementation of the school-based HIV and AIDS prevention programme. Two categories emerged from this theme, namely adequate resources and the target population. From these two categories, 11 subcategories were identified respectively as shown in Table 4.9 below.

Table 4.9: Theme 3 categories and subcategories

Category	Subcategories
4.2.4.1 Adequate resources	Appropriate educational aids and venues
	Human resources – empower all role
	players with knowledge and skills
	Human resources – ensure collaboration
	between role players
	Human resources – ensure sufficiently
	trained dedicated staff
	Dedicated prevention programmes with
	monitoring and evaluation(M&E)
	Consistent involvement of school health
	team (SHS)
	Involvement of multidisciplinary team
	Involvement of nongovernmental
	organisation (NGOs)
4.2.4.2 Target population	Include primary schools
	Involve community/church/parents
	Include educators

4.2.4.1 Category 1: Adequate resources

Adequate resources are necessary for the smooth running of any programme. The provision of adequate resources was identified the first category under Theme 3, suggestions and needs for HIV and AIDS prevention programme. Eight subcategories were identified as resources which were needed to enhance the implementation of the school-based HIV and AIDS prevention programme as shown in Table 4.10 below.

Table 4.10: Category 1 and its subcategories

CATEGORY	SUBCATEGORIES
4.2.4.1 Adequate resources	Appropriate educational aids and venues
	Human resources – empower all role players with
	knowledge and skills
	Human resources – ensure collaboration between role
	players
	Human resources – ensure sufficiently trained
	dedicated staff
	Dedicated prevention programmes with monitoring and
	evaluation
	Consistent involvement of school health teams
	Involvement of multidisciplinary team
	Involvement of nongovernmental organisations

• Appropriate educational aids and venues

In this subcategory appropriate learning and teaching aids as well as adequate venues were discussed. The participants raised the following aspects of concern:

"Ja, [Yes], we need pictures and magazines." (Participant no.3 FGI School A)

"Sometimes when the, if the department will bring videos where sometimes learners they see what is going on there within [inaudible 00:20:49]..." (Participant no. 4 FGI School A)

"Maybe if, isn't it presently, you know educators are offering lessons like verbally in class, maybe if they could have like projectors with all those, the slides of, you know, pictures so that they can see so if I don't do this then I will end up like that. You know I once attended a workshop; they were talking about HIV and AIDS. They showed us pictures. You know, even us as adults we were like shocked. We say, 'sjoe [wow] HIV can do this to a person?'(Participant no. 2 FGI School B)

"You know, so they should be given a chance to participate and then they give them those slides like a projector and they are given a chance to ask questions based on what they shall have seen. Ja, [Yes], maybe that could assist." (Participant no.6 FGI School B)

"Or maybe if they can video tape maybe when an accident happens how do they do it. Then they will have like first-hand information. They have seen it how they do it when they assist people who have been involved in an accident. Then they will know. Maybe they show them pictures of how do you take care of a person who is infected at home, because that is another challenge, because they are there with their grannies, their sisters, their cousins who are infected and every day they have to assist them but they don't know how. We don't even know how to assist them. Yes so if there could be like such equipment ... We can fight the battle; we can." (Participant no. 3 FGI School B)

"Like what the principal was suggesting if we can get more material that can demonstrate to the learners how the virus works in the body." (Participant no.7 FGI School A)

"Yes, more like... I don't know how to put it, but it should make them very much aware of the realities of HIV and AIDS..." (Participant no.3 FGI School A)

"... we need manuals, facilitators' and learners' manual[s] especially on sexual transmitted infections so that the learners can refer to even when they are at home, unlike having to wait for me to come back to ask questions if they did not understand some of the things during the lessons ... And the games things we can use in between lessons so they don't get bored when we are teaching them, but have some recreation [recreational – thus fun – activities] in between."(NGO Participant no.2)

"Pamphlets, dildos, condoms, deal us well with condoms, and then even those, what do we call those things, those big ones, not the pamphlets? That one with... Not posters per say [per se] that one with STIs like... I'll show you when we go that side. I forget the name of it... Flip charts!" (Clinic Participant no.1)

The findings of the study revealed that supplying the role players with appropriate resources will enhance and improve the effectiveness of the school-based HIV and AIDS prevention programme. The participants believed that supplying the role players with audio-visual learning and teaching resources will improve their presentation skills. This in turn will improve the understanding of the learners which will be beneficial to them and also make the lessons more interesting. It was also revealed that if the role players or programme presenters use games in their presentation, not only

will the participation and involvement of the learners be stimulated but the effectiveness of the programme will be enhanced as well. Various teaching aids were mentioned by participants as most urgently needed for effective teaching about HIV and AIDS. These included educator and learner manuals, pamphlets, posters, flip charts, video or DVD programmes related to HIV and/or AIDS issues as well as condoms and dildos.

The participants believed that the use of videos or DVDs may trigger learners to grasp the reality of how seriously devastating living with HIV and AIDS can be or how being infected with STIs can influence one's lifestyle. Visual presentations of the consequences of these debilitating diseases seem to have a greater impact on learners' understanding that it can ultimately lead to death.

• Human resources – empower all role players with knowledge and skills

Providing opportunities to acquire knowledge and skills was suggested and explored. The participants elevated the following aspects in this regard:

"We need in-service education it can be part of it too. I mean resources." (Participant no.5 FGI School A)

"Yes we need skills like counselling skills." (Participant no.4 FGI School B)

"So that is why I am saying they need a special skill. If you are an LO educator [educator], learners must be able to come to you and confide that secrets with the confidence that they can't even share with their friends or their parents but you. You must be able to advise them and assist them." (Participant no.5 FGI School A)

"One other thing, I think it can be more helpful if LO educators can be clear, very clear, on how the virus affects the functioning of the body..." (Participant no.7 FGI School B)

"It seems that if we can have more material that will teach us more so that if you go to the learners who are in a position to express ourselves more confidently and teach that if we take our antiretroviral in case you are already infected, then you assist our bodies so that they function normally, the way they were supposed to. If you can have such resources that will help us to have more knowledge so that we go to the learners then well-armed and we also [have]enough knowledge to encourage those that are already infected to say that if you take this medication this is what you are going to experience, 'Yes, just contain, take

the pill. You are going to end up...Your body will end up adapting'."(Participant no.1 FGI School B)

"We need to have knowledge of HIV and as well be able to counsel the learners." (Participant no. 2 FGI School B)

"I think, to add, even the diet; they must know what to eat and not to eat. I think it is very important because they must first eat and then drink the pill." (Participant no.1 FGI School B)

"One need to have a special interest to learners and their health issues, and I also think we need to be 'work-shopped' at regular interval to update us with the latest information with regard to HIV and AIDS and other STIs ... you know you find one staying for two years with no workshop or update on the knowledge. We also need more empowerment with regard to school health issues." (NGO Participant no.1)

"To implement HIV management, because on that one I think they include everything concerning HIV, [al]though they give you that information in a short space of time. And then, even the PMTCT [prevention from mother to child transmission] programme because it's where we are able to prevent HIV. Currently we are eliminating ... want to eliminate HIV to those kids. And then... another one thing that I want is HIV in adolescent. Yes, because now most of those kids that we have already started them on treatment, now they are no longer taking it well the treatment because they say that they 'know' and are starting to have sexual relationships, so they stop taking drugs, so I think that the adolescent training is one of the...even the... it's where they will teach us about how to disclose the status [of] those kids."(Clinic Participant no.1)

"I think it's... teaching the health educators for them to teach those ... teaching us, for us to teach the kids and educators, or organising workshops. Last, we were... there is a place where as nurses we are going to, in... somewhere there in Witbank, where they are teaching us about HIV, the RTC centre (Clinic Participant no. 2)

The participants believed they needed to have special skills to be able to be adequate LO educators. Counselling skills and confidentiality were specifically elevated as one of the skills that are needed. This may be associated with the fact that educators have learners at schools that are affected and infected with HIV and AIDS. Learners must be able to trust the educators with their

confidential information instead of being uncomfortable that their diagnosis or family issues may be divulged to other educators or other learners. The educators must be able to counsel the learners on their treatment regimen; they must know how to encourage learners, comfort learners who seem as though they want to stop their treatment and be firm with learners who victimise others. Hence, they need to have sufficient detailed knowledge about antiretroviral (ARV) treatment and how the treatment regimen works if they are expected to support infected learners. It was also found that detailed knowledge about the human immunodeficiency virus (HIV) and how it functions should be within the educators' competence. The participants indicated that with adequate knowledge about the virus, they would be able to impart this important knowledge to the learners.

The need to have workshops regularly on new issues concerning HIV and AIDS as well as infected people's dietary issues was emphasised. Participants reiterated that all school health issues should be part of the knowledge they acquire and are empowered with during workshops. They further indicated they needed more knowledge and training on managing HIV and AIDs; especially on the adolescent management of HIV.

It was the firm belief of all the participants that empowering the various role players with knowledge and skills was the best way forward to improve the effectiveness of the programme. Although it was noted that all role players need to be empowered with skills and knowledge, educators, nurses and the NGOs were specifically elevated to attend workshops in specialised areas as the participants believed this would assure that reliable information from reliable sources is imparted. The regional training centre used as a training centre for HIV and AIDS was singled out as an appropriate site for teaching. Regular in-service education was also one of the methods mentioned to enhance role players' empowerment continuously.

• Human resources – ensure collaboration between role players

Participants believed that collaboration between role players will enhance the implementation of the programme. The following quotations were extracted in support of this finding:

"Sometimes even the nurses collaborate with police ... Ja, [Yes, the] police can be involved as well because there are those who are using drugs. So the social worker cannot help those that are in drugs but the police can." (CHC Participant no. 1)

The same participant explained collaboration with other role players, according to her perspective, as including support role players give and receive from each other. This two-way support would

assist role players to deal with the emotional stress they experience when rendering the HIV and AIDS services. Various other participants agreed that mutual support between role players was pivotal.

"We sometimes need counselling...Then I was so tired and it really disturbed me. So such things, we also need support." (CHC Participant no. 1)

"No it is not, we'll need more support from other departments as well. Oh yes I wanted to forget [almost forgot], we need the support from nurses as well, the school health services." (NGO Participant no.2)

"So far I think you have covered most of the things. But I would be very grateful if our girl child mentors' programme can be given full attention and collaboration with other role players deepens." (NGO Participant no.1)

Counselling and support were mentioned by the participants as needs. Prioritising these two needs might stem from the traumatic situations and circumstances they came across in the schools and workplaces. The support needed extends to other departments, to nurse individuals as well as the school health services.

The role of the psychologist in relation to collaboration with the other role players was clarified as follows:

"I think the health worker must know how to handle those kids because we are... in the health side, we know about health stuff, but we need to also know how those kids think. I think even that one it's needed in our side because we, even the educators, tend to just shout at those kids, even though they know how they grow and everything. So I think the psychological part of the kids, we must be aware of it, how to handle those kids." (CHC Participant no.1)

Collaboration with other role players was found to be significantly beneficial to the learners and the various role players involved in the programme. In cases where the role players experienced intense stress, they needed to undergo counselling. These sessions may be possible if there is a proper collaborative system. All the need aspects of the learners and role players must be met to ensure the success of the programme. This may be achieved through collaboration. The participants mentioned that the services of police officers were necessary in cases where the

learners are using drugs. Collaboration with parents as well may prove to be more rewarding to the implementation of the programme.

A suggestion of collaborating with girl mentors was mentioned as well. This may enhance the decision making skills of the girl child. With the girl learners being skilled to take decisive steps, make firm decisions and know they have the right to protect their health, the programme may prosper as the girl learners will be able to choose lifestyles that may not predispose them to contracting HIV and AIDS.

Collaborating with nurses as mentioned by the NGO participants may yield positive outcomes for the programme. Making nurses available to capacitate educators and NGOs with the appropriate skills and knowledge on HIV and AIDS and to provide other role players with on-going support and keep them updated with the newest information on HIV- and AIDS-related health and research issues will certainly contribute significantly to achieve the attempted collaboration effort among role players. Once groups of people (all role players) who have the same goal (achieve success with the school-based HIV and AIDS prevention programme for learners) understand that collaboration with the other groups is essential to reach the same goal, they seem to pull together and work as a unified entity.

• Human resources: Ensure sufficiently trained dedicated staff

For any programme to be effective, an adequate number of sufficiently trained and dedicated staff is a necessity. The necessity for the availability and allocation of trained staff for the school-based HIV and AIDS prevention programme was echoed by the participants. The following quotes were extracted from the discussions held with the participants in this regard:

"Maybe we can have the management structures to be 'work-shopped' about the subject and thus the [there] will be improvement in the management of this subject." (Participant no. 1 FGI School A)

"One other thing, I think it can be more helpful if LO educators can be clear, very clear, on how the virus affects the functioning of the body." (Participant no. 2 FGI School B)

"They must start to consider LO like History, Geographic [Geography] ...like all the other subjects." (Participant no.2 FGI School A)

"It is actually a very good point there. For example, a educator [an educator] can be given a subject that he/she likes to teach, have interest in the subject ... and there is also a learner or a child must also know the risks, the dangers of actually committing him or engaging him or herself to [inaudible 00:11:47]..." (Participant no.3 FGI School A)

"Yes, yes a special school health nurse allocated, looking at the health issues of the learners; social worker for social issues, psychologist maybe for psychological issues..." (Participant no.6 FGI School B)

The participants stated they needed the management structures in their institution to be 'work-shopped' (attend appropriate workshops) on the subject, Life Orientation, as well as on HIV. These findings may be associated with the idea that background knowledge on the subject may encourage and improve the support the role players receive from the management cadres. This may as well inform the management to consider LO like any other school subject and give it the value and credit it needs. Furthermore, the allocation of educators to teach the subject needs to be done in accordance with the educators' interest in the subject as enjoying or having a dislike in LO will determine the effort and attitude of the educator on the subject. The participants also indicated that a dedicated school health nurse, a social worker, a psychologist and other members of the health team need to be allocated to schools so as to deal with the challenges relevant to their field of practice as soon as it is needed.

To emphasise the benefit of having dedicated staff, a participant made the following statement:

"But if we have a session as educators and then we talk about these things, you know, openly. You know you might grab one or two things from others when you share, and you know how to deal with the learners in class." (Participant no.3 FGI School B)

It was found that having staff that are allocated and delegated to run the programme will improve effectiveness of the programme. This will make it easy to be able to plan specialized training for the skills needed to effectively implement the programme for those dedicated staff. It was further suggested by the participants that taking LO seriously like other school subjects may benefit the programme. This may trigger the learners to take LO seriously like other subjects and thus the long term effects of the programme may prove to be of value.

Participants mentioned shortage of staff as a challenge to the implementation of the programme. Allocating sufficient number of staff to render services efficiently was identified as a need by the participants. The reviving of the school health services in the district was indicated as an urgent need to curb the shortages in the clinics.

• Dedicated prevention programmes with monitoring and evaluation (M & E)

Participants mentioned a need for more HIV and AIDS prevention programmes with a section to monitor and evaluate (M&E) the progress of the programme. The following suggestions and needs were identified by the participants:

"... another programme on HIV and AIDS prevention could help. It would assist." (CHC Participant 1)

"Although at the school is the most appropriate place where they can get relevant information, because the information that they get outside might not be reliable. So we, I personally think that yes other programmes are supposed to be introduced, more effective programmes. Ja, [Yes], otherwise we are not going to win the battle." (Participant no.7 FGI School B)

"And then we should be, maybe if, if maybe the programme directors or the people who are working with HIV, we are calling them the CCMT, can have a slot during... I don't know how, ... the kids can hear those stuff, maybe if the Mpumalanga have that thing, an hour, 30 minutes or so for them to teach those kids, and then at the school they have that period where they open that station and listen to those health education[programme]." (Clinic Participant no.4)

Participants felt that there was a need to have other programmes at school apart from the LO programme but which enhances the LO programme. Despite their assertion that a school is an appropriate place for learners to acquire knowledge on HIV and AIDS, the participants believed the introduction of various other relevant programmes such as inviting the CCMTs to have periods and slots at the school as well as making use of radio broadcasting may be of benefit to the current singular programme. Discussing the apparent ineffectiveness of the programme at present, the participants postulated whether the goal of the programme will be met if more of the available current and newer programmes are introduced. Close monitoring of the programme to give opportunity for re-planning and adjusting programmes was mentioned as an important tool to monitor the progress and effectiveness of the programme.

Consistent involvement of School Health team (SHS)

Participants suggested the involvement of the school health services (SHS) team as a need to be considered. Participants had this to say in this regard:

"It's for us to push and then to show maybe if we can have something in writing where we alert the... we make them aware the... our coordinators, that we are having this challenges and then we want to go to and help where and where, and then we have to form maybe the committees and then we meet every now and then, where we can... organise some campaigns and everything." (CHC Participant no. 3)

"You know sometimes the educators of educators. Like now this Life Orientation, it is a new programme to schools. They are not, the information that the educators are having are not like us nurses. We have got more information than them. So if it will be helpful if we go and assist them." (CHC Participant no.5)

The participants stated the formation of committees and teams as a dire need. A team has to be made up of various role players who bring to the table a diversity of skills, knowledge, ideas and expertise. It was voiced that this is the way in which role players will share information, discuss ideas and come up with solutions because it is more fruitful to work in a team. Working in these teams will ensure that all the SHS teams are fully involved in programme.

• Involvement of multidisciplinary team

To ensure that the learners are given a holistic approach to the programme, the multidisciplinary team is to be involved.

Yes, yes a special school health nurse allocated, looking at the health issues of the learners; social worker for social issues, Psychologist maybe for psychological issues (Clinic Participant no. 3)

This suggestion was made by the participant in line with the fact that every individual is a whole. No fragmentation of services will be experienced as management of the programme will be done in a round table with all members involved, from the nurse to the learner who is the receiver of care/service.

Involvement of non-governmental organisations (NGOs)

The last suggestion with regard to human resources is the involvement of non-governmental organisations (NGOs). Participants made the following suggestions:

"Yes, we have to involve the NGO, as you know that our department has no resources. Partnering with NGOs may reduce the need for teaching and learning aids needed in the programme." (CHC Participant no. 1)

"We can make use of love Life [an NGO] as well." (Clinic Participant no.3)

"Yes, like I said before those people from right to care...Yes....we can make use of them to support us. They support us with Information and...err...personnel ". (CHC Participant no.3)

".....NGOs, can assist, there is[are] this.. psychologists...There are some of them, and the social workers." (CHC participant no.3)

Some participants suggested partnerships with NGOs to make able beneficial relations between them. An NGO specifically identified by a participant for partnership in the venture to improve and effectively implement the school-based HIV and AIDS prevention programme, was Love Life— an NGO supported by the WHO and the South African National Department of Health (NDoH) focusing on the prevention of HIV, STIs and unplanned teenage pregnancies among the youth (NDoH 2013:6).

4.2.4.2 Category 2: Target population

The participants voiced it was necessary to identify the intended target population to ensure the effective implementation of the school-based HIV and AIDS prevention programme. In this category three subcategories were identified: include primary schools; involve community/church/parents, and include educators. Table 4.11 below illustrates category 2 and its subcategories.

Table 4.11: Category 2 and subcategories

Category	Subcategories
4.2.4.2 Target population	Include primary schools
	Involve community, church and parents
	Include educators

• Include primary schools

The participants mentioned that primary schools must be the priority area – they felt starting with the school-based HIV and AIDS prevention programme earlier in learners' school years would most likely impact positively on young children's knowledge base about sexual issues and making the right choices. The following quotes from participants confirm primary schools as the target:

"Once you teach a child from around six years, seven, nine years, say that, 'My child you don't do this and this and this and this', she will realise that this is [important]because she will [understand] English, ten years, they involve themselves in sex. So they don't know anything about a condom; even if we are looking [watching] TV, they see people kissing each other... This is reality, these things are happening in life. Do not allow your brother to touch your front parts, must go, you boy, don't allow your sister to touch the front of yours....it is your private part, and it is your private part. You don't allow your father to do this and this and this and this. You know, do not allow any person to touch your person from an early age. I feel that if you can teach them from an early age about the dangers, the weeks and.... whatever that is involved...They [educators and parents] must stress [emphasise; focus on it] it [take control over your body] - from the lower grade[s]."(Participant no.3 FGI School A)

"Especially the public primary schools. In private schools amongst these learners[primary school learners] from those schools ... in private schools they can teach them about it, not in the public schools. It seems like that." (Participant no. 4 FGI School A)

"This has to start from primary school, that is where children learn a lot of things" (CHC Participant no.5)

Introducing LO in primary schools was advocated by the participants as a way of possibly achieving more success with the school-based HIV and AIDS prevention programme. They felt the earlier the mind frame of the learners are broadened, the quicker it would lead to informative decision making on the part of young learners. Educating primary school learners will be of value as young children, according to the participants, take advice and trust information given to them by elders. In concluding their responses on primary schools as the target for this programme, the participants indicated that in private schools, primary school children are taught LO but in public primary schools LO as an official subject does not form part of the curriculum. Hence, primary school learners lack the opportunity to benefit from the school-based HIV and AIDS prevention programme.

• Involve community, church and parents

Involving the community, church and parents was identified as a suggestion to improve the implementation of the programme. The following is what the participants had to say in this regard:

"Like, for example, at times that we used to have community engagements. I think that the health workers and social workers are supposed to be part of such meetings ... where community does address learners of the community. The health workers and social workers must also add something from their departments saying that okay we as social workers we are working according to this and this and this and this." (Participant no.3 FGI School A)

"Nurses must actually visit communities, have meeting with community members, and social workers should have community ... have this meeting to community members as well to inform them about this whatever thing [LO subject as part of the school-based HIV and AIDS prevention programme in primary schools] that is concerning life at school." (Participant no.4 FGI School A).

"Pastors ... the have youth in different churches, policemen, social development, and psychologist, etc.by inviting them to workshops destroying the stereotype that sexual issues may not be discussed in church... The social development people, first things first, they need workshops on communication." (NGO Participant no. 2)

"... this is challenging... I don't know how to put it ... I think we need to involve other institutions...broaden the base of information in a way that all this information is available and accessible in the churches, home affairs, place of safety, social development...and all

the other areas as we do find these high school learners in these area."(NGO Participant no.1)

"I think everyone under Department of Education and Department of Health should take this matter serious, because when you maybe someone says it is not my job it is someone's job, there will be no way for what. We need to involve everyone. We need to involve each other so that the program can go further and be effective enough". (Clinic participant no.3)

"Maybe if we can talk to the pastors and then somebody, especially some other political members may have a chance to explain to the church because the problem, they don't know that HIV and AIDS is a disease in that case. So maybe if they can go there and explain to them something with; and maybe something happened with their parent that will assist them further".(Participant no.1 FGI School A)

The participants implied that the involvement of all community members, the church as well as parents may yield positive outcomes for the programme. The learners are community members; therefore, if members from the communities where the learners reside are involved in the programme it would suggest that to learners that the whole community is supporting them and thus their trust in adult leadership and guidance may be enhanced. The participants suggested involving all institutions such as the church, home affairs, places of safety and many others. They believed broadening the base of information by involving and improving access of information by these institutions would increase the spread of information to the beneficiaries of the programme, namely the primary as well as high school learners. Involving specifically the church would assist in helping learners – and possibly the parents – to understand that religious tenets restricting exposure to the school-based HIV and AIDS prevention programme are not always the one and only right way to approach this issue. By combining faiths, beliefs and traditions with the children's real life situation and getting support and advice from professionals with experience in their community on the prevention of HIV and AIDS among the children of the community may help parents and older community members to better understand and ultimately support the programme.

• Include educators

Participants suggested that educators also be included as a target group for the programme. The following is what the participants had to say in this regard:



"One other thing that I have noticed is that it shouldn't be the responsibility of the LO educators only. I think each and every educator is supposed to be responsible. So not giving this task to the LO educators only. Like for instance our enrolment has gone up this year, our classes are congested. So if we give this responsibility to the LO educator only she might not be able to know all the learners. Like if all the educators could be engaged, then it comes to the point that all the educators should be well informed, because there is no way in which we can guide learners without information. So if we could have, you know, a situation where all the educators are well informed and they know how to present this to the learners then it would assist." (Participant no.2 FGI School A)

"I think if these people can come together and have training on how to do this; because most of the time even people who are from the District, you will find them doing maybe some road shows, not including the nurses and educators who are around that area. They are overlooking at them. So it is so difficult, you cannot come from somewhere and deliver the message and expect that those people... After you have left they don't have anyone to go to, to support them or to go to ask some questions. Educators must be part of road show on HIV and AIDS...If they can form a group and deliver this message, being a group, working together as a team, I think it can help" (Clinic participant no.3)

"As I have said, ma'am, the educator who is teaching life Orientation is very importantthey cannot be left out....and then even the program coordinators, as they are the one who can assist me with, assist us with the pamphlets and everything that will be needed at school." (CHC Participant no. 1)

All educators were recommended by the participants to be involved as the target group for the programme. The benefit of involving all educators is that all learners will have an equal chance of receiving correct information from a knowledgeable educator which will benefit the programme. The participants believed that all educators must be targeted not only those teaching LO. They further suggested that all the educators should be well informed on this subject to the extent that they are able to guide the learners at every available opportunity. Mostly, all the educators must have the know-how to approach and present the subject without experiencing personal or outside challenges.

4.3 Field notes

The analysis of the field notes occurred simultaneously with data collection as is done in qualitative data analysis. The field notes written down by the researcher and research assistant were personal observations of what occurred during the data collection period (Christensen, et al 2015:375). This was done to foster self-reflection which is crucial for understanding and meaning-making in any research study (Christensen, et al 2015:376). The preliminary analysis revealed emergent themes which allowed the researcher to shift attention to include non-verbal important information to the verbal dat. Items from the field notes were added where the context required it. This ensured a comprehensive assessment of the data obtained during the FGIs and personal interviews which, in turn, fostered a more developed investigation. Table 3.12 illustrates the analysis of the field notes.

Table 4.12 Field notes analysis

No.	Descriptive content	Reflective content
1.	Physical settings: Entrance to the facilities had secur guards. They all greet researcher and requested to researcher to fill in the register	of the settings where the researcher collected data. The security guards were neatly

and patients entering the clinic and CHC were taken care of and of value to the security personnel.

- The two schools had physical gates but no security personnel at the entrances to monitor who is coming in and out of the schools. The lack of visible security personnel in the school settings had an unsettling effect on the researcher in relation to the safety of the educators and learners. However, one of the schools was fortunately close to a police station.
- The outside environment was neat, although in both the clinic and CHC there were many patients waiting outside and inside the establishments.
- In one of the schools, the learners were outside and happily having conversations with each other as they had just finished writing their examinations.
- The communication with and between the people in the environment was flowing freely. In the mind of the researcher, there

• Environments: The outside

environment areas were neat.

- There was activity observed in the settings where the interviews were done. People were walking around
- Social environment: The researcher was warmly welcomed in all the settings.

was a sense of responsibility and accountability on the part of the nurses, the other clinic and CHC staff members as well as from the educators' and learners' sides. On the other hand, the researcher was wondering if maybe the warm welcome was related to the fact that all the visits were prearranged and the members were aware of the researcher's purpose to visit their settings. This could possibly have influenced the very positive attitudes of the members who were participating in the study.

- 2. **Formal** interactions: The environment where the formal interactions took place was very clean and spacious. The areas were quiet although in of the schools one presence of learners outside was a little bit disturbing. The vice principal in that school instructed the learners to be far classroom awav from the where we had our interviews.
 - Participants were available and ready for the interviews except in the clinic. Although the participants were available and ready, they had to first attend to the patients and thereafter take turns to be interviewed.

This was an indication of the willingness and understanding of the management the institutions. This was also reflected as good understanding regarding the purpose of conducting a research study in that unnecessary interruptions are discouraged.

- The nurses prioritised and respected the needs of their patients and clients and that was of value to the researcher.
- Building rapport with the participants helped so much that

- The participants looked very interested and eager to be part of the study. They communicated very openly, both verbally and nonverbally, after the introductions and explanation of the purpose of the study as well as the assurance of confidentiality.
- In certain instances, some of the participants had to use their own languages. participant's for quote, example:" You can see that they enjoy the talks from the way they ask questions and showing more interest in the topic. And in case if you do not know the content and not well prepared for them..... U ta ti poyila [because they ask a lot of questions]". [Laughing].

- they actually openly and honestly communicated about all the issues they were questioned about. However, there were instances where the researcher had to probe for more in-depth sharing of information.
- On the other hand some of the participants were very relaxed and felt so at ease and comfortable that they reverted to their home language to communicate their enthusiasm and excitement about their participation. The fact that they were also laughing during the interviews indicated to the researcher that they felt safe and free to share all they know and believe in.
- The participants used nonverbal communication in the form of nodding their heads in agreement or shaking it if they did not agree with certain things said during the interviews. The researcher reflected on these nonverbal gestures as an indication that all the participants were listening intently, paying attention to what others were saying and pondering on their own ideas or perceptions

on issues that were forthcoming. This was especially noticeable during the focus group interviews. From some of the answers given by the educators and the way they presented their points, researcher felt as if the LO educators and the subject itself are both being undermined by the school management. Similarly, it felt to the researcher as if the lack of support from the district health managers to nurses who walked the extra mile to be part of the HIV school-based and AIDS prevention programme, was on a low priority level for the school health services. 3. Exiting the interviews: All The researcher reflected on this. participants were excited and She finally associated it with the were asking a lot of questions fact that the educators were really outside the interview in relation very interested to know more to the school-based HIV and about HIV and AIDS and how to AIDS prevention programme. handle it for their own benefits as well as for that of the learners under their care. The research assistant as well The researcher's as well as the was moved by especially the research assistant's experience educators' keen interest to with the educators left both know more about HIV and individuals with a lot of deep AIDS and policies on HIV and thoughts; a lot of thinking in both AIDS in schools. on how much needs to be done for

educators to be able to handle the
subject at school. As well as the
need for more research on the
school-based HIV and AIDS
prevention.

4.4 CONCLUSION

In this chapter findings were presented, interpreted and supported by verbatim quotes from the participants. The answers to the research questions were answered in line with the findings of the FGIs and individual interviews. Three major themes on the roles, challenges and suggestions were identified from the data, 11 categories and 35 subcategories were identified as well to substantiate each theme. The categories and subcategories under each of the three themes were analysed and interpreted. Verbatim quotes written in italics were used to interpret and support the findings. The roles and challenges of the role players in the implementation of the school-based HIV and AIDS prevention programme were explored and suggestions were made despite the deep contradicting discussions in relation to the challenges. The next chapter focuses on the discussion of the findings and literature control.

CHAPTER 5

DISCUSSION OF FINDINGS AND LITERATURE CONTROL

5.1 INTRODUCTION

This chapter is dedicated to the presentation and discussions of the findings of Phase I, the empirical phase, of the study. The discussions are controlled with literature. The findings were derived from the analysis of the findings of the data collected from the empirical phase of the study. Phase 1 was carried out to inform the drafting of guidelines in Phase 2 on the implementation of the school-based HIV and AIDS prevention programme in Bushbuckridge, Mpumalanga.

The discussions of the findings provided a deeper understanding of the experiences of the participants while the literature control done afterwards was conducted to confirm the findings. In some cases the discussions were supported by quotes from the individual and/or focus group interviews.

The roles, challenges and suggestions/needs of the local role players (nurses, educators and NGOs) in the implementation of the school-based HIV and AIDS prevention programmes as required by the Integrated School Health Policy (ISPH) were explored. The exploration resulted in the development of categories and subcategories that built knowledge and understanding of the topic under study.

5.2 DISCUSSION OF FINDINGS WITH LITERATURE CONTROL

The researcher conducted focus group interviews and semi-structured individual interviews with the nurses who had experience of the implementation of the school-based HIV and AIDS prevention programme. The discussions are considered to be personified knowledge and experiences of the participants. The constructivist perspective assisted the researcher to be able to understand, describe and interpret the roles and challenges experienced by the local role players to implement the HIV and AIDS prevention programme in high school settings. (Refer to Table 4.1

in Chapter 4 for more information on the identified themes, category and subcategories of the focus group interviews and semi-structured individual interviews).

Below, the three major themes corresponding with the objectives of the study which were identified and acknowledged during the data analysis are listed.

- The roles and responsibilities of role players in the school-based HIV and AIDS prevention programme.
- Challenges with regard to the implementation of the school-based HIV and AIDS prevention programme.
- Suggestions/needs for the effective implementation of the school-based HIV and AIDS prevention programme.

5.2.1 ROLES AND RESPONSIBILITIES OF ROLE PLAYERS IN THE SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMME

The roles of the various role players were explored and described. These roles included:

- providing HIV and AIDS health services;
- giving HIV and AIDS education;
- ensuring collaboration (referral system) between role players/services;
- monitoring and evaluation of the programme: educators' and nurses' views of the programme; and
- monitoring and evaluation concerning the parents' roles and responses towards the HIV and AIDS programme.

The participants in the study emphasised that they have important roles to play in the prevention of HIV and AIDS in schools. They declared that in spite of working in different health and education sectors, they all shared a common goal when it came to HIV and AIDS prevention, namely to successfully implement the HIV and AIDS prevention programme in school settings. Although all the participants acknowledged and reiterated their commitment to their varied roles in the implementation of the programme, in the opinion of the educators, the nurses together with the NGOs were the main drivers of the programme implementation. They based the justification of their notion on their assured belief that nurses have knowledge of all health-related issues.

The roles of role players as identified by the participants in the current study are in line with the NDoH and DBE (2012:12) package of health services which should be provided as a minimum in

all schools. According to this policy, the services to be provided are: health education and promotion; learner assessment and screening; provision of on-site services; follow-up and referral; coordination and partnership; community participation; learner participation; and consent and assent. The ISHP thus provides guidance on the type of services to be rendered by various role players and it additionally spells out in which institutions these services must be rendered. The implication of the prescription of services as well as the institutions by the policy is to confirm and cement the efficiency and effectiveness of the services. Hence, the service providers must have the necessary skills and knowledge.

The provision of HIV and AIDS education was identified as one of the roles in the current study. Without the necessary skills, knowledge and the right attitude –meaning having an interest in HIV and AIDS as disease – the role players will not be able to give accurate and effective education. The role of HIV and AIDS educators require the role players to acquire all the knowledge they need to meet the goals of the programme. This is a shared responsibility between each role player and the organisation (Borawski, Tufts, Trapl, Hayman, Yoder and Lovegreen 2015:8; Hoseinpour, Moghadan, Saeidi, Khademi and Khodaee 2015:1163, 1165).

One of the aims of the ISHP is to ensure close collaboration between all role players from the Departments of Health (DoH), Department of Basic Education(DBE) and Social Development (DSD) (NDoH and DBE 2012:6). As one of the roles identified by the participants, collaboration will eventually function/operate in accordance with the aims and commitments of the ISHP. The role players are expected to maintain a relationship that will foster continuity and sustain the accomplished success of the school-based HIV and AIDS prevention programme. An effective referral system of the services could yield significant results to the programme as could the monitoring and evaluation of the services rendered by the role players to inform policy makers of the impact of the programme.

5.2.1.1 Category 1: HIV and AIDS health services

The findings of this study revealed that the nurses' role is to provide HIV and AIDS health services for the learners. All the interview participants indicated that it was the nurses' role to provide HIV and AIDS health services to the learners and educators. It was further indicated that these health services had to be provided in the form of a youth-friendly clinic and clinic visits.

For the HIV and AIDS health service to be effectively provided, the individual should be the first point of departure in the programme implementation. In this study, the individual was represented

by the various role players: the learners, the educators, the nurses and the NGOs. According to Mulaudzi and Peu (2014:5), the nurse is said to be the liaison person between the various role players, the community, the organisation and the public policy makers. They further alluded that the nurses' roles have stretched from health education in schools to the provision of integrated holistic healthcare services which include physical, spiritual, psychological and educational, facilitative, administrative and socioeconomic dimensions. The outlined roles of the nurses require them to have the knowledge and skills to be able to provide effective services and the belief in their ability to succeed and accomplish the task. Their sense of self-efficacy will play a major role in how they will approach the goals, tasks and challenges they have to face in the provision of these services.

Youth-friendly services(YFS)

From almost all the participants interviewed, the common finding was that nurses should provide youth-friendly services (YFS) for the benefit of both the learners and the educators. The YFS was adopted into a national policy by South Africa in 2006 (Schiver, Meagley, Norris, Geary and Stein 2014:2)' which ultimately means the YFS as a service has guidelines stipulated to its functioning that should be followed by the implementers. Geary, et al (2014:1) describes sexual reproductive health (SRH) services as a key strategy for improving young people's health. However, what is important to bear in mind is that the culture, values and morals of the community will determine the success of the service. If the culture and the values work against the services of the YFS, the service will not be effective or yield the expected goal of the ISHP.

The findings of the current study delineate the accessibility of the YFS as well as the response of the learners towards the programme. The services were found to be accessible (thus obtainable), acceptable (young people were willing to obtain the health services available), appropriate (the right and needed health services) to the learners during the week as well as over weekends. According to the participants in the current study (Nurses, NGOs and educators) learners were in general happy and satisfied and mostly willing to attend the youth-friendly clinic. This was a positive finding because various researchers provide evidence that adolescents tend to avoid mentioning or referring to SRH services when visiting PHC clinics. Bana, Bhat, Godlwana, Libazi, Maholwana, Marafungana, et al (2010:157) investigated contraceptive utilisation among 150 senior learners (Grades 11 and 12) in three schools in the Mhlakulo region in the Eastern Cape, South Africa. The finding was that by far the majority admitted they were 'too shy' to buy condoms. This finding reaffirmed Abrahams' stance in 2009 that learners are inherently shy and will not openly obtain condoms (Abraham (2009) cited by Bana, et al 2010:157). In a study conducted by

Ramathuba, Khoza and Netshikweta (2012:6) it was found that adolescents did not utilise healthcare services because they experienced the healthcare workers as were of the opinion that, because they were still teenagers, the participants were too young to engage in sexual intercourse. The adolescent participants added it was their perception that for this reason the nurses' attitudes were unfriendly. Another reason why they did not make use of the services was the fact that they as adolescents were not culturally permitted to utilise the services.

The current study suggests that there is an increase in the implementation of youth-friendly services. This suggestion contradicts the findings of Beksinska, Pillay, Milford and Smit's (2014) report in 2011 suggesting that interviews held in eight health centres in Agincourt, Bushbuckridge found the youth friendly services were lacking in overall and falling below the national estimates. Reiterating the WHO's (2012b:7) requirements that for health services to be considered adolescent friendly, it should be accessible, acceptable, equitable, appropriate and effective, the services in the current study were found to differ from these specifications – it was found to be accessible, acceptable and maybe equitable since all groups of learners benefitted from the service. The current study suggests similar perceptions as well as the findings of Ambresin, Bennett, Paton, Sanci and Sawyer (2013:680) which yielded that eight domains stood out as central to young people's experiences of adolescent-friendly care. The latter findings fit remarkable well with the WHO framework of adolescent-friendly healthcare services.

However, the appropriateness and effectiveness of the delivery of YFS in the current study was questionable. According to Inspire Provide (IPPF Inspire) (2012:4), youth-friendly service delivery is about providing services based on a comprehensive understanding of what young people in a society *want;* not what the *providers believe they need*. IPPF Inspire (2012:4) asserts services should offer a wide range of sexual and reproductive health services relevant to adolescents' unique needs. The organisation emphasises that these services should include sexual and reproductive health counselling, contraceptives counselling and provision(including emergency contraceptives), STIs and HIV prevention, counselling and testing, treatment and care, prenatal and post-partum care, sexual abuse counselling, relationship counselling, and safe abortion and abortion-related services (DoH 2016:9).

The current study participants' assertion had similar descriptions when compared with those of the WHO (2012b:7) and the Ministry of Community Development, Mother and Child Health (MCDMCH) Republic of Zambia (2013:2) on adolescent-friendly health services (ADFHS). These bodies describe ADFHS as a combination of high quality services that are relevant, accessible, attractive,

affordable, appropriate and acceptable to the adolescents and young people. The MCDMCH Republic of Zambia (2013:2) emphasises that the services must be provided in line with the minimum healthcare package and must be aimed at increasing acceptability and utilisation by young people. In Zambia the services offered are classified into the Basic Essential Health package (BEH) and the Comprehensive Essential Health package (CEH). The BEH package service comprises physical and mental development, HIV/AIDS/STIs, pregnancy prevention and care, post abortion care, family planning, antenatal, post-natal, substance abuse, and national problems. The CEH consists of all services in the BEH package as well as CD4 count/ART, cervical and breast cancer screening, male circumcision, FP long term, drug and alcohol abuse, comprehensive abortion care (CAC),and ultrasound and general X-ray (MCDMCH Republic of Zambia 2013:2).

The BEH and CEH services described above differ substantially from the YFS described in the current study. Services rendered at the youth-friendly clinics in Bushbuckridge are not as broad as the aforementioned; it ranges from consultation for minor ailments, contraception, and HIV Counselling and Testing (HCT) to health education on HIV and AIDS. Ramathuba, et al (2013:6), who did a study in Limpopo on the knowledge, attitudes and practice of girls in secondary schools towards contraceptives, maintain that adolescent-friendly reproductive healthcare services must be available, accessible and comprehensive. These authors emphasise that adolescent-friendly services need to empower girls in secondary schools to develop into mature and responsible adult women.

In South Africa, as affirmed by Beksinska, et al (2014), the 2012 Integrated School Health Policy (ISHP) is accepted as the current guiding policy for sexual and reproductive health (SRH) initiatives aimed at the youth. It is stated in the policy that all learners in secondary schools must receive SRH counselling, particularly risk behaviour counselling. "Dual method contraception, HIV counselling and testing (HCT) and STI screening services are to be provided for sexually active learners by an onsite site nurse or via referral to a healthcare facility offering the service". The National Adolescent and Youth Health Policy (AYHP) 2017 aims to promote the health and wellbeing of young people, aged 10-24 years (DOH 2017:1). The AYHP 2017 predominately focused on equitable distribution of health resources and the expansion of service delivery to improve the health of the youth. The findings of the current study are in line with the interventions of objective 2 of the AYHP 2017. The intervention suggest the implementation of adolescent and youth-friendly clinic spaces aiming to meet the practical and psychosocial requirements of the target population, "including operating hours that accommodate learners' timetables, that uphold privacy, and that employ non-judgemental staff" (DOH 2017:7).

A disconcerting finding in the current study was that not one of the participants interviewed had ever seen or read the ISHP – although a few had heard about it. The finding raises questions about how exactly do the role players render SRH and what directives or specifications they are following. Moreover, how informed are the relevant stakeholders on the promulgation of new policies and how do such new policies affect their functioning? It seems at present as if decisions made by policy makers and the information they have at their disposal do not reach those at service delivery level; in other words a communication gap exists between top level health and education decision makers and the implementers of the decisions at grass-roots level. This non-existence of top-down information sharing may negatively influence the rendering of urgently needed and critical SRH services to South Africa's youth.

The positive findings of the study corroborated that in general most of the clients' rights to information, access, choice, safety, privacy, confidentiality, dignity, comfort and continuity of service are met. At the same time, concerns exist about the service provider's needs as stated by IPPF Inspire (2012:4). The findings implied service provider's needs are rarely met and/or attended to. Having training sessions, staying informed, being fortunate to rely on a good infrastructure with sufficient and the right supplies, receiving guidance, back-up, encouragement, feedback and being respected and allowing one to state one's opinion openly and freely remain challenging issues. The researcher therefore proposes it is wrong to assume the current programme is 'youth-friendly' because its 'youth-friendliness' is, in fact, out-dated due to the aforementioned gaps in the services offered.

Clinic visits

Various statements from the participants attested they viewed clinic visits as an ideal opportunity for learners to access all-inclusive HIV and AIDS health services provided at the healthcare facility. These visits may be voluntary or referrals. However, it was also found that learners' main reason for clinic visits was for help with issues related to health promotion, prevention of diseases as well as curative services.

The participants voiced that clinic visits by the learners would be a way forward to achieve success with the programme. Essentially, it would combat the constant shortage of nurses in the clinics. Learners visiting the clinic would ease the burden on nurses who have to leave their stations and physically visit schools for health education or the provision of other types of health services. The participants' general argument was that nurses, learners and educators would all benefit more from

clinic visits than from nurses visiting schools. In the clinics nurses have the freedom to educate and advise the learners in all areas of sexuality, STIs, HIV and AIDS, family planning as well as in all other areas included in the Youth Reproductive Health Services and the ISHP programme. In schools, nurses and NGOs are expected to stay within the prescripts of the school's policy guidelines if they visit the schools to educate learners on SRH services. The current guidelines limit role players to guide learners on abstinence only; condoms or any other methods to prevent the spread of HIV and AIDS as well as other STIs may not be mentioned at schools. In support of the current study findings, Ali, Farron, Ouedraogo, Mahaini, Miller and Kabra (2018:3) emphasised that "condoms are one of the major prevention techniques for two pressing issues in SRH: family planning and HIV/AIDS prevention". For nurses and NGOs this is a frustrating situation because in their view the prescript of the public policy of the school may hinder the effective implementation of programmes aimed at offering a wider range of SRH services to learners. The prescription ultimately defines the importance of policy to the success of any health promotion and prevention programme (Chandra-Mouli, Plesons, Hadi, Baig and Lang 2018:2).

The nurses stated as role players, nurses have the experience, knowledge, ability and the desire to give appropriate and relevant health education and advice to the learners during clinic visits; more specifically on dual methods for the prevention of the spread of STIs, HIV and AIDS and pregnancy. According to Odo, Samuel, Nwagu, Nnamani and Atama (2018:2) there is an increase in the rate of sexual and reproductive health (SRH) issues among young people in the sub-Saharan Africa. The increase suggests a need for adequate attention towards adolescents' sexual and reproductive health. When learners visit a clinic, the nurse can connect to them on their level and educate them on preventative measures. Having the freedom to educate learners on SRH issues that are unique to adolescents will bring a sense of achievement to nurses as they will feel they are fulfilling their purpose to decrease the spread of HIV and AIDS. However, this sense of achieving or doing something positive is not experienced when nurses have to educate learners in the school setting. Following the set school guidelines prevents nurses and NGOs to provide meaningful information and appropriate interventions to the learners.

As community members and health professionals, the nurse participants were aware of the risky sexual behaviours and lifestyles the learners are exposed to and they also knew the learners engaged in unsafe sexual practices. Nurses knew this because learners visited the clinics for pregnancy-related problems and treatments for sexually transmitted infections. Inyang and Inyang (2013:55) confirm in Nigeria the youth is vulnerable to HIV, the birth rate among teenage girls is high and the prevalence rate of STIs among adolescents in the country is rising significantly. There was tremendous support among the current study participants for the learners to visit the clinic

because it would bridge the gap between school-based theoretical training and actual skills development training as informed by Mmbaga, Kajula, Aaro, Kilonzo, Wubs, Eggers, de Vries and Kaaya (2017:8-9).

In support of the current study findings, Omage and Omage (2013:313) found that sex education that focuses on abstinence is based on the general belief that it encourages young people not to have sex until marriage. They further point out their findings indicated that encouraging abstinence is the best way to fight against and reduce HIV and AIDS infection among the younger generation. But, this approach limits AIDS educators to inform and educate young people on the alternative ways and means available which they can access to protect themselves from HIV infection if and when they do choose to have sex. It is thus vital for the prevention of HIV that schools provide comprehensive sex education which informs learners about the importance of condom use, dual protection as well as delaying sexual initiation. This has been further supported by Ali, et al (2018:3) by identifying evaluation and improving adolescent health interventions in and out of schools to include; the promotion and utilization of comprehensive sexual education and the human rights based approach for students and youth in general as priority number four for the most pressing and prioritized aspects of sexual and reproductive health to be addressed in the near future.

The real life situation of today's youth and the findings of the current study directly contradict the policy guidelines for nurses at schools with regard to SRH information given to the youth. Three of the participants in this study indicated that they live and interact with the learners every day because both they and the learners are part of the same community. Their observations were that the learners' lifestyles outside of school were risky and bordered on the promiscuous. Having first-hand knowledge of the learners' unsafe sexual behaviours these participants were in the position to insist teaching abstinence was not enough; the learners needed comprehensive primary healthcare services, including education about HIV and AIDS, STIs, prevention of teenage pregnancy as well as drug and alcohol abuse (which is often the leading cause for the youths' initiation into sexual activities) (Malone 2011; Weed and Ericksen 2017:4)

In further support of the contradicting findings of the current study versus teaching only abstinence, an announcement was made by the KwaZulu-Natal Department of Education that it would start providing condoms at schools in the province in 2016 The announcement was met with great resistance from religious leaders. In February 2016 Cardinal Wilfred Napier, head of the Roman Catholic Church in South Africa, announced that condoms would not be distributed at Catholic schools. Napier told the Sunday Times that the province's plans were 'short-sighted' and 'immoral'.

His objections appeared to be based on the belief that providing condoms would increase sexual activity among young people. He was quoted as saying, "Once something is distributed by people in authority, children take it as an okay." (NSP Review, 2013:19; the South African Catholic Bishops' Conference (SACBC) 2013: February 25). As a result, what has become known as 'the Napier Objection' can make it difficult for educators, whose religious beliefs support the idea that the provision of condoms increases sexual activity among young people, to continue teaching the HIV and AIDs prevention programmes in schools (Banda and Christopher 2015:246-7). A further concern for Catholic parents and leaders is that the Catholic youth may start resisting abstinence and become sexually active because of having access to condoms which make sex 'safe'. The strength of many parents' and adults' religious convictions and the moral teachings of the church is one example of how cultural and traditional norms, moral and ethical perceptions, and societal attitudes and beliefs can continue to shape general assumptions about gender, sexuality, teenagers and parenthood. Stakeholders' reaction to making condoms available in schools may negatively affect the impact of the school-based HIV and AIDS prevention programme.

Spotlight 2013 June 7 informs that evidence clearly shows that providing condoms prevents HIV infections and unwanted pregnancies consequently disputing the opinions/ ideas that distributing condoms in schools would lead to earlier or more risky sex as there is no scientific evidence to support it. Shisana, Rehle, Simbayi, Zuma, Jooste, Zungu, et al (2014) as quoted by Mkhabela and Peu (2016:317) further support and put emphasis on correct and consistent use of condoms as an integral part of the strategies in place to prevent HIV infection. In the view of Sani, Abraham, Denford and Ball (2016:23) school-based sexual health education may be an effective strategy to promote condom use. This gives more significance to the fact that nurses and educators in the implementation of the school-based HIV and AIDs prevention programme have to teach and counsel learners on the use of condoms.

In Nigeria the concept of sex cannot be discussed openly because it is a clear reality that the young people are sexually active (Inyang and Inyang 2013:56). According to Ajaegbu (2015:1), the taboo on sex-related discussions may be related to the traditional norms, culture and religious beliefs of the Nigerians. It is therefore decidedly apparent that policy, cultural and religious practices and beliefs may negatively impact the HIV and AIDS prevention programmes among the youth. These assertions and findings are in agreement with the findings of the current study.

Despite the fact that clinic visit may yield positive results on the side of the nurses, the learners may not attend the clinic as often as they are supposed to for reasons ranging from the negative

attitude of the nurses at the clinic to all other inconveniences that may be related to making a trip to the clinic. According to Frans (2013:13), many health professionals at clinics are not willing to provide condoms to young people and discriminate against those engaging in sexual activity and who require sexual-related health services. This attitude of the nurses hampers young peoples' decision, and even desire, to practice safe sex. Health professionals need to be trained to not discriminate against young people seeking access to sexual health services. The translation of comprehensive sexuality education into access to HIV and sexual and reproductive health services is the way to ensure its effectiveness. In other words, the comprehensive sexuality education opened a way for accessing and provision of reproductive health services, including HIV and sexual services. The systematic implementation of behaviour and social change communication and demand generation that has not taken place as a gap (UNAIDS 2016:70, 74).

Screening and health education (to learners and educators)

Screening and health education by nurses to the learners and educators was mentioned by participants as another service to be offered in a bid to implement the school-based HIV and AIDS prevention programme.

Stellenbosch University (2017:38) advocate for offering health screenings as a guideline to implementing a community based HIV and AIDS prevention programme. It is said the health screening assist the community members to be familiar with the type of service to be provided. Avert (2017:1) as well supports blood screening for HIV and AIDS for students in the implementation of biomedical interventions to reduce the spread of HIV and AIDS. As found in the current study, CDC (2014:2) support educating learners about HIV and other sexual transmitted infections as the knowledge may increase the learners' likelihood to be screened (tested) for HIV and other STIs. Participants in the current study indicated they screen the learners and educators. In the process of screening them, they get an opportunity to educate them.

Public Health England (2018:2) describes screening as a process of identifying healthy people who may have an increased chance of a disease or condition. Screening aims at reducing the chance of developing serious conditions and improve quality of life through early detection. This is also evident in the findings of the current study as learners and educators who are healthy are being screened by nurses. The screening is mostly done for HIV, STIs as well as TB through counselling, testing and treating approach.

It is thus very important to provide opportunities for both the learners to benefit by screening them.

5.2.1.2 Category 2: HIV and AIDS education

The second role that was identified by the participants in the study was to render HIV and AIDS education. All the participants in the study mentioned this as one of their major roles in the implementation of the school-based HIV and AIDS prevention programme. This finding is supported by Tauken and Ferreira (2016:5) who emphasise that the need for HIV and AIDS education was re-enforced. In this study HIV and AIDS education was described as education on HIV and AIDS given to learners by either the educators, clinic sisters, NGOs and/or any relevant stakeholder. The focus of this education is on the causes, methods of transmission, prevention and consequences of HIV and AIDS (AI-Iryani, Basaleem, AI-Sakkaf, Kok and Van den Borne 2013:57; Jones, Modeste, Marshak and Fox 2013:3; Menna, Ali and Worku 2015:6).

The participants in the study further discovered various ways were used by the different role players to reach the goals of HIV and AIDS education as prescribed in the subject Life Orientation (LO). Together with health education, life skills education, information sessions, counselling and school programme/campaigns, LO have been identified in the current study as the vehicles to provide supportive assistance with HIV and AIDS education.

Life Orientation (LO) and Health education

The Department of Basic Education (DBE) (2011:8) describes Life Orientation as being central to the holistic development of learners. It "addresses skills, knowledge and values for the personal, social, intellectual, emotional and physical growth of learners, and is concerned with the way in which these facets are interrelated. Life Orientation guides and prepares learners for life and its possibilities and equips them for meaningful and successful living in a rapidly changing and transforming society." The focus of LO is therefore obviously and appropriately viewed as the development of "self-in-society" (DBE 2011:8). "It promotes self-motivation and teaches learners how to apply goal-setting, problem-solving and decision making strategies. These serve to facilitate individual growth as part of an effort to create a democratic society, a productive economy and an improved quality of life" (DBE 2011:8). Learners are further guided to develop their full potential and are provided with opportunities to make informed choices regarding personal and environmental health, study opportunities and future careers. This description of LO was indeed similar to the utterances of the participants who advocated for acknowledging the importance of

teaching LO at schools. It was revealed that the learners were taught to develop their self-identity and self-worth which enabled them to meet and resolve some significant issues related to their everyday lives. The learners were also taught decision making with regard to sexual matters and HIV and AIDS.

In the new democratic South Africa, LO has been introduced as a compulsory curriculum subject that learners must complete from Grade R to Grade 12. The intention behind including the subject in the curriculum is to teach learners social and emotional skills as well as cognitive skills (Pan American Health Organisation (PAHO) 2001:6; Department of Education, 2002a; 2011). The subject was introduced in South Africa as a formal and compulsory school subject to educate learners on the issues of life skills and sexuality education and as a measure to reduce the new HIV infections among the youth (Fatoba 2013:3). Thus, the Life Orientation Programme (LOP) was introduced into the school curriculum as a preventive measure. Furthermore, Fatoba (2013: IV) mentions that HIV and AIDS prevention programmes as part of the LOP are designed to increase the knowledge and skills of youths in order to adopt and maintain good sexual behaviours that can virtually eliminate the risks of becoming infected with the HIV.

The above discussion concurs with the current study findings. The current participants explained LO as an excellent subject that was introduced to empower learners to make informed decisions with regard to HIV and AIDS. They further mentioned that the introduction of LO earlier in the lives of children is associated with learners having vast knowledge on HIV and AIDS and all issues related to HIV when they enter secondary school and eventually real life as adults. The knowledge they acquired at a young age will benefit them, for example, to make the right decision about their lifestyle and empower them to stay away from leading risky lifestyles. Sani, et al (2016:22-23) concur with the findings of the current study that early school-based intervention is likely to prove to be very effective in the fight against HIV and AIDS infection.

Other countries introduced school-based HIV and AIDS prevention programmes similar to that of South Africa. According to Pohan, Hinduan, Riyanti, Mukaromah, Mutiara, Tasya, et al (2011:526), in Indonesia a school-based HIV prevention curriculum similar to that of the Kenyan curriculum was developed to increase learners' knowledge and develop life-skills to prevent HIV infection through drug use and risky sexual behaviour. In Kenya, for example, HIV and AIDS education has been integrated in all school subjects. A weekly and compulsory lesson was introduced and educator training was offered to transmit the knowledge effectively to learners. The subject knowledge includes information on the different ways in which HIV transmission occurs, prevention, skills building, health and sexuality, issues on stigma and discrimination, and care for

people living with HIV and AIDS (Frans 2013:15). Although the Indonesian and Kenyan programmes are known as Life Orientation, the subject content is similar to that of South Africa's LO school programme.

In the current study it was found that the educators are the active role players in the teaching and imparting of knowledge to the learners. Some participants voiced that other role players should be involved in the teaching of LO, but specifically nurses when it comes to health-related matters as they have first-hand information and accurate knowledge about HIV and AIDS to teach the learners. In one of the facilities, nurses were actively involved in the teaching of health-related issues in the LO subject. These findings agree with that of Peu, Matoboge, Landzani, Wessels, Mostert-Wentzel and Seane (2015:6) who found that educators play a vital role in the health promotion of learners by preparing and presenting lessons on disease and health promotion. Peu, et al (2015: 6) support the view of Panday, Makiwane, Ranchod and Letsoalo (2009) and Independent Education (2016) that programmes that have an impact on improving the behaviour of the learners are curriculum-based programmes with educators and/or adults such as health workers leading the programmes.

It was further revealed that in Life Orientation, HIV and AIDS is not the only topic covered in the LO curriculum, but other issues are addressed as well. This assertion raises concerns on the amount of information taught to the learners. One may wonder if it is enough to meet the goals of the DoH and DBE. This finding may suggest that information given to learners on HIV and AIDS is limited to introductory information only. This contradicts the argument of Jansen (2015) who mentions that LO, if properly taught, may influence learners' attitudes and behaviour and the latter will ultimately receive information about HIV and AIDS and sexuality that they do not receive at home. In a study conducted by Sarma and Oleveras (2013:25) on implementing HIV and AIDS education, it was suggested that introducing HIV and AIDS topics in the curriculum was not sufficient to ensure that the programme implementation is efficient. In agreement, Inyang and Inyang (2013: 59) reports that educators in his study revealed that HIV and AIDS was not taught as a separate topic nor was it detailed enough. Instead, HIV and AIDS only came up in passing in the teaching of subjects such as biology and integrated sciences.

Reaffirming the above views and statements, a study conducted by Ma, Fisher and Kuller (2014:9) raises the same concerns with regard to details of the teachings. The authors found that students receive HIV and AIDS education, but there was no details regarding the quality, e.g. medically accurate, developmental appropriate, skills based, etc. of the education provided. Furthermore,

Lee and Talić (2012:1) reports that sexual health education programmes should be medically accurate regardless of the emphasis on content. The author asserts that the programmes should be consistent with scientific evidence, tailored to students' contexts, and the needs and educational practices of communities. Moreover, effective classroom instructional methods should be used. In spite of the various assertions on sexual health education, Mkumbo (2012:157) discovered that educators supported the inclusion of a wide range of sexuality education topics in the school curriculum. This implies that the educators do not view sexuality education as an important strategy for protecting young people from HIV and AIDS and other sexual health problems only, but as an important strategy for promoting healthy adolescent sexual development.

In the light of the various concerns raised by Sarma and Oleveras (2013:25), Inyang and Inyang (2013:59), Ma, et al (2013:9), Lee and Talić (2012:1) and Mkumbo (2012:157), the current researcher reviewed one of the LO textbooks to check the content related to reproductive health issues, HIV and AIDS as well as other related modules. The review was done of Grade 10, Grade 11 and Grade 12 textbooks.

The prescribed book review and learning outcomes of LO documented that LO Grade 10 was to be presented in term 3, weeks 1-5 and the content included development of the self in society; teenage pregnancy – possible causes; STIs including HIV and AIDS – gender inequality and untreated STI; behaviour that could lead to sexual intercourse and teenage pregnancy; life values – respect, abstinence and self-control; values and strategies to make sexuality and lifestyle choices; skills relating to sexuality and lifestyle choices – decision making and problem-solving; and facts about sexuality – abstinence and pregnancy. The content of the LO and some of the learning outcomes were found to be in line with the findings of the current study.

In Grade 11 LO content was one module that included; personal well-being; sexual behaviour and choices; risks of sexual behaviour; why do teens have sex and factors influencing sexual decisions and lastly in Grade 12 the related content was on unit 6 only which was on rights and responsibilities in relationships, it covered casual sexual relationships and sexual responsibility and risks. The review of the content for both the grade 10 and 11 LO was found to be similar to the content revealed by the participants. The amount of HIV and AIDS content was found to be minimal to make a real impact on the prevention of HIV and AIDS in high schools.

From this review, it was found that much of the reproductive health issues as well as HIV and AIDS were presented in Grade 10. In Grade 11 a few topics were covered, but in Grade 12 rights and responsibilities in relationships was the theme covered. However, sufficient attention must be paid

to the instruction from the Department of Education (2011:V) that the curriculum for LO was designed to reflect the issues that the young people of South Africa faces today and to help them to deal with the ever-changing society thy live in. The participants believed that as a subject, LO is an excellent programme meant to empower learners on HIV and AIDS and all other issues related to it. This current finding is in line with the intention of the DoE to introduce LO as an official school subject (Department of Education 2002a:9). Life Orientation primarily intends to teach learners skills, knowledge and values to make informed decisions in their lives.

According to the NSP Review May 2013 – June (NSP Review 2013:2), the NSP targets a 50% reduction in TB and HIV incidence and also seeks to halve the level of stigmatisation attached to these infections. South Africa can only achieve these goals if we have effective sex education in schools. Pohan, et al (2011:528) advises the purpose of school programmes is an important step in preventing the further spread of HIV; therefore, targeting groups at special risk and educating them on HIV and AIDS is a positive and decisive approach. The authors further suggest that learners must be provided with basic information on how HIV is transmitted and, more importantly, how can it be prevented. Although in the current study it was found that learners were provided with information on HIV and AIDS and the prevention thereof, the participants were not convinced that the information is adequate enough to have an impact on the reduction and spread of HIV and AIDS (Banda and Christopher 2015:241). Strengthening this concern is the participants' sharing of the fact that in LO other issues topics like career guidance and physical education were taught as well; consequently, the content on HIV and AIDS was minimised.

The participants endorsed school-based interventions that are sufficiently effective and provide positive results to reduce risky behaviours. Critically looking at the portions extracted from the LO curriculum content above, risky behaviours may be reduced significantly with the knowledge and the right attitudes after exposure to the aforementioned topics included in the curriculum. Contrary to this view, the content on HIV and AIDS seem to be minimal. One may argue that having adequate knowledge on personal wellbeing and sexual behaviour but less information on HIV and AIDS may not yield the anticipated results. Various studies support the supposition that more than just an introduction to a topic is needed for it to be successful. Thaver and Leao (2012:87) suggest that the content taught in South African schools focuses mainly on HIV and AIDS awareness and information. They further argued that although the content has positive effects on the learners, it does not meet the goals of the national policy. The goal of the national policy is to promote healthy behaviour and positive attitudes. It is common knowledge that any content taught is derived from a curriculum; in this instance, it is apparent this is not the case and it can therefore be assumed that the curriculum was not developed in line with the national policy. According to Mmbaga, et al

(2017:7) the education curriculum alone may not be effective to induce behavioural change. The authors' stance is that an intensive and multifaceted intervention programme that covers educator-centred classroom teaching, peer education and youth-friendly clinic visits may contribute to yield positive changes. This assertion clearly confirms the findings of the current study in relation to the roles of the various role players in the implementation of the HIV and AIDS prevention programme.

The methods of presenting content coupled with the associated attitudes of the presenter emerged as an issue of discussion in this study. The study revealed that the educators mostly used the traditional methods for teaching LO. In some instances, individual assignments were used encouraging learners to search for information and they were thus actively involved in their own learning process. The participants noted that pamphlets were also used as a mode of information transfer to the learners. Other educators went to the extent of requesting the nurses from the nearby clinic to visit the schools and teach the learners – this activity can be classified as making use of specialists on the subject of HIV and AIDS and relates to the study conducted by Mkumbo (2012:157) that indicated in spite of the fact that educators supported the teaching of sexual education and the inclusion of a number of other topics in the school curriculum, they found it uncomfortable because they were not capable to teach all the key sexual education topics.

In some instances, making use of the traditional methods of teaching to teach HIV and AIDS as a subject is related to inadequate knowledge and a lack of training. A study conducted by Sarma, Islam and Gazi (2013:7) confirms this assumption. They found that training had a great impact on teaching as it was perceived that among educators who had prior training in terms of teaching methods, used it when conducting HIV and AIDS classes. The participants noted that trained educators used group work and discussion methods in classes in accordance with the situation or environment of the classroom setting.

Further findings in the study included that the nurse participants viewed health education as one of their most important roles in LO. They asserted nurses have to educate the learners as well as the educators on any health-related topic as it is the nurses' field of speciality whereas teaching is the field of speciality of educators. The nurses believed they had the ability, capability, expertise and knowledge provide educators with accurate and up-to-date information. The nurse participants emphasised that health education and health talks formed a bigger part of teaching LO. The role of health education was extended to the health promoters, peer educators as well as the NGOs (Frantz 2015:5). Effective partnership with relevant organisations that can provide human resources to handle this role in this regard is of utmost importance.

In Nigeria a study by Inyang (2013:59) revealed there was no significant form of HIV and AIDS health education programme in the schools although the Trinity Care Foundation (2017) asserts that school health education should be integrated with all the activities in the curriculum. Health education should be part and parcel of the child's daily life. It must include the whole life of the child taking into consideration his or her relationship with the school community as well as the community outside the school. Inyang (2014:60) further backs the finding of the current study by recommending that qualified health educators with confidence be posted to secondary schools. This recommendation was made to ensure effective handling of issues in the health educators' speciality areas.

The importance of adequate and interactive training and teaching as well as encouraging role players to work with educators in the provision of school health services was emphasised by the current participants. Quite a few research studies were found that related to the interactive teaching method and peer teaching seems to be the most effective in teaching learners about HIV and AIDS (Sarma and Oliveras 2013:25; Menna, et al 2015:6). These authors agree that peer education was determined as the most effective and preferred method to use in HIV and AIDS teaching; this same method was determined as the best and most effective by the current study participants.

In the current study it was established that the LO educator had to have special qualities for the effective teaching of LO. Educators should be approachable to learners; educators' attitudes towards learners should be encouraging – learners must *want* to be in their classes and listen to their teachings. The educators must further be willing to take on various roles that may be entrusted to them by the learners. The dynamics between the educator and the learners are believed to be the biggest concern for the successful outcome of any programme or initiative (Brown 2013:11). Life Orientation educators need to be everything with an appropriate personality and life experience (Helleve, Flisher, Onya, Műkoma and Klepp 2011:19).

Life skills education

Just like Life Orientation, teaching life skills was a way to implement HIV and AIDS education by the various role players. The researcher believes one need to understand what Life skills as a subject is before attempting to understand life skills education. The World Health Organization (WHO) (2004:3, 8) defines life skills as "the abilities for adaptive and positive behaviour that enable individuals to deal successfully with the demands and challenges of everyday life". It represents

the psychosocial skills that determine positive behaviour and include reflective skills such as problem-solving and critical thinking as well as personal skills such as self-awareness and interpersonal skills. This definition is represented by the extracted content lifted in the discussion above.

According to UNICEF (2004 as cited by Roux 2013:40), life skills education programmes focusing on the prevention of HIV and AIDS proved to be more effective in changing behaviour if they included balanced knowledge, skills and attitudes with relation to HIV and AIDS as opposed to prevention programmes that emphasised information alone. In South Africa, the Department of Basic Education (DBE) has an HIV and AIDS life skills education programme as one of its health promotion programmes which is derived from the National Policy on HIV and AIDS for Learners and Educators in Schools (Department of Education 1999a:1-4).

In the current study, life skills was found to be incorporated in the LO programme as part of the content to be taught in the subject. In South Africa the HIV and AIDS Life skills Education Programme was initiated in 2000 and implemented in all public schools from Grades1 to 12. The main objectives were to integrate HIV and AIDS and relevant life skills into the school curriculum as a strategy to prevent and mitigate the spread of HIV infection, and to provide care and support for learners that are infected and affected by HIV and AIDS. One of the focal areas indicates that educators are trained to implement Sexual and Reproductive Health (SRH) and TB programmes for learners through the curriculum. The implication of the focal area may be that educators are expected to have accurate medical knowledge in SRH and TB issues, as they are expected to be already trained to implement the programmes. UNESCO (2012b) and the Republic of Kenya (2013) have similar objectives as well. Hence, their focal area is on the educator (educator) education programme aimed at developing communication skills, professional attitudes and values that equip educators (educators) with the knowledge and ability to identify and develop the educational needs of the child. However, the Kenyan counterpart does not specify nor single out SRH and TB programmes in their educator (educator) education programme.

According to the Department of Basic Education (2011:6), the subject Life skills is concerned with the social, personal, intellectual, emotional and physical growth of learners and with the way in which these are integrated. It is centred on the holistic development of the learners. Thus, the WHO (2004:8) denotes Life skills education as promoting the practice and reinforcement of psychological skills that contribute to personal and social development and the prevention of health and social problems as well as the protection of human rights. The findings in this study was that

the educators were responsible for teaching life skills in both schools, but in one of the schools a life skills educator who was stationed at the clinic was the expert who presented life skills education to the learners. A study by Salam, et al (2014:6) support using educators as life skills presenters because they have contact with the students on an on-going basis which contributes to the sustainability of the programme. However, educators require a lot of support from all the other team members to facilitate change and efficient programme implementation.

It was mentioned that one of the functions of the life skills educator was to mentor the learners. In other words, the life skills educator is expected to always help and advise learners in all matters related to HIV and AIDS (Glanz, Rimer and Viswanath 2008:xiv). Nabunya, Ssewamala, Mukasa, Byansi and Nattabi (2015:2) specify as well that mentoring programmes that connect adolescents with stable, caring and supportive non-parental adults or peers have been credited for providing a context in which adolescents can develop self-esteem and confidence in their abilities. A lesson learned in other studies is the need to engage schools differently in HIV prevention, including making use of personnel other than educators to deliver interventions. According to Harrison, Newell, Imrie and Hoddinott (2010:910), school mentors can be used to work in partnership with educators who request to teach sexuality education and HIV prevention. Banda and Christopher (2015:245) are in support of role models and mentorship to enhance the effectiveness of the prevention programme for the youth. This assertion supports and is in line with the findings mentioned above.

Meanwhile, topics covered during life skills were found to be HIV and AIDS, decision making and taking responsibility of own behaviours. Most of the educators in the current study were very comfortable teaching life skills to the learners. They appeared to have all the skills necessary to effectively pass the knowledge and transform the behaviour of the learners. This suggests different perceptions of the attitudes of the educators in the current study in comparison to earlier work done by Abobo and Orodho (2014:41) who found that most educators had a negative attitude towards the teaching of life skills education. However, this was related to the lack of pre-service training of the educators in Abobo and Orodho's study.

Additionally, in relation to the current study findings Pohan, et al (2011:528) caution that one should not only be paying attention to the content of the education or providing the learners with knowledge, but also on enhancing their skills – particularly their life skills. In the opinion of Smith and Harrison (2013:2), the curriculum places more emphasises on individual level self-efficacy and behaviour change in a quest to promote a delay in sexual debut and an increase in condom use. They further confirm that comprehensive information on the transmission and prevention of HIV

and other STIs, reproductive biology, contraception and pregnancy, domestic violence, sexual negotiation, physical activity and nutrition, emotional and mental health, drug and alcohol use as well as vocational preparation forms part of the content of the programme included in LO.

The observation of the researcher in the current study was that life skills was treated as a separate topic and not as part of LO as stipulated by the Department of Basic Education. The researcher suggests that during life skills sessions, developing the capacity of the learners to be able to solve problems, make decisions, strengthen their esteem and confidence and being more responsible should be highlighted. This may empower learners to feel and be more comfortable to adapt to the social issues they may be surrounded with in their daily living. According to Beksinska, et al (2014:676), in 2009 the HIV and AIDS Life Skill Education Programme was revised and an important amendment added was the establishment of school-based support teams (SBST) and school management teams (SMT) to aid the implementation of the programme. In the current study, the two high schools involved did not have any of these teams to enhance the implementation of the life skill education programme. It is possible that not having the assistance and support of the SBST and SMT contributed to the fact that no improvement in the implementation of the programme was noticed.

Curriculum reviews of both LO and life skills in South Africa are imperative to ensure the content of these learning areas are in line with the needs of the learners as concluded by the many researchers mentioned. On 23 March 2017, the DBE had a curriculum review meeting. Metro FM radio news reported that the issue of adding more sex education in the school curriculum was discussed in depth in the meeting as it was seen as key to the future of all South Africans (Metro FM News 2017).

Information sessions

HIV and AIDS education was found to be implemented through information sessions. In this study, information sessions were explained as opportunities afforded to nurses, educators and NGOs to share health information with the learners. The study revealed that sessions are organised by educators and nurses. The topics covered during these sessions centred on sex education and other general health-related matters, TB and communicable diseases. Objective no three of the National Adolescent and Youth Health Policy 2017aims at preventing, testing and treating for HIV and TB; as well as integrating chronic and communicable disease management with sexual and reproductive health services (DOH 2017:7). This is in line with the topics covered during the sessions.

The sessions are usually held with only one grade; in other words, mixing of grades is not favoured. Officials from the DoH are invited to the schools to talk to learners in a specific grade, addressing health issues appropriate for the grade and age level. Time for these sessions is allocated during campaigns and school health programme initiatives. In the case of the study by Frohlich, Mkhize, Dellar, Mahlase, Montangue and Karim (2014:688), information sessions are developed and catered for by the Centre for the AIDS Programme of Research in South Africa (CAPRISA) and the Sexual and Reproductive Health Pilot (CSRHP). It is described as a nurse-driven, short, in-school group session providing general information on HIV, STIs, customised HIV counselling and testing (CCT), sexuality, wellness, availability of the SRH services, and referral procedures. These information sessions are held once four times a year. Leaflets promoting the availability of the sexual health and reproductive health services (SRH) and other information are distributed to the schools and learners. Frohlich, et al (2014:690) support brief in-class information sessions similar to the one done in their pilot study because it facilitated the uptake of individual SRH and CCT counselling by students.

Counseling

In the current study counseling was identified as a dialogue with a purpose between a learner and a care provider. This dialogue is aimed at enabling the learner to cope with the demands of his or her lifestyle and be able to make personal decisions with regard to the prevention of HIV and AIDS. The majority of the nurse participants affirmed their role of counselling the learners; they affirmed that they counsel the learners at every opportunity they get. It was found that nurses do counselling with learners who come to the clinic and also test them for HIV. This role was confirmed by the educators as a role that they also perform. They confirmed that they refer most of the learners to the clinic for counselling, meaning they spearhead the process of referring learners they identify as in need of counselling services to the clinic. The educators admitted to the occasional counselling of learners, but only learners they identified as in dire need of counselling. They further attested to offering counselling services to learners in the school who are around friends and other learners who are affected by and/or infected with HIV and AIDS. Fountain and Fletcher (2004:478) define counselling as a "relationship between two people where one person attempts to assist the other to organize himself or herself better to attain a form of happiness by adjusting to a situation". Counselling may also be seen as the provision of professional assistance and guidance in resolving personal, psychological and health challenges. Counselling was identified as one of the roles for nurses, educators as well as NGOs in the implementation of the school-based HIV and AIDS programme.

Counselling is one of the roles that is expected from all the role players involved in the school-based HIV and AIDS prevention programme. In this instance the role of educators as counsellors was a challenge because not all of them were trained or possessed the skills to do counselling. Brown (2013) quoted by Diale (2016:88) suggests it is expected from LO educators to act as counsellors for life outside the classroom as well. Gama (2015:24) supports the suggestion by Brown (2013), in her study it is indicated that the LO teacher's role includes the role of being a teacher and be a counsellor. These roles are said to extend beyond the classroom. This expectation is often in areas beyond their professional education and qualification.

Nurses, on the other hand, are expected to be the major role players in counselling for HIV and AIDS programmes. Mkhabela and Peu (2016:317) refer to Dlamini's article in a newspaper on 6 April 2011 which makes reference to nurses who used to be fully responsible for providing HIV and AIDS education, counselling, testing and support in all health establishments. Contained in the article is the statement that with the increased number of people affected and infected with HIV and AIDS, additional human resources became the number one need to assist the nurses to manage the services. Hence, lay counsellors were introduced to manage the counselling role. In the school-based HIV and AIDS prevention programme, the use of lay counsellors may bring more relief to the already compromised role players. In essence, this requires collaboration with NGOs as most of the lay counsellors are NGOs (Dlamini 2016).

Contrary to the current study findings, Andersen, Nyamukapa, Gregson, Pufall, Mandanhire, Mutsikiwa, et al (2014:12) found learners stated they never attended any counselling with educators. They shared that they lacked opportunities for face to face dialogue with educators to share concerns and explain their situation(s). In the same study educators, on the other hand, raised their wish to support and provide counselling to the learners, but their own personal economic constraints and emotional challenges restricted their participation (Andersen, et al 2014:12). Consequently, the school environment itself may be a hindrance to the provision of counselling services to the learners. In this regard, Andersen, et al (2014:16) again observed one school appointed specific educators for counselling roles. This created an ideal opportunity for the development of a trusting confidential relationship between the learner and the educator. The school as an institution is on level 4 of the organisational level. This means the organisation has to ensure that it provides an enabling environment to yield success, efficiency and effectiveness for any health programme provided at the school. It is also vital to take note of the other sphere of the environment, not just the physical environment. In support of this assertion, Mulaudzi and Peu (2013:4) state the role of nurses in school health is that the school health nurse should be aware of the psychological and social aspects of the school environment. Further, Kulkarni and Vishwanath

(2013:223) maintain counselling sessions, HIV awareness lecturers, and group discussions as special programmes addressing challenges and reinforcing knowledge related to HIV and AIDS. The NSP Review (2013:1) called for a political commitment, resources and monitoring as from May to June 2013. The success of the HCT campaign may be a motivation as well for the call to use campaigns for health promotion services in schools.

School health programme and campaigns

The findings in the current study were that the district had school health programmes assigned to the school health services. In the study, the objectives and activities included in this programme were not indicated. It was mentioned that the nurses working in school health services are responsible for teaching learners and educators on issues related to HIV and AIDS as recommended by Mulaudzi and Peu (2014:5). The nurse participants in the current study were not aware of the functioning of the school health programmes as run by school health services. Further research to the running of the school health services revealed inadequate provision of the service. According to participants, the local clinic members did not have any valuable information about the service. This was a worrying finding as the school health services was said to be part of the comprehensive primary healthcare package which operates within Department of Basic Education (DBE) framework (Peu 2015:S218). This may be an indication that services are not done and therefore the school health programme assigned to this service may be lacking. The findings was in agreement with the findings in the study conducted by Peu (2015:S217) in which school health services were inconsistent and the visits by the school health nurses were occasional. The Trinity Care Foundation (2017) revealed that their school hardly ever had a well-defined school health programme. Teaching about health was done incidentally while teaching other subjects contained in the curriculum such as physiology, hygiene and biology. The participants further divulged that the approach to these subjects is academic and considered to be important for examination, but it has little value for actual health practices and attitudes.

According to the WHO (2017) these are strategic health programmes to prevent important health risks among the youth and to engage the education sector in efforts to change the educational, social, economic and political conditions that affect risk. The programmes seek to mobilise and strengthen health promotion and education activities as documented in the ISHP (NDoH and DBE 2012:6). The NDoH and DBE (2012:6) state school health programme provides an ultimate prospect for health education and intervention that aim to address the vast health and socioeconomic factors distressing school-going children in South Africa. The Trinity Care Foundation (2017) defines the school health programme as "the school procedures that contribute

to the maintenance and improvement of the health of pupils and school personnel including health services, healthful living and health education".

The findings of the current study were that nurses organise and run campaigns for learners. These campaigns are usually held during months when health awareness is highlighted. During the campaigns, they screen the learners and teach them about various health issues including HIV and AIDS and its prevention. In South Africa every year 1 December is National AIDS day. This is a campaign initiated by the South African Government to increase awareness on HIV and AIDS. Schools are usually involved and all health establishments use the media to meet the goals of this campaign. The NDoH (2010) stipulates the creation of awareness as one of the strategies for preventing HIV and AIDS; in South Africa it has helped more people to access HIV and AIDS counselling services. This stipulation dictates all role players should be involved in the running of campaigns as it is during campaigns that awareness is done. In their study Mkhabela and Peu (2016:317) cite the Minister of Health in South Africa, Dr Aaron Motsoaledi, launched the initiative to run HIV and AIDS counselling campaigns. It is during these campaigns that counselling and testing for HIV was encouraged. The authors further clarify the objective of campaigns is to promote a healthy lifestyle and to ensure health behaviour which contributes positively to sustain this lifestyle. It is in the same suggestion that these campaigns should be organised for learners and the relevant role players are encouraged to organise it. Omage and Omage (2013:311) mention that health organisations and nongovernmental organisations (NGOs) have taken it up as a matter of priority to constantly carryout public enlightenment campaigns on the issue even though there is a continuous rise in the number of cases of HIV and AIDS infected people. In further support of the current study findings, Omage and Omage (2013:321) suggest that school clubs should be established and seminars and campaigns on HIV and AIDS and sex education for students should be launched on a continuous basis. The following strategies were suggested by these authors to enhance school programmes and campaigns: assigning health personnel to go around schools monitoring the welfare of educators and students in the area of HIV and AIDS education and prevention; using media platforms such as the radio and television to air seminars with experts so students and guardians can see, hear and learn. If the school-based HIV and AIDS prevention programme is to be efficient and successful, all these strategies must be applied.

Finally, backing the findings of the current study, Laud (2016:5) quotes UNAIDS' (2012) assertion that programmes to prevent HIV infections among young people will be more effective if they include combination prevention approaches. These programmes should be youth-friendly and promote comprehensive services that include sexuality education, knowledge of HIV, access to sexual and reproductive health services, and discussions on harmful sexual norms and practises.

The comprehensive health services may be realised if the suggestions and policy directives as reiterated by the Advocate for Youth (2013:18) are implemented in school-based health centres/clinics (SBHCs). The SBHCs are usually located on school property or it is a mobile unit operated by a hospital or health department. SBHCs generally provide both primary care and mental health services to students. Sexual and reproductive health services on campus including but not limited to STD and HIV testing, pregnancy testing, pap and pelvic examinations, and contraceptives may be added in these clinics to meet the youth-friendly service requirements.

5.2.1.3 Category3: Collaboration (referral system) between role players and services

The participants explained that for them to effectively collaborate, they need to identify all the role players involved in the implementation of the school-based HIV and AIDS programme. They added that role clarification for each role player should be the next step. As a result they will all be able to collaborate and have a referral system between them. Rouse (2017) defines collaboration as "a joint effort of multiple individuals or work groups to accomplish a task or project". It involves collaboration among partners working together simultaneously and at the same time also communicating as they work. Collaboration is a working practice whereby individuals work together to achieve a common purpose. In the current study collaboration meant working jointly in cooperation with various role players on the implementation of the school-based HIV and AIDS prevention programme.

The CDC (2013a:20) states strategic partnerships and collaborations are crucial for implementing programme strategies and achieving outcomes. This allows for more efficient use of existing resources and the exchange of information between experts working in various areas of education, public health and other sectors. Furthermore, role players are encouraged to build and expand collaborative relationships with strategic partners to achieve greater programme impact and sustainability, maximise partnerships with other agencies and organisations and to expand working relationships between education agencies and national NGOs. Collaboration should not be limited to the healthcare teams, but should be extended to all relevant role players as stipulated in the ISHP (NDoH and DBE 2012:14). According to Peu (2015:S218), collaboration must also exist between school health and nurses. The researcher's stance is that collaboration in school health remains the cornerstone for better education as far as teaching and learning is concerned.

Salam, et al (2014:6) further suggests continuous involvement of former role players and facilitators in education and community development to enhance participation and collaboration of current diverse role players. Subsequently, the collaboration should not be limited to nurses,

educators and NGOs, but be extended to community members and parents as well. The Advocate for Youth (2013:8) advocates for and supports thoroughly ruminated policies for school-based sexual health education and access to services developed collaboratively with parents, educators, administrators, students and other community members. The above mentioned authors believe this type of collaboration can ensure that the policies reflect the needs of students and the values of the community. Ultimately, the collaboration with the identified stakeholders will yield a positive uptake of the programme. Frohlich, et al (2014:689) echoes similar assertions. They indicate in their study that community consultations and involvement is not only critical in the development of programmes, but in its implementation as well.

In the current study it was found that the educators are the key facilitators for the programme. The nurses and the NGOs were involved as support and supplementary structures in the implementation of the school-based HIV and AIDS prevention programme. This finding is in contradiction with the prescription of the ISHP. According to the NDoH and DBE (2012:20), the nurse is supposed to be the facilitator of the processes and activities as stated in the policy. In the study by Mulaudzi and Peu (2014:5) it is indicated that the nurse involved in the implementation of the programme must be competent, be able to assess, diagnose, plan, teach, promote, consult, evaluate, educate and collaborate with others. The authors further state the nurse must be able to build relationships with stakeholders, build trust with learners, parents, educators and many other different stakeholders. More importantly, the nurse must be able to network with other role players by being involved in school activities and be up to date with related knowledge. Additionally, the nurse must be able to use social media platforms such as Facebook, Skype, and Twitter to reach and break barriers between the involved role players.

Role players

The Integrated School Health Policy (2012) identifies a local role player as a person, group or organisation that has an interest or concern in a local programme. In this study the role players were people involved in the implementation of the school-based HIV and AIDS prevention programme. The participants identified health promoters, the doctors, primary healthcare (PHC) and HIV course trained nurses, educators, parents, preachers, psychologists, social workers, police officers and NGOs as role players. The importance of each of these role players and their roles in the implementation of the programme was revealed by the participants.

The significance of parents and pastors (church leaders) as role players in the implementation of the school-based HIV and AIDS prevention programme cannot be ignored. This assertion emerged from the belief that learners are community members who take part in all activities in the community; therefore it is necessary to include parents and preachers as role players. It was also found that the prevention of HIV and AIDS must start at home with the parents when the learners are healthy and continue through their times of sickness and visits to a doctor. This continuum of prevention and care was found to be an indicator for collaboration between the role players and within their professional roles to ensure that the learners have overall coverage. Frohlich, et al (2014:689) and Peu, et al (2015:7) reaffirm that successful collaboration between educators, parents, the DSD and DoH may yield positive results in combatting the causes and effects brought about by unhealthy reproductive health issues.

The study findings exposed the fact that all the role players should work within their specialties or professional roles. This was specified and emphasised as important because all the aspects of concerns related to the comprehensive healthcare of the learners will be covered. Together with the provision of the comprehensive healthcare package to the learners, each role player must be knowledgeable and comfortable in their roles. Borawski, et al (2015:2) cement this finding by asserting that school nurses have always been useful in enhancing health protective behaviour as well as providing one-on-one instruction and guidance to adolescents regarding their reproductive health. Reference to this finding was specifically in relation to the educators who are teaching LO.

Pohan, et al (2011:530) advocate for early involvement of other key stakeholders –particularly the involvement of religious and community leaders during the process may prove to be the key to the success of the HIV and AIDS prevention programme in schools. The issue of referring learners to other role players came out strongly as well in the study. In line with these findings, Andersen, et al (2012:6) found in their study that educators referred learners to available health and social resources by forming partnerships with and between children and families, and community volunteers and community organisations. However, the authors reiterate that there is a need to explore the boundary between schools and external organisations in order to strengthen supportive school environments (Andersen, et al 2012:8).

Omage and Omage (2013:312) also mention educators, counsellors and other stakeholders within the educational system as a confirmation of collaboration between and among the various role players. Similarly, Laud (2016:2) establishes that parents, peers, educators, service providers, community leaders, religious leaders and policymakers must be involved in meeting the health and developmental needs of the young people. He further associates this with how a young person relates to own parents, a positive school environment and spiritual beliefs. However, in the same study Laud (2016:10) confirms adults, educators, health workers, qualified counsellors, facilitators, young adult volunteers, and peer educators as role players are equally important.

So far, there has been little discussion about social workers as part of the role players to be involved in the programme. This is a gap that needs to be closed as there is a lot of social issues to be attended to in the implementation of the school-based HIV and AIDS prevention programme. Poverty has been mentioned by participants to be a challenge for many learners, and thus the services of a social worker cannot be ignored. Pohan, et al (2011:529) involved and sought the presence of community leaders, religious leaders, experts, professionals like physicians and psychologists, organisations concerned with adolescents, drugs and sexual reproductive health in the planning, development, implementation and evaluation of the curriculum. The findings of this study, however, imply the coordination of services of the suggested role players may be a challenge if no clear guidelines are set and followed.

Role fulfilment

From the study findings it was evident that educators played the most fulfiling role in the school-based HIV and AIDS prevention programme as they were found to be the primary educators of LO. As the programme was implemented in schools, the other role players felt like secondary role players as the first contact person for the programme was the educator. The nurse participants pronounced they would be grateful and feel fulfiled if they were able to adequately fulfil their role in providing health education to the learners. They further indicated that they also had a role to fulfil with regard to research on the area of school-based HIV and AIDS prevention programme. Admitting that they contributed very little in terms of doing research was a disappointing finding which should be paid attention to.

The roles to be fulfilled by the district health manager were put on the spot. The district health manager's roles revolve around administration, monitoring and evaluation, and support. The findings provided evidence that there was no adequate support from the district health manager and that, in fact, the impact or role of the district manager is significantly minimal. In any role that one has to play, role fulfilment comes with achieving an aim, objective, obligations or a goal; adequate knowledge; the availability of resources; and everything that will make the role player achieve the set purpose.

5.2.1.4 Category 4: Monitoring and evaluation: educators' and nurses' views on the programme

As analysed and interpreted in Chapter 4 (Category 4.3.1.4.) these views will be discussed as the short term effects and long term effects of the programme. The category involves the monitoring and evaluation of the programme. The participants felt it is important to monitor and evaluate the school-based HIV and AIDS programme. In support of monitoring and evaluation, Zimbabwe has

funded activities for monitoring and evaluation of HIV and AIDS programmes (Bhat, Kilmarx, Dube, Manenjie, Dube and Magureg 2016:4). These authors state AIDS Levy supports monitoring and evaluation projects conducted by the NAC in collaboration with the Ministry of health and child care (MOHCC). They explain the production of annual and quarterly monitoring and evaluation reports are funded from the AIDS Levy support funds. This confirms the importance of the monitoring and evaluation of programmes. In the current study monitoring and evaluation was found to be one of the roles for the role players and was designated as an important role.

In assessing the effectiveness of the school-based HIV and AIDS prevention programme, Laud (2016:6) discovered difficulties in obtaining clear evidence with regard to its effectiveness. Mufune (2015 cited in Laud 2016:6) implies that this may be due to the difficulty in measuring outcomes such as skills, vulnerability and HIV incidence. Educator refusal negotiation and condom use unfamiliarity in the schools were mentioned and the (WHO (2004) is cited in Laud 2016:6). In support of evaluation and review of the programme, Mason-Jones, Sinclair, Mathews, Kagee, Hilman and Lombard (2016:7) mention in their study that most evaluations of programmes are usually self-reports and usually prone to bias. They advocate for systematic reviews as they provide unique contributions to the field under review. Contrary to the findings of the current study, monitoring and evaluation of the programme was mentioned as a role for the role players. But, in practice there are minimal efforts in official monitoring and evaluating of the programme. Yet, it is an important role to identify gaps in the programme as well as avoiding duplication.

Short term effect of the programme

These are the effects that can be observed and expressed immediately by the educators, nurses and NGOs and after implementing the activities of the programme. This may also refer to the immediate changes in knowledge, attitudes and behaviour that may be observed by the role players after the implementation of the HIV and AIDS prevention programme in the schools. The study revealed that there is no formal evaluation of the programme by all the available role players and thus the effects were based on personal observations and feelings. Nonetheless, the findings in this subcategory produced results with both positive and negative effects.

Mixed emotions were observed by the participants from the recipients of the programme. Learners were found to be interested and liked the programme very much. This was associated with their interest in all sexual-related issues. The learners' interest in the programme was linked to their openness during discussions – to the extent of following up with the nurses in the clinic after health education at school. Trusting relationships between the educators, nurses, NGOs and the learners

improved drastically; some learners even shared confidential information about their families. However, the double standards perceived in the learners' reactions towards the lessons may be an indication of them applying double standards and pretending when interacting with the role players in the programme. Beksinska, et al (2014:677) and Frohlich, et al (2014:689) agree on a positive uptake of the CAPRISA mobile services.

The worrisome and undesirable findings were that some learners did not take the information seriously, but instead joked about it. Mogoane (2012:105) associates the laughing and disruption of classes when sex-related issues are discussed, with learners' negative attitudes. The author, however, acknowledges that they change their attitudes as they become more knowledgeable on issues relating to sex and HIV and AIDS. This has an effect on the efficiency of the programme as the outcomes will be negative because the necessary measures will not be noted, perceived and implemented by the learners.

The participants experienced mixed emotions from the learners. Some seemed satisfied and happy to receive the information while others were saddened and responded with tears. The crying was associated with the learners either being infected and/or affected by somebody close who was living with HIV and AIDS. It is essential for such learners to be identified and referred to receive counselling and appropriate care from relevant role players. Mogoane (2012:104) views the insensitivity demonstrated by some educators in such a situation as a challenge faced by learners during life skills training. The author writes some educators were found to be harsh to learners living with HIV. Although the learners may be able to talk to or confide in the educators about their challenges, the lack of confidence and formal skills may be a challenge on the educators' side to handle or advise the learners in distress (Campbell, Anderson, Mutsikiwa, Madanhire, Nyamukapa and Gregson 2016:15). In this case, the authors refer to formal skills as adequate knowledge about HIV and AIDS, knowing how to talk to children about sex, and having counselling skills.

Boredom was mentioned by learners who explained it was associated with receiving and listening to the same information over and over from various role players. However, this feeling of boredom may also be associated with educators' discomfort in using interactive teaching methods and discussing sensitive topics such as the learners' sexual behaviour in relation to adolescence (Laud 2016:8). Sarma, et al (2013:5) found with training, educators gathered the skills to explain sensitive issues related to HIV to their learners. According to their study findings, after training the educators were equipped with skills and knowledge to use interactive teaching methods. Empowering educators with these skills enable them to teach the subject content with confidence. Interactive

teaching methods ultimately reduce the boredom experienced by learners as they start to actively participate and listen during the lessons.

As indicated, in the current study there was no formal monitoring and evaluation of the programme done by the role players. This finding ultimately makes it difficult to measure the effects and impact of the school-based HIV and AIDS prevention programme on the learners in totality. In some cases where the impact of the programme has been assessed, direction as to where to go with the programme became possible. A study conducted by Ferreira do Val, et al (2013:700) found that students of today have very little knowledge of the concepts about HIV and AIDS today. Meanwhile, Laud (2016:6) states evidence is unclear on whether the school-based HIV and AIDS prevention programme meets the goals of the United Nations General Assembly Special Session on HIV and AIDS for young people (UNGASS 2001). The following are the goals for UNGASS: the provision of access for young people to information; teaching young people skills to avoid becoming infected with HIV; providing access to services; decreasing young people's vulnerability to infection; and decreasing the vulnerability of HIV among young people. In order for the short term effects of the programme to be clearly monitored and met, ensuring that the goals for UNGASS are met can be vital. Laud (2016:6) reported that school-based HIV and AIDS prevention programme were effective in changing the behaviours of young people towards sexual activity and thus, implementation of school-based HIV and AIDS prevention programme is to be promoted.

Long term effects on the programme

The researcher perceives long term effects as the effects or results achieved/measured a year or several years after the completion of the programme. In this study the effects or outcomes were measured while the programme was being run because the school-based HIV and AIDS prevention programme is on-going. The findings in this subcategory were that the long term effect of the programme has undesirable outcomes. It was found that learners still became pregnant even after so much effort was put in life skills by any educator that taught it. The pregnancies were associated with exposure to HIV and AIDS as pregnancy is more often a result of unprotected sex. The participants also mentioned new cases of HIV and AIDS were still prevalent among the youth which indeed further discredits the long term effects of the programme. The efficiency of the programme was also questionable according to the participants. No marked evidence of the efficiency of the programme was associated with negative long term effects. The current study findings were inconsistent with the findings of Sommart and Sota (2013:212) which show the sexual health programme was effective in enhancing sexual health knowledge, creating positive attitudes towards sexuality, and encouraging students to refuse to take sexual risks.

According to Laud (2016:2), although there is evidence of a global decline in the infection rate, the prevalence of HIV among the youth still continues to be high in developing countries. UNAIDS (2012b) as well, estimates a 27% decline in the HIV prevalence among the youth. Laud (2016:5) reflects the majority of newly infected youths are those who inject drugs, but very few of them have access to evidence-informed HIV prevention and treatment. Conversely, this may be an indication that there is a gap in the HIV and AIDS prevention programme for the youth in that there is uncertainty about the target groups for the services.

5.2.1.5 Category 5: Monitoring and evaluation: educators', nurses' and NGOs' views on the parents' roles and responses towards the HIV and AIDS programme

Parents' roles and responsibilities towards the programme is a vital aspect that needs attention because parents are regarded as the most important role players for the success of the programme. The participants agreed that parents have an important role to play in the raising of a responsible young woman or man. The participants viewed the parents as having almost the same roles as them (nurses, educators and members of NGOs), but mostly, they believed that teaching must start where the teenagers' roots are – at home and with their parents. Contrary to the participants' firm belief, it was found that parents send their adolescent and high-school children to the nurses in the clinics to be educated about sexuality, HIV and AIDS and any other issues the parents feel uncomfortable to address at home. To support the views of the role players in this regard, Peu, et al (2015:7) found that students supported by their parents were less likely to experience emotional challenges which may predispose them to engaging in unhealthy behaviours.

With regard to the parents' response to the programme, it was found that the majority accepted and liked the programme. It was also apparent that there were some parents who did not respond positively to the programme. Some parents believed that teaching and educating learners about sexuality as well as HIV and AIDS, challenged their children to be more inquisitive and wanting to experiment with everything learned. Therefore, equipping the parents with information about the content and presentation of the programme gave them insight into the goal thereof which made them understand better that the Integrated School Health Policy (ISHP) was an aid and not a hindrance. Enlightening the parents proved to be beneficial. It ultimately helped to change the attitude of the parents. A trusting relationship between the other role players and the parents developed through information sharing.

It was found in the current study that some parents were not comfortable talking to their children about HIV and AIDS or any other sexual issues. This finding was associated with the cultural and religious beliefs of the parents. The realisation of the clash between the perceived role of parents in the HIV and AIDS prevention programme and their cultural and/or religious beliefs may impact the programme negatively. Understanding the role of age-old traditions and beliefs among many African cultures is essential to understand why some parents are negative about the programme and perceive it as unacceptable and wrong. For example, talking about sexuality is taboo because the culture dictates that these topics are addressed by elders at a certain stage of life such as when a girl starts menstruating. Thaver and Leao (2012:88) assert that in South Africa it is a still a traditional belief in certain generations and households that sexual education belongs in private and not in public realms; therefore, public education of aspects of sexuality and reproductive health in schools is unacceptable. This stance of parents may be detrimental to the implementation of the HIV and AIDS prevention programme in schools as it may receive no or minimal support from the parents and community. In principle thus, children have to be nurtured at home first and as they grow up, be informed about sexuality as they become adolescents. It is therefore posited that SRH is one of the primary responsibilities of parents and how they approach it may have a lasting impact on their children's later behaviour and attitudes towards sexuality and lifestyle choices. Inyang and Inyang (2013:59) agree parents should be the first age-appropriate sexual health educators as they are the primary contacts of the children.

The sensitivity surrounding sexual talk is usually associated with the parents being uncomfortable to discuss the topic with their children. According to Thaver and Leao (2012:89), the youth does not only need lessons and guidance from educators, but also from their parents, spiritual leaders and peers. Bana, et al (2010:155) found that by far the majority (88%) of teenagers from a rural area in the Western Cape, "learned about STIs from health care workers/nurses/doctors/clinics, the media, educators, school (teachers, classmates or in the classroom) and friends" and the remaining 12% "reported having learned about these issues from their parents/guardian" (Bana, et al 2010:155). These statements confirm the participants' assumptions that parents can find communicating with teenage children difficult, embarrassing or going against their cultural tenets. The consequence being that learners learn from others (which may good if it is from a responsible adult like an educator, a nurse or religious leader or bad if it is from uninformed and promiscuous peers and friends). However, this does not take away the parental education role of the parent, but again parents were further observed to be inactive role players when it came to issues pertaining to sexuality.

The observation by the participants was that parents trusted nurses to teach their children as far as sexual information sharing, education or teaching is concerned. In some instances this is positive as many parents either lacks or have inadequate and incorrect sexual information which they impart to their children. Ultimately, monitoring and evaluating the impact of the parents' role in the programme may be difficult and possibly inaccurate. Studies done on the roles and responsibilities of parents on sexual education include that of Asampong, Oricafo, Bingenheimer and Ahiadeke (2013) indicating the expectation for parents is to provide supportive environments. The authors assert that the environment must be such that their adolescent children can have access to useful information, taking into account an understanding of the development of their sexuality so that they do not engage in untimely risky sexual behaviours. Asampong, et al (2013:9) compared parents from two different regions, Somanya and Adidome, in Nigeria. The results showed parents from both regions resorted to their individual personal efforts to prevent their adolescent children from engaging in sexual activities. In addition to their personal efforts, parents from the Adidome region also engaged the services of other people and institutions to help control their adolescents' sexual behaviours of which it proved to be effective.

Emphasising parental right and involvement, the Advocate for Youth (2013:12) concurs with other authors on the fact that parents and guardians are critical partners in education, especially sexual health education. Endorsing the critical roles of parents, they mention that in other states in USA, parents are typically notified when sexual health education will occur. The information includes the course material to be used as well as affording the parents the opportunity to review the curricula. These parents have authority to excuse their children from a portion of the education or the entire lesson without penalty. Parents have to give signed consent for their child's participation in sexual health education as explained by a participant.

The perceived minimal involvement of parents as viewed by the role players is an unfortunate and problematic issue which negatively influence the effectiveness of the programme. Demissie, Brener, MacManuse, Shanklin, Hawkins and Laura (2015:7) irrevocably state the involvement of parents in schools is undeniably linked to better student behaviour leading to positive uptake of the HIV and AIDS prevention programme.

5.2.2 THEME 2: CHALLENGES WITH SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMMES

The challenges related to the implementation of the school-based HIV and AIDS prevention programme were explored and described as experienced by the various role players. From this theme, departmental challenges, inadequate resources and personal barriers emerged as the broad and major challenges of the programme implementation. Sarma, et al (2013:2) found that implementing the HIV and AIDS education programme through the national curriculum a challenging task. These authors state the challenge revolved primarily around developing a cultural-sensitive curriculum and to ensure the readiness of educators to disseminate HIV and AIDS information to their learners.

5.2.2.1 Category 1: Departmental challenges

Departmental challenges experienced by the role players were mostly related to issues of the two departments responsible for the programme; the Department of Health and Department of Education. The study revealed that from both the DoH and DBE challenges were encountered which could have an impact on the implementation of the school-based HIV and AIDS programme. The two main challenges identified were insufficient departmental support for preventive services and Life Orientation is not perceived as a priority. Institutions and organisations play a vital role in the provision of any service by assuring an enabling environment for the success or failure of the programme. In this instance, the organisations' risk factors towards the effectiveness of the programme constituted of insufficient departmental support/time for preventive services and health and education departments disproving the prioritisation of Life Orientation as a school subject despite the fact that it is compulsory.

Insufficient departmental support and time for preventive services

Insufficient departmental support/time for preventive services refers to the unsatisfactory support participants said was received from the National Department of Health and the National Department of Education. The participants informed the concept 'support' encompassed sufficient available resources as well as making allowance for adequate time to render the HIV and AIDS preventative services at the schools. Substantiating the current study findings, Sarma, et al (2013:6) reveal that educators in their study verbalised that irrespective of their training status, class time, lack of support from the headmaster, and lack of teaching material, there were other practical obstacles they also had to deal with.

In this study it was found that there are no adequate support structures from the two departments on local, district and provincial levels. The local lack of support structures is mentioned by Francis and De Palma (2015:35) who suggest that school principals still maintain or stand by the idea that anyone can teach LO. However, MacEntee (2016: 91) agrees with the current study finding as he or she also found structural barriers in the educator education programme. Identified barriers such as the influence of mentor educators who may be less cooperative to the inclusion of alternative pedagogies or HIV topic integration may impede pre-service educators' ability to apply these methods directly for HIV and AIDS education.

Considering the role of the district manager, it was found to be more focused on patient care and there was minimal or no support in relation to prevention services. The prevention services rendered by the clinic and CHC nurses were limited to condom distribution. Time and staff allocation for services was found to be the most frustrating challenge. It was also indicated that there was not enough time or an adequate number of staff allocated for this programme and this put additional strain on the already compromised healthcare services.

• Health and education department: Life orientation not a priority

The findings regarding the health and education departments revealed that both the DoH and the DBE are not providing Life Orientation the attention that it needs as a programme. The nurse participants verbalised their belief that the NDoH does not know about this programme because if it did, the department would prioritise the programme and put systems in place to meet the goals of the programme. This finding contradicts the stipulation of the aims of the ISHP of which one aim is the commitment to close collaboration between all role players, with the National Department of Health (NDoH), Department of Basic Education (DBE) and the National Department of Social Development (DSD) jointly taking responsibility for ensuring that the ISHP reaches all learners in all schools (NDoH and DBE 2012:6). The commitment of the Integrated School Health Policy (ISHP) will ultimately not be met as the current study found minimal collaboration from the side of the NDoH, DBE and DSD.

On the other hand, the educator participants pronounced their dissatisfaction with the DBE in relation to LO as a subject. According to these participants, the subject is not prioritised at all. Prioritisation of a subject is observed by how the subject is managed. In one of the schools in this study, for example, the head of the department (HOD) of Life Orientation was also the HOD for English. The participants were upset about the situation where a particular member who had no adequate knowledge of the subject, but was expected to manage the running of the learning programme for the subject. The allocated time of the period on the roster as well contributed to

how unimportant the subject Life Orientation is viewed in schools. The subject was given less time than others, and periods had to be split for all learners in the classroom to do physical exercises as required by the LO curriculum.

Jansen (2015) reports that the Basic Education Department acknowledged in a meeting that educators who find sexuality education uncomfortable, squeezed school timetables and gaps into the curriculum content which means in Life Orientation periods, HIV and sexuality education classes were not adequately addressed. Van Der Kuil (2017) an article, published on 15 May 2017, reveals that the NCS allocated two hours per week for LO. One hour is for physical education and the other is for theory. The SA Basic Education Department NCS (2011:7) also supports the two hours per week time allocation. The fact that no official written examination on LO is expected in Grade 12 further decreases the value and importance of the subject. The IEB (2015:1) and Gauteng Province Education (2015:4) confirm that the assessment for LO is an internal assessment, a school-based assessment. Educators in the study conducted by Sarma and Oliveras (2013:24) also shared the time allocated for HIV and AIDS was insufficient. The Advocate for Youth (2013:15) also supports the issue of instructional minutes for HIV and AIDS teaching.

A recommendation was made by the Joint Committee on National Health Education Standards that learners in Grades Pre-K-2 receive a minimum of 40 hours and learners in Grades 3 to12 receive 80 hours of health instruction per academic year. A national survey conducted by the Centres for Disease Control and Preventions Division of Adolescent and School Health to assess school health policies and practices across the USA, found that a median total of 20, 30 and 40 hours of health education is provided for elementary, middle and high school learners respectively. Within these totals, only 3.1 hours in elementary, 6 hours in middle, and 8.1 hours in high school of instruction is devoted to HIV, pregnancy and STD prevention topics (Advocate for Youth 2013:15).

5.2.2.2 Category 2: Inadequate resources

It was found in this study that all resources needed pose challenges to the implementation of the school-based HIV and AIDS prevention programme. According to the participants, the organisation has an important role to play in any programme especially in providing the resources needed for the implementation of a programme. Peu (2015:S219) identifies limited resources, inconsistency in existing school health services rendering, inadequate HIV services, and poor collaboration between stakeholders as major barriers to the delivery of school health services. In the current study the inadequacy of the resources was classified as individual and organisational.

• Ineffective presentation skills of educators (e.g. lack of real life examples)

The current study revealed the participants lacked the appropriate skills to deal with the content of sex and sex education. It was also found that some of the educators were not comfortable at all presenting the subject which compromised the way in which the content was delivered. The lack of skills to and ways to deal with such content was associated with culture and tradition. Sarma, et al (2013:7) found that training enhanced the skills and abilities of educators to ensure that learners participated in classroom discussion. This ultimately requires all LO educators to continue developing their professional roles so that they are able to manage their professional learning and work tasks. This supports stance that these work tasks consist of the acquisition of new attitudes, beliefs and competencies. The competencies mentioned by this author may include essential and specific presentation skills which may increase the effectiveness of the lessons.

It was also found that the attitude of the educator very much determines the presentation of the content as well as the attitudes of the learners towards the content. The educators' attitude is particularly important to those learners who are HIV positive and/or have relatives or friends infected by the virus. The significance of an educator to have the right attitude and skill is perhaps realised more fully when one considers that it may influence disclosure by learners who are HIV infected or affected by the disease.

• Lack of visual educational aids and appropriate venues

The study found there was a critical shortage of teaching and learning aids including visual and audio aids which the participants believed can influence the effectiveness of the programme. Diale (2016:100) found a lack of physical space, time tabling and other educational resources were obstacles for successful programme delivery. According to Thaver and Leao (2012:88), educators often lack the competence to communicate sexual health education in a successful manner. This is greatly associated with the lack of resources which may subsequently result in negative outcome of the programme goals. The participants said they needed pamphlets, flipcharts, computers with programs installed for teaching, televisions and DVDs. It was also revealed most of the time they only had condoms as a teaching aid. The availability of condoms only as teaching aids contravenes the school guidelines of teaching learners about abstinence only. It was furthermore specified by the participants that whatever teaching and learning aids they needed, the only way they could get it was by visiting and obtaining it from resources outside the school itself. The same barrier was identified by educators in Sarma and Oliveras' (2013:25) study where an inadequate distribution of teaching material was also discovered. Pohan, et al (2011:527) explain in many interventions, information about HIV and AIDS is disseminated through lectures, events, training, and the media. Similar to the current study finding, the content of sex education in the textbooks

was found to be inadequate (Sommart and Sota 2013:209). In fact, Boonmongkon (2011 cited by Sommart and Sota 2013:209) makes the claim that sex education in schools is not successful due to the didactic approach of the educators and insufficient resources.

In this subcategory the shortage of physical resources was addressed. It was found the spaces that they had in the clinic were not adequate. The participants indicated they needed more rooms or a venue where they could create a comfortable environment for the learners and youth. They wanted an environment that was private and easily accessible to learners because they believed privacy, confidentiality and accessibility contribute to the value of the programme outcome and enhance learners' confidence in the educators. The educators emphasised the issue of the physical environment as well. They implied overcrowding in the classroom rendered programmes ineffective, especially when it comes to TB and other communicable diseases. Mkhabela and Peu (2016:324,325) agree the lack of infrastructure is a challenge to effective service delivery. Poor infrastructure and the lack of private space were barriers to the effective management of integrated HIV and TB programmes and presentations. Suggestions made for the institutions included to provide new or alter available resources to make available well-ventilated private spaces for counselling and testing.

Scarcity of transport was indeed discovered as one of the biggest resource challenges – specifically the nurse participants declared the lack of available transport and the money involved in paying for taxis and buses challenging. The nurses confirmed they needed transport to be able to enhance and extend the programme and services further. Follow-up of cases was not possible because of the transport issue. The inadequacy of the infrastructure, transportation, time and other resources may hinder health workers from providing effective teaching to many learners in many schools (Laud 2016:8). The shortage of transport ultimately results in the service not rendered especially in areas where it is not possible for the role players to walk or the learners to visit the clinic.

The issue of a real life models came out strongly from the participants. They believed that the media portrayal of HIV and AIDS positive people as beautiful and successful individuals influence the learners to not see or comprehend the seriousness of HIV and AIDS. In the opinion of the participants, a negative display of HIV, AIDS and TB patients will sensitise learners to the severity and seriousness of these conditions. Accordingly, they believed that it will yield positive responses from the learners. Salam, et al. (2014:7) mention in their study that compounding these problems is

the issue that many adolescents lack strong role models and mentors to guide them through the exploration which naturally occurs as a part of adolescent self-identity development, thus potentially leading to unhealthy and risky sexual practices.

Community factors, e.g., child-headed families and poverty

The participants stated social, economic and physical environmental factors determine the health of community. According to Inyang and Inyang (2013:57), school-based HIV and AIDS education can be likened to the community control of disease approach, which has to do with behavioural change. Mokhele and Jita (2010:1765) advocate that change occurs "most rapidly when people want to change" and when they see the benefit in doing so. This may imply that all community factors surrounding the learners and role players should be the first point of reference if HIV and AIDS transmission is to be reduced and ultimately eradicated.

The study findings revealed social issues like child-headed families and poverty as further challenges to the effectiveness of the programme. It was found that most of the families in the study setting were living in poverty. Bushbuckridge is also classified under the rural and poor communities. It was also found that with child-headed families, risky life styles as well as alcohol abuse became a way of survival for the youth in the Bushbuckridge municipal area. Sexual violence as well was reported challenging and even more so if the role players had to collaborate with parents for the care of learners identified at school. This was found to cause more problems in relation to confidentiality between the educators and learners. Inyang (2009 cited in Inyang and Inyang 2013:59) show much concern for learners from impoverished household where parents encourage their children to practice premarital sexual activities to earn money for the family.

Other challenges to overcome; are the physical environment of the school which hinders effective implementation of the programme. Most of the learners are from rural villages without basic resources. Overcrowding and congestion were major stumbling blocks preventing easy management of the spread of communicable diseases like HIV and TB.

5.2.2.3 Category 3: Personal barriers

Personal barriers are obstructions put into place by individuals that negatively affect their achievement in specific areas of their lives in general. In this category these personal challenges that pose a threat to the effective implementation of the school-based HIV and AIDS prevention programme are discussed.

Lack of trained dedicated staff/services – infrequent services

A scarcity of trained staff dedicated to specifically run the school-based HIV and AIDS prevention programme and others services related to the programme was identified by the participants. The findings revealed role players in the programme were not sufficiently trained to run the programme. Agreeing with this finding, Thaver and Leao (2012:87) also found that educators running the ISHP were in general not adequately skilled to effectuate the success of the programme. Educators were not trained and either did not register for or complete the course the participants actually knew was needed to effectively run the programme. Nurses were found to have basic HIV and AIDS knowledge and basic counselling skills affirming the reported findings of Inyang and Inyang (2013:59) that most educators showed little understanding of the HIV and AIDS and high risk behaviour content of the subject. It was further discovered there were no dedicated staff members for the programme. In some instances, school health services, if available, were not effective while in other cases there were no services at all. Hence, infrequent service delivery occurred which is unacceptable if the success of the programme is to be guaranteed. Maseko (2016) reported that the Mpumalanga portfolio committee indicated on 7 April 2016 that only 18 school health teams were available in the whole of province. This was not acceptable and the province was in the process of recruiting retired nurses to meet the requirements for school health services, although the move was facing budgetary constraints according to Maseko (2016).

Some of the educators teaching LO were found to be ordinary educators with no extra training empowering them to teach the subject effectively; they mostly relied on information they found in the textbooks. Only a few educators had additional training especially on HIV and AIDS as well as life skills. Unlike with the nurses, specific educators were allocated to teach the subject even though they were not adequately trained. In relation to this finding, Helleve, et al (2011:14) write it is relevant and vital to have a better understanding of the difference between personal and professional characteristics for educators who teach school-based HIV prevention programmes when it comes to distributing and disseminating programmes to schools. Salam, et al (2014:7) mentions low educator involvement, a lack of human resources, and low awareness and commitment to deal with the problem makes school-based delivery difficult. In addition, De Klerk (2013:12) state insufficient staff for frequent visits to schools which result in less time for the provision of these services ultimately affects the welfare of the learners.

• Insufficient knowledge and application of policies and guidelines

The study found that all the participants did not know the Integrated School Health Policy (ISHP) is one of the guiding policies on the running of the school-based HIV and AIDS programme. This lack of knowledge about the existence of the ISHP and its content was related to challenges in working

through the guidelines stipulated in relation to this policy. It was revealed that they had the other policies with regard to HIV and AIDS in schools and among the youth and adolescents. Similarly, the personnel in the study conducted by Kwatubana and Kheswa (2014:1718) were not aware of the ISHP and were implementing HIV and AIDS policies in isolation. With regard to guidelines, it was found that all the institutions had the guidelines although it was discovered old guidelines were followed.

HIV prevention programmes created in collaboration with community members to address adolescent sexual behaviours and prevent unhealthy sexual practices are the most effective ones (Salam, et al 2014:7).

Insufficient collaboration between role players

Participants identified insufficient collaboration among and between role players as personal barriers to the effective implementation of the school-based HIV and AIDS prevention programme.

The current study revealed there was insufficient collaboration between and among the role players. No proper flow of information was identified as the cause of the lack of collaboration. All forms of communication between the role players were not effectively used and consequently uncoordinated services and services not rendered were the outcome. The insufficient collaboration led to a break in the continuity of services. The lack of collaboration was also found by Diale (2016:98) in that the educator participants agreed there was no collaboration with other stakeholders. On the other hand, Makhubela-Nkondo (2013:2) calls for the involvement of societal actions where parents, nurses and schools collaborate with other diverse multidisciplinary, interdisciplinary and transdisciplinary practitioners. According to this author, this will facilitate dissemination of accurate and up-to-date information. De Klerk's (2013:13) concern is the unavailability of a referral system to respond to identified health needs. This may be related to the mentioned lack of collaboration. If successful and proper collaboration exists, identified health needs will be referred to the appropriate discipline for care. UNESCO (2016:11) also emphasises the importance of collaboration between the education and health sector as the two sectors have enormous potential to promote good health and wellbeing of all individuals and communities. This will help to prevent, among others, the transmission of HIV and AIDS, and enable access to care and support mainly for adolescents and young people living with HIV or increased susceptibility to STIs including HIV.

List of research project topics and materials

Educators' barriers towards HIV and AIDS education (sensitive issue)

The study revealed the educators regarded HIV and AIDS as a sensitive topic and thus teaching it required for them to have certain skills. It was emphasised most of the educators felt inadequate and uncomfortable when they had to teach learners about HIV and AIDS. They believed they did not have the right attitude as well as that special skill to deal with the lessons. The environment as well dictated to them to treat teaching HIV and AIDS as a special topic. MacEntee (2015:90) concludes addressing educators' challenges with HIV and AIDS education continues to stun those responsible for the national response to HIV and AIDS. This should be a wake-up call for the DBE and DoH to find ways to deal with barriers the educators are facing.

· Cultural and religious beliefs

The participants' way of life as well as their religious beliefs was identified as a challenge to the effective implementation of the programme.

Culture and religion were found to be much of a personal barrier to the implementation of the school-based HIV and AIDS prevention programme. Culture was found to restrict parents' freedom to openly discuss sexual issues with children at home. As parents themselves, most participants were subjected to adhere to their inherited and traditional African culture which prohibited them to talk or teach learners about sexual issues. Moreover, learners were bound by the same cultural norms and beliefs which prevented them from seeking help on sexual health issues and prohibited them to be educated on these issues. Participants observed learners were afraid to be seen by elders queuing in sections where reproductive services to the youth were rendered. Sighting any youth in a spot where sexual and reproductive health was rendered, was immediately interpreted by traditional community members as the youth leading a careless and irresponsible sexual life. Salam, et al (2014:7) perceive traditional cultural beliefs and reluctance to talk about sexual issues as one of the major barriers to the implementation of programmes for HIV prevention and screening. Harper, Riplinger, Neubaus, Murphy, Velcoff and Bangi (2014:139) reiterate culture does not encourage parent-child communication about sex. However, these barriers may and can be addressed if the community becomes involved from beginning in such programmes and they are provided with an opportunity to design initiatives that are sensitive to their culture and beliefs.

School-based HIV prevention programmes are also faced with issues such as maintaining the programmes. Contemplating these issues, Salam, et al (2014:2) assert effective HIV prevention measures should ideally emphasise human dignity, responsibility, voluntary participation, and empowerment through access to information, services and support systems. Furthermore, a thorough understanding of the common values and belief systems of a community will also help to

identify positive values and practices that can facilitate and more effectively promote HIV interventions.

Lack of parental understanding of the school programmes

The study revealed that most of the parents were misinformed about the programmes content taught in LO. It was mentioned some parents believed the teaching and introduction of this programme in schools in fact promote risky sexual behaviours among learners. Many parents tend to believe learners would want to experiment after the lessons. It was found because parents were not exposed to the programme and its content, many rejected the programme. The lack of parental support because the parents are misinformed, not informed at all, or not aware of its existence will undoubtedly hamper the progress of the programme.

Parental barriers towards sexual education

The study revealed the attitude of many parents towards sex education is complex. Anger towards the educators who were teaching sex education was apparent from some parents. The lack of support from parents to facilitate sex education may hamper the effectiveness of the programme.

Numerous issues lead to the lack of support from parents when it comes to sexuality education. Kuo, Atujuna, Mathws, Stin, Hoare, Beardslea et al (2016:109) found discussing sex and HIV with one's children is not admissible in certain cultures. According to Jones, et al (2013:9), parents and educators have to be educated about issues that pertain to sexuality and how to discuss these issues with their children. These authors assert a trusting relationship between parents/guardians and the National Department of Education needs to be established as it will assist the parents to understand the school is not trying to corrupt their children by teaching them about sex, sexuality and HIV and AIDS.

Again, they emphasise the importance of teaching parents to understand that education about the use of condoms does not lead to increased activity. When informed and educated, parents will hopefully then realised that without their involvement and support in sexuality education, their children would possibly learn about sexuality and HIV and AIDS from their peers who may not always have accurate facts thereby disseminating myths and fallacies (Jones, et al 2013:7). All this efforts will assist in gaining support from the parents and ultimately the success of the programme.

Positive results were also yielded since some parents were relieved from the pressure of teaching their children about sex-related issues. In support of this finding, the Advocate for Youth's (2013:8)

national and state surveys repeatedly reflects parents overwhelmingly support sexuality education in public schools.

5.2.3 THEME 3: SUGGESTIONS/NEEDS FOR SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMME

5.2.3.1 Category 1: Adequate resources

The organisation has to provide resources to ensure the programme is effective and efficient. All resources, ranging from human resources to material resources, need to ensure efficient service.

Appropriate educational aids and venues

The findings of the study revealed supplying the role players with appropriate resources will enhance and improve the effectiveness of the school-based HIV and AIDS prevention programme. The participants believed that supplying the role players with audio visual learning and teaching resources such as venues will improve their presentation skills. This will in turn improve the understanding of the learners to their benefit. It was also revealed that if they are using games in their presentation, participation and involvement of the learners may enhance the effectiveness of the programme. Kulkarni and Vishwanath (2016:224) mention the use of documentary videos, mass media, social networking sites such as Google, WhatsApp, WeChat and many others as strategies for spreading awareness of HIV and AIDS among the youth. The participants believed the use of videos may trigger the reality regarding the trauma and devastating physical, emotional, familial and personal horror that accompany these diseases and may make learners realise the seriousness of HIV and AIDS. Venues are also important for the implementation of the HIV and AIDS prevention programme. With adequate space the privacy of the learners will be ensured and this may encourage them to make use of the services with no reservations.

Human resources: Empower all role players with knowledge and skills

Providing opportunities to acquire knowledge and skills was suggested and explored. The participants believed by empowering the various role players with knowledge and skills were the way forward to improve the effectiveness of the programme. Although all role players were mentioned to be empowered with skills and knowledge, educators, nurses and NGOs were specifically addressed. The participants believed that attending workshops at specialised areas was the best way forward as this would ensure that reliable information from reliable sources is imparted. The regional training centre used as a training centre for HIV and AIDS was singled out as a prepared site of teaching. Regular in-service education was also one of the methods mentioned to empower the role players. The National Adolescent and Youth Health policy 2017 make provisions to intervene through the provision to health care workers with pre and in-service training on adolescent and youth friendly services (DOH 2017:6).

Maticka-Tyndale, Mungwete and Jayeoba (2013:621) explained PSABH's addition as a setting and context in which educators reviewed the curriculum, discussed potential concerns they had; sorted through contradictions between their own beliefs and the facts as presented in the educational package; learned and practised pedagogical techniques beyond those commonly used; developed teaching strategies for dealing with contentious topics such as condoms and considered HIV and AIDS vulnerabilities; and learning needs in the contexts of local experiences of youth from diverse ethnic groups and life circumstances.

According to the Advocate for Youth (2013:16), given the unique nature of sexuality on-going education on professional development is critical. They continue reiterating in some states in the United States of America professional development requirements specifically relate to sexuality education and/or HIV/AIDS prevention education although most states do not. UNESCO (2016:10) further points out attention must be given to pre-service and in-service training. This will provide educators with requisite knowledge and skills. Ultimately, with all the knowledge and skills, the goals of the programme will be achieved.

MacEntee (2016:90) quote Jansens (2015) who indicates that the DBE plans a national rollout of scripted lessons for Life Orientation from Grade 7 to Grade 9. According to Wood and Rolleri (2014:526), this decision is said to be based on a report by Douglas Kirby who advocates for curricula that will tell the educator what to do and say, and will describe each activity, material and the time needed for the activity. In line with the findings of the current study, this decision is necessary as the educators will be empowered with the knowledge of what they need to teach the learners.

Human resources: Ensure collaboration between role players

Participants believed that collaboration between role players will enhance the implementation of the programme. Demissie, et al (2015:48) found coordination and collaboration of health education activities with other components of the school health programmes help to ensure that health issues are addressed and reinforced at school. They further reiterate the importance of collaboration as eliminating gaps as well as avoiding duplication of programmes and activities. Collaboration with other role players was found to be extremely beneficial to learners and the various role players involved in the programme. In cases where the role players experience intense stress, they need to undergo counselling. These sessions may be possible through a proper collaborative system.

According to the Department of Health and Public Health England (2014:16, 20) referral of cases from one area to another for care requires a collaborative referral system. This requires full collaboration with other role players to be reckoned as successful. All the aspects of the learners and role players must be met to ensure the success of the programme. This may be met through collaboration.

The participants mentioned that the services of police officers were necessary in cases where the learners use drugs. Collaboration with parents as well may prove to be more rewarding to the implementation of the programme. This is supported by Demissie, et al (2015: 48) who allude that school health programmes are effective when parents and community organisations are involved. Their involvement in the implementation of the programme is an indication of a harmonious relationship between the role players and, ultimately, the success of the programme.

A suggestion made to collaborate with girl mentors was voiced. This may enhance the decision making skills of the girl-child. If the girl learners have been skilled to make decisions, it may assist in the programme as the learners will be able to choose lifestyles that may not predispose them to contracting HIV and AIDS. This finding is reaffirmed by Kinyanjui (2016:iv) who found mentors helped girls in Kenya to acquire life skills to navigate the transition from childhood to adolescence, overcome negative peer pressure, and avoid risky sexual behaviours among other topics they taught. Furthermore, the author mentions girl mentoring is seen as a promising low-cost intervention for at-risk youths (Kinyanjui 2016:10).

Collaborating with nurses as mentioned by the NGO participants may yield positive outcomes for the programme. Nurses will be available to capacitate the educators and NGOs with appropriate knowledge of HIV and AIDS. Nurses, especially school health nurses, are seen as important gatekeepers and they play many roles in the school health domain (Demissie, et al 2014:6) thereby

serving as an extension of the public health system. It is suggested that while classroom health education educators may be skilled at imparting knowledge, they may be less effective with instructions involving skills aimed at reducing risky sexual behaviours (Borawski, et al 2015:8). Students reported more positive views of health education educators' performance with regard to the presentation of materials, the comfort level of the facilitator, and the degree to which the curriculum challenged how and what students thought about health.

Fonner, Armstrong, Kennedy, O'Reilly and Sweat (2014:16) assert effective interventions include community-based components that extend beyond school-based sex education by involving resources and activities outside of the school environment such as training healthcare staff to offer youth-friendly services, distributing condoms, and involving parents, educators, and community members in intervention development. This system thus combats the issue of resource shortages in schools and clinics.

. Human resources: Ensure sufficiently trained dedicated staff

Availability and allocation of trained staff for this programme was echoed by the participants. It was found having staff allocated and delegated to run the programme will improve the effectiveness of the programme. This will make it easier to plan specialised training for the skills needed dedicated staff to effectively implement the programme. It was further suggested by the participants that if staff take Life Orientation seriously like other school subjects it may not only benefit the programme, but it may trigger the learners to take Life Orientation seriously like other subjects and thus the long term effects of the programme may prove to be of value.

Participants mentioned shortage of staff as a challenge to the implementation of the programme. Allocating a sufficient number of staff to render services efficiently was identified as a need by the participants. The reviving of the school health services in the district was indicated as an urgent need to curb the shortages in the clinics.

Borawski, et al (2015:8) similarly suggest that while classroom health education educators may be skilled at imparting knowledge, they may be less effective with instructions involving skills aimed at reducing risky sexual behaviours. Students reported more positive views of health education educators' performance with regard to the presentation of materials, the comfort level of the facilitator, and the degree to which the curriculum challenged how students thought about health. The use of medically accurate information is also highlighted by the Advocate for Youth (2013: 16) in that information provided to students be verified or supported by research conducted in compliance with scientific methods and published in peer-reviewed journals. In other words, the

information received by the learners is appropriate and recognised as accurate and objective by professional organisations and agencies with expertise in the relevant fields such as the Centres for Disease Control and Prevention, the American Public Health Association, the American Academy of Paediatrics, and the American College of Obstetricians and Gynaecologists.

• Dedicated prevention programmes with monitoring and evaluation

Participants suggested a need for more HIV and AIDS prevention programmes with a section to monitor and evaluate the progress of the programme. The Advocate for Youth (2013:14) reports every state in America and local education agency needs to have an HIV materials review panel. Resources used in the programme implementation must be reviewed. Materials include written materials (curricula, training materials, pamphlets); audio visual materials (motion pictures, videos); pictorials (posters and similar educational materials using photographs, slides, drawings or paintings); and electronic resources (websites, PDF files and PowerPoint files). The mapping and alignment process as well as the evaluation tool must also addresses additional parameters such as the target population, identified needs within the district, target grade level(s), learning objectives, curricula and training costs, and time requirements.

The participants felt there was a need to have other programmes at school running together with the LO programme. It was alluded that the current programme is not effective and unless new effective programmes are made available, the goal of the programme will not be met. Close monitoring of the programme will provide opportunities for re-planning and adjusting programmes was mentioned as an important tool to monitor the programme with.

According to Maticka-Tyndale, et al (2013:615), monitoring the delivery of the programme must be assessed based on reports of nurses, educators and pupils. They recorded evidence of HIV and AIDS programme based on a review of educator lesson plans, pupil workbooks, classroom observations of classroom, school records of the frequency of responses to anonymous question boxes, school health club meetings, and other co-curricular activities that dealt with HIV and AIDS topics, and the presence of teaching and learning resources such as posters and books. As a result, tools must be developed to assess everyone involved in the programme.

Consistent involvement of School Health Services team (SHS)

Participants believed that the formation of committees and teams is a definite need. The team should comprise various role players with diverse knowledge and skills. This was seen as a way in which role players can share information as it is easier to work in a team. Working in these teams

will ensure that all the SHS teams are fully involved in the programme. The establishment of SHS teams is in line with the ISHP (NDoH and DBE 2012:18).

Gates, Walker and Webb (2015) reason the use of this broader approach to prevent and reduce STIs will also entail abandoning silo-based strategies whereby departments address issues narrowly, utilising expertise and resources unique to their agencies. The authors further state developing partnerships with others within the school environment (other educators, school nurses, and counsellors) facilitates better diffusion of innovative lessons and ensures their sustainability. In support of this suggestion, the Advocate for Youth (2013:19) suggests for meeting the needs of their learners, schools must establish school-linked clinics. School-linked health centres/clinics are located off the school property, often provide hours of operation before or after school, and can typically provide more comprehensive sexual and reproductive healthcare services than school-based health centres/clinics.

Involvement of multidisciplinary team

The participants expressed to ensure that the learners are given a holistic approach to the programme, a multidisciplinary team must be involved. This suggestion made by a participant is in accordance with the fact that every individual is a whole. The participants further indicated no fragmentation of services will be experienced as management of the programme will be done in on a round-table basis with all members involved – from the nurse to the learner who is the receiver of care or service.

Gates, et al (2015) point out a team of people working together in a coordinated manner, could develop and monitor policies and activities related to HIV and AIDS education within the school, thereby lending strength and support to the individuals conducting awareness and prevention education in the classroom. This team should include diverse members of the community such as educators, health providers, social workers, counsellors, and parents. The team should also be actively interested, committed and well-trained in HIV awareness and prevention education in schools.

Involvement of nongovernmental organisations (NGOs)

NGOs are non-profiting organisations that operate independently of any government; typically one of which the purpose is to address social and political issues. It was suggested by the participants for partnerships with NGOs to be formed to assure beneficial relations between the institutions. Organisations such as Love Life were identified as NGOs for partnership in a venture to improve

and effectively implement the school-based HIV and AIDS prevention programme. The Advocate for Youth (2013:17) supports the involvement of external organisations and agencies such as NGOs. The author indicates community-based organisations provide essential services to learners and support educators and other staff. In following up their support, they reiterate that more especially in sexuality education it is common for some community-based organisations or health departments to teach some or all of the classes devoted to sex education and/or provide professional development and technical assistance. Kulkarni and Vishwanath (2016:224) agree with this suggestion by emphasising the need for political and administrative commitment and establishing good public private partnership through the involvement of NGOs.

5.2.3.2 Category 2: Target population

The participants identified the suitable population and target to ensure the effective implementation of the school-based HIV and AIDS prevention programme. Omage and Omage (2013:313) concur by mentioning the international HIV and AIDS education charity engages in target group HIV and AIDS education. They reach high risk groups like homosexuals in settings like workplaces, schools, and homes to reach the most vulnerable, poor and marginalized people. In Asia, the Cambodian HIV/AIDS Education Care expands its work with key multimedia system and networks such as television, radio, public forums, and conferences which they can use as the basis for targeting public education and advocacy on HIV and AIDS (Omage and Omage 2013:314). Gates, et al (2015) also support the suggestion and agree an effective multidepartment strategy will require unified messages and curricula that are evidence-based and population-specific. In other ways, however, one approach may not be effective across all groups or settings.

Include primary schools

In the opinion of the participants, primary schools must be the priority area to start the HIV and AIDS prevention programme in. They suggested that primary schools be the target as well for this programme. The participants argued if Life Orientation starts from the primary schools, the mind frame of learners are broadened and may increase their decision making. They further indicated teaching primary school learners will be of value as young children can take advice and trust information given to them by elders. Kulkarni and Vishwanath (2016:223) confirm this assertion and suggest for school-based education programmes on causes and consequence of HIV and AIDS as well as sex education and sexuality in the school syllabus should be done as early as in primary schools. This should be done by trained educators. Hill, Drape, De Villiers, Fourie, Mohamed, Parker, et al (2015:1) are in favour of the notion of teaching Life Orientation at an early age. Introducing their study findings, they mention attitudes, beliefs and behaviours learned during the formative years grow and are cemented in one's being through the developmental stages to adulthood. This assertion is a confirmation that, if health promotion behaviours are taught during the foundation phase, it may be practised throughout the growing process.

Involve community, church and parents

Involving the community, church and parents was identified as a suggestion to improve the implementation of the programme. Chowdhury, Jackson, Elwyn, Rivera-Rodriguez, et al (2013:9) found in their study that wider and deeper involvement of community members in prevention interventions should be encouraged. These authors further indicate the involvement of the community and parents in every aspect of their project enhanced the likelihood of an effective HIV prevention programme to families in communities of need.

UNESCO (2016:17) states in spite of the fact that national education has a key role to play, they will not be able to address HIV, and sexual and reproductive health issues alone. Therefore, partnerships with parents, communities and faith-based organisations and so forth must be strengthened. Furthermore, The Advocate for Youth (2013:8) reports policies for school-based sexual health education and access to services developed collaboratively with parents, educators, administrators, learners and other community members can ensure that the policies reflect the needs of learners and the values of the community. This collaboration may increase the efficiency of the programme as the entire list of role players will be informed through policies and other services and direct involvement in the planning of the programme will be possible (Chowdhury, et



al 2013:8). Therefore, buy-in of the community members and inevitable support of the programme by members of the community is important.

In addition, the preliminary results of Chowdhury, et al (2013:9) reveal participation of members in the project led to the strengthening of certain variables of the unified theory of behaviour change. The changes included an increase in HIV knowledge, decrease in perceived environmental constraints, and increase in endorsement of habitual behaviours.

The participants suggested that the involvement of all community members, the church, and parents may yield positive outcomes of the programme. Magezi (2016:3) acknowledges that churches play a crucial role in community initiatives particularly in driving some HIV and AIDS as well as health responses in African countries. The author further quotes a scripture from the Holy Bible John 17:14–16 where it is mentioned that the church "is in the world but it is not of the world." Magezi (2016:4) agrees with the content and implication of these verses by ascertaining that the church is shaped by the ethos and values which are different from the rest of society and communities. Ultimately, the role of the church and community integration should be observed and respected. In his conclusion, the author places emphases on the church upholding its sacredness as a community institution that is responsive to community needs (Magezi 2016:8). The learners are community members and as members from where they come from, they are involved in the programme and they therefore may develop trust in the successes and benefits of the programme (Rakotoniana, Rakotomanga and Barannes 2014:1). These authors further indicate the involvement of the church covers the religious beliefs that may restrict the learners to receive the implementation of the HIV and AIDS prevention programme. Gates, et al (2015:4) concur with this suggestion but note parents and, if possible, other sectors in the community should arrange separate teaching and learning activities for parents to enhance their communication with their children on HIV awareness and prevention. Parents will thus have the knowledge and they can also assist the learners at home.

The involvement of the church in the HIV and AIDS prevention programme is further supported by Szaflarski, Vaughn, Chambers, Harris, Ruffner, Wess, at al (2014:96). These authors mention religion as a key element of culture important to the issue of HIV because it shapes ideas about sexual behaviours and lifestyles associated with HIV risk. Partnering with the church was mentioned to be the most important part of partnership as it was connecting with cultural insiders (Szaflarski, et al 2014:103). These authors conclude in their study that Black churches were uniquely positioned to address HIV stigma, prevention and care in African American communities.

Educating and empowering the churches are critical and has to be done with multi-sectorial support (Szaflarski, et al 2014:106).

Include educators

Educators were identified and suggested by the participants to be involved as the target group for the programme. The benefit of involving the educators is that all the learners whom the educator comes across will have a 50% chance of benefitting from him or her. The Department of Basic Education (2016:3) reports 93% of learners and students were enrolled in ordinary public schools, 4% in independent schools, 2.2% in Early Childhood Development (ECD) centres, and 0.9% inspecial schools. This report shows with about 98% of leaners enrolled in schools, there is more than a fifty per cent chance for them to benefit from educators with regard to HIV and ADS prevention, sexuality education, life skills and Life Orientation as an official school subject. The participants felt that all educators must be targeted and not only those who are teaching LO. Campbell, et al (2016:18) support the inclusion of educators, provided that they have support in terms of time, recognition for caring work and creating referral systems with other role players. UNESCO (2015:1) reports in the USA more than 54 million young people are enrolled in elementary and secondary schools. The authors state these young people spend about 6 hours per day in schools and therefore schools are in a unique position to help improve the health status of the learners. This statement clearly indicates the time spent by learners with educators; therefore, the involvement of the educator in HIV and AIDS programmes must not be overlooked or underestimated. According to Ferreira do Ferreira do Val, de Souza Silva, Rincon, dos Anjos Lima, Barbosa and Nichiata 2013:700), it is important to create networks for health promotion and, above all, to maintain a communication channel for exchanging information and the establishment of linkages necessary to meet the problems of sexual and reproductive health. These actions may be lectures in schools, healthcare services in the community, debates, group work, workshops, and networking meetings between schools and services (Ferreira do Val, et al 2013:700).

5.3 CONCLUSION

In this chapter the findings of the current study with supportive and relevant literature were presented and discussed. The roles of the role players were discussed as the first theme. The identified roles as stipulated by the participants in this study were widely supported by various researchers. The provision of health services, HIV and AIDS education and collaboration was discussed and found to be main roles of the various stakeholders involved in the implementation of the school-based HIV and AIDS prevention programme. Various methods were used to provide the

identified services. Monitoring and evaluation of the programme was identified as an important role for the various stakeholders.

The discussions revealed minimal evaluation of various programmes implemented in general. This revelation is a major concern as the impact of the programmes was not accurately measured. The discussion of the challenges of role players yielded common ground in most of the discussions and literature. Challenges identified ranged from departmental and personal to the availability of resources. The last theme discussed was the suggestions given by the participants to improve and ensure the effective implementation of the programme. The provision of resources in the form of human resources and equipment was the priority need identified. Furthermore, identifying the target role players to include in the programme was key. Most of the identified target was supported as a need by various studies.

The next chapter will discuss these findings in alignment with the social ecological model (SEM).

CHAPTER 6

DISCUSSION OF FINDINGS WITH REFERENCE TO SOCIAL ECOLOGICAL MODEL

6.1 INTRODUCTION

In the previous chapter the findings were discussed and supported with relevant literature. In this chapter, the findings of the study are further discussed in relation to the Social Ecological Model (SEM). The themes and concepts that emerged from the study will be merged and aligned with the concepts of the model to guide the drafting of the guidelines. The overview, core and principles of the Social Ecological Model are discussed to guide the merging of the findings to the SEM.

6.2 OVERVIEW OF THE SOCIAL ECOLOGICAL MODEL

The SEM was used in the current study to assist in finding solutions to improve the implementation of the HIV and AIDS prevention programme in high schools as it examines multiple factors and the interrelatedness of social elements. This model is discussed in detail in Chapter 2. See the aforementioned chapter for details of the model.

The SEM has five hierarchical levels namely: the individual, interpersonal, organisational, community, and the public policy levels. These levels are interrelated and nested to each other. In Table 6.1 the model is summarised.

Table 6.1: Summary of the Social Ecological Model (SEM) levels

SEM level	Description
Individual	Characteristics of an individual that may influence behavioural change including knowledge, attitudes, beliefs and skills.
Interpersonal	Formal and informal social networks and social support systems that may influence individual behaviours such as family, friends, peers,

	co-workers, religious networks and customs or traditions.
Community	 Relationships among community organisations, institutions, and informational networks within defined boundaries including the physical environment, village associations, community leaders, cultures, and morals and values.
Organisational	Formal organisations or social institutions with rules and regulations for operations that affect how or how well services are provided to an individual or group.
Policy/Enabling environment	Local, state, national and global laws and policies including policies on HIV and AIDS prevention programmes in schools, ISHP, policies regarding the allocation of resources for HIV and AIDS prevention in schools, or lack of such policies or implementation frameworks.

6.3 ASSUMPTIONS AND CORE PRINCIPLES OF THE SOCIAL ECOLOGICAL MODEL (SEM)

The Social Ecological Model is based on four core principles; the details of the principles are detailed in Chapter 2 (see section 2.4). These core principles are: (1) multiple factors influence behaviours; (2) environments are multidimensional and complex; (3) human-environment interactions can be described at varying levels of organisation; and (4) the interrelationships between people and their environment are dynamic. The reasons for choosing the SEM to guide this study were drawn from these assumptions and core principles as explained in the next section.

6.4 REASONS FOR CHOOSING THE SOCIAL ECOLOGICAL MODEL FORTHIS STUDY

Changing health behaviour is the biggest hope for "reducing the burden of preventable disease and death around the world." (Orleans 2006 in Glanz, et al 2008: xiii). Orleans (2006) identified the four current leading behavioural risk factors prevailing across the modern world as non-adherence to prescribed medical screening and prevention and disease management practices; risky sexual practices; drug use concomitant with family and gun violence; and worksite and motor vehicle injuries (Orleans 2006 in Glanz, et al 2008:xii). It is of utmost importance to address these behavioural risks and disparities, and the behaviours which they are associated with, since they enforce global health threats.

The modern trend of moving away from primarily focusing on only individual behavioural change towards broader multilevel behavioural and social change models are emphasised by, for example, Glanz, et al(2008:xiv) and Stokols (1996:282). Salis, Owen and Fisher (2008:465) discuss the ecological models of health behaviour and classify these ecological models according to their different uses. Among other ecological models, models designed mainly to guide behavioural interventions are discussed including Daniel Stokols' (1992 and 2003) social ecology model for health promotion.

The ultimate aim of this book Health Behaviour and Health Education, Theory, Research and Practice is to discuss theories and models that will effectively cause a change in behaviour eventually reducing the burden of preventable disease and death around the world. Based on the assertions, in-depth discussions of the ecological models and the relevancy of the discussions in relation to the current study by the authors of the book, the current researcher felt confident the SEM, despite lacking specificity of its theorised influences, was the appropriate ecological model to serve as the theoretical frameworkfor the current study.

Furthermore to the reasons mentioned above, the following additional reasons were identified of which some were based on the principles and core assumptions of the SEM.

6.4.1 School-based HIV and AIDS prevention is a health promotion programme

According to Stokols (1996:283), the concept 'health promotion' differs from other disease prevention orientations because it emphasises the roles of the persons, groups and organisations as active agents in shaping health practices and policies to reach the peak of both individual and societal wellness. The first aim of the current study was to identify the roles of the various role players in the implementation of the school-based HIV and AIDs prevention programme. This was in line with the assertions made by Stokols (1996:283).

In alignment with Stokols; Mehtälä, Sääkslahti, Inkinen and Poskiparta (2014:1) the SEM approach emphasises that health promotion focuses on multiple level factors influencing the behaviour or action being researched. Stokols (1996:283) emphasises the need for collaborative efforts among the various role players and institutions in the private and public health services (Golden and Earp 2012:364). In the current study, the role players had to collaborate with each other and other institutions to ensure the mandated services were provided.

6.4.2 The dynamic interrelationships between people and their environment

The Integrated School Health Policy (ISHP) identifies various role players who have to be involved in the promotion of health and have to participate in the prevention of HIV and AIDS in schools. In agreement with this policy, this study involved educators, nurses, NGOs, SGBs and district managers. Moreover, the current study encompassed the participation of various members in the community as well as multiple factors influencing the uptake of the programme. Among the institutions playing a role were the schools, clinics and health centres. The interrelationship between the role players and the environment may enhance or lower the uptake of the programme. The in-between social interactions necessitated full understanding if the envisioned effective and efficient health promotion programme was to be the ultimate end result. The selected model to assist in understanding these interrelations was the SEM.

In support of these assertions, Stokols (1996:283) indicates most of the public health challenges are too complex to be understood well from a single level of analysis. That is why using the SEM was assumed to be fruitful as it would assist in finding responses to the questions about the issues related to public health.

6.4.3 Human-environment interactions can be described at varying levels of organisation

The implementation of the school-based HIV and AIDS prevention programme involves quite a number of role players. These role players are placed in various areas of the programme implementation. The educators are found in schools; nurses in the clinics and health centres; NGOs in offices in the community, and so are parents and other key members spread over various areas. Understanding the interactions these role players have in all the five levels of the SEM may be of great benefit to the programme implementation as well as with the identification of the challenges in all the levels.

People generally believe an individual is entirely responsible for his or her behaviour, but this may not always be the case. According to the SEM, the knowledge, attitude and skills of an individual define the behaviour she or he displays. In the same breath, Glanz, et al (2008:479) state ecological models maybe used to reframe behaviour. These authors explain this is often seen as the "responsibility" of the individual to include the required change at clinical (organisational) and community levels. In essence, improved understanding of the multilevel and interactive influences could lead to more targeted and effective interventions (Glanz, et al 2008:481).

6.4.4 Success stories of intervention studies using the SEM

Nyambe, Van Hal and Kampen (2016:7) inform the SEM has been used successfully in a number of prevention technique studies, although modified in some of these studies. The authors ascribe the popularity the SEM in various studies to its flexibility of variables within the levels.

Any prevention strategies should include a continuum of activities and in the current study the activities were addressed within the multiple levels of the model. These activities should be developmentally appropriate and conducted across the lifespan. This approach is more likely to sustain prevention efforts over time than any single intervention. The Centers for Disease Control and Prevention (CDC) (2011:20) quotes Israel, et al (2003) and Salis, et al (2008) who are in agreement that the SEM understands health to be affected by the interaction between the individual, community and the social as well as the political environments. This assertion motivated the use of SEM in the current study as the study involved the examination of multiple factors and the interrelatedness of various social elements.

More evidence of the use of the SEM according to Terry (2014:2) was based on the understanding that it may be tailored to better understand the phenomenon under study. The purpose of the current study was to explore the roles and challenges of all the role players involved in the implementation of the school-based HIV and AIDS prevention programme. The in-depth understanding of the roles and challenges of the various role players would ultimately guide the development of guidelines. As put forward by Terry (2014:2), the fact that the SEM allows for the integration of other theories presented the current study with the opportunity to use some of the concept of changing the social norms through the levels of SEM. The concept is derived from communication for development (C4D) in strategies for strengthening capacity. Taking into consideration the discussion in section 6.2.1 which relates to the individual level, making use of changing social norms in strengthening the knowledge, attitudes and skills in this level was a reachable goal.

6.5 CRITIQUE OF THE MODEL

According to Glanz, et al (2008:479), ecological models have been central to health promotion for several decades. Health policy groups increasingly rely on multi-level interventions to solve the most pressing health problems.

A study was done by Mahadevan, Amutah, Ramos, Raines, King, McIntosh, et al (2014:90) with the purpose to use the SEM to describe the rationale, need and procedures for the use of a community-based participatory and empowerment building approach as an effective and sustainable means to target the individuals' unique factors. Secondly, these authors desired to describe the environmental needs of women with dual diagnosis of HIV and any other chronic disease. The study was done in the form of a project known as 'THANKS'. The ultimate goal of the project was aimed at directly addressing the barriers leading to recidivistic behaviours as well as increasing the resolve to stay in treatment for both the diagnosed diseases. By doing this, the authors wanted to become more effective in ensuring that overall positive health outcomes among the HIV positive African American women were realised. Mahadevan, et al (2014:91) identified key factors they perceived as having a significant impact on the HIV positive African American women using the SEM. These key factors were identified in terms of and in relation to the various intervention levels in line with the SEM. Four levels of the SEM were used. Level 1 represented the influences of individual factors. Level 2 was represented as interpersonal factors defined by social and cultural norms and social support and environmental factors defined by food and access to healthcare services and, lastly, as institutional factors defined by public health policies and inequity in healthcare access. Level 3 represented the psychological factors while level 4 represented the overall health outcomes.

Analysing the processes used in Mahadevan's study, one will note that the SEM was used differently. The flexibility allows researchers to use the model in a manner that will allow them to reach their goal. Mahadevan, et al (2014:91) had hoped that the subsequent use of SEM as an evidence-based framework would lead to more effective harm reduction policies and minimisation of the costs associated with prevention and managing of HIV and other related comorbid conditions. The outcome of their study indicated there were multitudes of contextual factors unique to the lives of the impoverished African American women. These factors were found to continue to impact their health in greater extents. This was despite the role of the antiretroviral medications. In this regard, the use of the SEM in the study was of value as factors that were affecting interventions planned were identified and, ultimately, programmes could be developed to work on the identified factors to the benefit of the women and the state.

Recently, a systematic review of the SEM and the Theory of Triadic Influence (TTI) identified the main differences and similarities of the SEM and the TTI. The review focused on screening and vaccination to prepare potentially successful prevention programmes for general and cervical cancer prevention in Zambia (Nyambe, et al 2016:2). The reason for reviewing these two models was because both models allow for the integration of multiple levels of influence to establish an

overall view of health behavioural change. Furthermore, the authors note when compared with the TTI, the SEM was a more commonly used ecological model and had been applied before for screening interventions. These authors came to the conclusion that in general both the SEM and TTI models have similar theoretical constructs, concepts and compositions (Nyambe, et al 2016:3). In addition, it was mentioned that the TTI is more specific to its application than the SEM which tends to be more flexible (Nyambe, et al 2016:11). It can therefore be concluded if one needs indepth information on issues one has to use the SEM as it does not consider the level of causation. A further assertion regarding the SEM that because it differentiates the levels of society if compared with the TTI, it must be considered if one needs information from people from different social standings. Finally, Nyambe, et al (2016:12) concludes the SEM appears to be effective for screening and vaccination studies. This conclusion was associated with the fact that the SEM has been applied more in prevention methods studies.

In support of the use of the SEM in health promotion interventions, Golden and Earp (2012:365) conducted a study to identify the ecological levels receiving more attention in intervention efforts as well as determining the extent to which programmes simultaneously target multiple levels of change. This was said to be fuelled by a lack of clarity on the extent to which appeals for more comprehensive approaches to public health problems have been adapted in practice. The frequency and limited studies on multilevel approaches within the health promotion field further prompted Golden and Earp's (2012) to conduct the study. Their findings suggested the call for the use of multilevel interventions to promote better incorporation of social, institutional and policy approaches to health promotion had gone unanswered. It was also found that interventions targeting public policies were absent; instead, institutional and community approaches seemed to make limited approaches in literature (Golden and Earp 2012:368). In their discussion of the findings, the authors argue it is unlikely that health promotion planning processes based on the social-ecological understanding of a problem would regularly reckon institutions, communities, and policies as inefficient influential points for change across all health topics in all intervention settings.

In their criticism of the SEM, Golden and Earp (2012:369) refer to Stokols' (1996) point of view OR stance suggesting that limited resources may preclude the development of programmes that target multiple levels of change. It was posited this may require of the practitioners to prioritise some interventions strategies over others (Golden and Earp 2012:369).

A key strength of ecological models is their focus on multiple levels of influence that broadens options for interventions. Practically, for many health professionals working in government public

health institutions and NGOs, there are limits on engagement in certain activities to upper level interventions such as public policy advocacy. Golden and Earp (2012:320) support this assertion.

Despite the criticism of the SEM or any other multilevel approach, in conclusion, Golden and Earp (2012:370)strongly recommend for improvements to be made in both research and practice as well dissemination of multilevel interventions through professional societies, peer journals and public health networks – the authors appropriate these as critical acts.

A recommendation made by LeBlanc, Sutton, Thomas and Duffus (2014:49) suggests a public health approach that considers all factors and engages multiple groups in affected communities will increase the world's ability to meet its HIV and STI prevention goals and improve health equity. It is expected that policy and environmental changes affect virtually entire populations in contrast to interventions that reach only individuals who choose to participate (Golden, McLeroy, Green, Earp and Lieberman 2015:10S). These authors highlight that the amount of resources and power distributed across individuals may influence policy and ultimately influence environmental changes. Policy and environmental interventions establish settings and incentives that can persist in sustaining behaviour changes thereby helping to solve the problem that the effects of many individually directed interventions are poorly maintained. Golden, et al (2015:11S) further support the altercation and mention that health promotion professionals have a role to convey the importance of health-enhancing policies and environments.

Furthermore, the flexibility of the SEM suggests any intervention that health promotion practitioners and researchers can think of, may be implemented and be a success by manipulating the model. This is supported by Golden and her colleagues' "inside out" ecological model. In their proposed use of the "inside out" ecological model for policy and environmental interventions, Golden, et al (2015:12S) advise placing health-related and other social policies and environment in the centre, and conceptualising the ways in which individuals, their social networks and organised groups produce a community context that fosters healthy policies and environmental development. In conclusion, health promotion practitioners and researchers may foster change by conveying the health and social relevance policy and environmental change initiatives; building partnerships to support them; and promoting more equitable distribution of the resources necessary for people to meet their daily needs, control their lives, and freely participate in the public sphere (Golden, et al 2015:8S).

While the SEM has been used in many studies, it is clearly quite difficult to incorporate the multilevel analysis of the model to ensure that a programme is efficiently implemented. The model

lacks specificity about the most important theorised influences and this makes it difficult to effectively develop guidelines that may be used to ensure school-based HIV and AIDS prevention programme successes.

A major challenge for those working with ecological models is to develop more sophisticated operational models that lead to testable hypotheses and useful guidance for interventions.

The following challenges have been singled out for discussion on closely critiquing the SEM:

6.5.1 Methodological challenges of multi-level interventions

Scholmerich and Kawachi (2016b:246) did a review of the current definitions of multilevel interventions and their operationalisation in the field of family planning. They found 45 out of 62 interventions operated on a single level and it was mostly on the organisational or community level. Seventeen (17) interventions implemented activities on two levels, 11 targeted both the individual and environmental levels and 6 interventions took action on two environmental levels and the interventions were geared towards changing individual knowledge, attitudes and perceptions (Scholmerich and Kawachi 2016b:249). No intervention worked through the SEM multilevel although the target was at the policy level. They concluded it is difficult to develop multilevel interventions due to the relatively high costs and feasibility challenges associated with implementing and evaluating them (Kaufman, Cornish, Zimmerman and Johnson 2014:S250; Scholmerich and Kawachi 2016b:2530). Furthermore, Scholmerich and Kawachi (2016b:2530) concluded the current SEM is not sufficient to help inform multilevel interventions. Although in principle they agree that the SEM emphasises the existence of links between the levels and in certain contexts, the combination of levels can lead to higher impacts. This challenge was also noted earlier by Dunn, Masyn, Yudron, Jones and Subramanian (2014:864,870).

6.5.2 Logistical challenges of conducting research and interventions based on ecological models

According to Scholmerich and Kawachi (2016a:18), a general scarcity of multilevel interventions and research exist within the public health arena. They associate the scarcity with barriers and challenges related to operational and empirical barriers. For the most part, the operational challenges they mention are related to the fact that the barriers principally target more than one target – they need to be adapted to the local context and they mostly require longer time intervals before an effect can be detected. Scholmerich and Kawachi (2016b) conclude in their study that interventions ignorant of the possible links between the socio-ecological levels could risk being less effective or not effective at all. Yet, they also emphasise more research need to be done to expand

the theoretical framework for understanding the links between socio-ecological levels in order to guide the design of various interventions (Scholmerich and Kawachi 2016a:19).

6.6 ALIGNMENT OF THE FINDINGS TO THE MODEL

Scholmerich and Kawachi (2016a:17) state interventions that incorporate a socio-ecological framework aim to create change on various levels. These authors further mention that knowledge of the links between the levels may be influenced to boost the effectiveness of an intervention. The use of the SEM in the current study as a model of application aimed to enhance the effectiveness of the school-based HIV and AIDS prevention programme in high schools in Bushbuckridge, Mpumalanga. Table 6.2 illustrates the alignment of the (themes) findings to the five levels of the SEM.

Table 6.2: Aligning of findings to the levels of the SEM

SEM MODEL	STUDY THEMES AND CATEGORIES	
	STOPT THEMES AND SATESSINES	
1.Individual	Theme 1: Roles and responsibilities of role players in school based HIV and AIDS prevention programme Provision of HIV and AIDS health services (nurses) Provision of HIV and AIDS education(nurse educators and nongovernmental organisations (NGOs	
	Theme 2: Challenges with school-based HIV and AIDS prevention programme • Ineffective presentation and facilitation skills of educators (e.g. lack of accessible and relevant real life examples) • Insufficient knowledge of policies/guidelines on HIV and AIDS prevention in schools and application thereof • Cultural and religious beliefs and barriers	
	Lack of parental understanding of the school programme Theme 3: Suggestions/needs for HIV and AIDS prevention programme	

	 Empower and equip all role players with relevant knowledge, attitudes and skills Continuously re-skill suitable educators Ensure sufficiently trained dedicated staff 	
2. Interpersonal	Theme 1: Roles and responsibilities of role players in school based HIV and AIDS prevention programme • Ensure collaboration (referral system) between round players/services Theme 2: Challenges with school-based HIV and AID prevention programme	
	 Insufficient collaboration between role players Cultural and religious beliefs and barriers Theme 3:Suggestions/needs for HIV and AIDS prevention programme 	
3.Community	 Ensure collaboration between role players Theme 1: Roles and responsibilities of role players in school-based HIV and AIDS prevention programme Ensure collaboration (referral system) between role players/services Monitor and evaluate the programme: educators' and nurses' views of the programme Monitoring and evaluation in relation to the parents' roles and responses towards the HIV and AIDS programme Theme 2: Challenges with school-based HIV and AIDS prevention programme 	
	 Community factors, e.g., child-headed families/poverty Insufficient collaboration between role players Cultural and religious beliefs and barriers Parental attitudes towards sexual education Theme 3:Suggestions/needs for HIV and AIDS prevention 	

	programme		
	Involve community, church and parents		
4. Organisational	Theme 1:Roles and responsibilities of role players in school-		
4. Organisational	based HIV and AIDS prevention programme		
	 Providing relevant and accessible HIV and AIDS health services 		
	Providing relevant and accessible HIV and AIDS		
	education		
	Monitoring and evaluation: educators', nurses' and		
	NGOs' view on the parents' roles and responses		
	towards the HIV and AIDS programme Thomas 2: Challenges with school based HIV and AIDS		
	Theme 2: Challenges with school-based HIV and AIDS		
	prevention programme		
	Insufficient departmental resources, support/time for		
	preventive services		
	Health and education department priorities, e.g., Life		
	Orientation not a priority		
	Lack of visual educational aids and appropriate venues		
	Theme 3: Suggestions/needs for HIV and AIDS prevention		
	programme		
	Adequate resources		
	Appropriate educational aids and venues		
	Dedicated prevention programme with monitoring and		
	evaluation (M&E)		
	Consistent involvement of school health teams SHS		
	Involvement of multidisciplinary team		
	Involvement of NGOs		
	Target population		
	o Include primary schools		
	o Include educators		

5. Policy/Enabling environment

Theme 1: Roles and responsibilities of role players in school-based HIV and AIDS prevention programme

- Providing HIV and AIDS health services
- Giving HIV and AIDS education

Theme 2: Challenges with school-based HIV and AIDS prevention programme

Insufficient knowledge and application of policies/guidelines

Theme 3: Suggestions/needs for HIV and AIDS prevention programme

 Empower and equip all role players with relevant knowledge, attitudes, beliefs and skills

In the current study, the school-based HIV and AIDS prevention programme was an intervention directed to the learner as an individual. Individual interventions deal more often with changing one's knowledge, attitudes, beliefs and, ultimately, behaviours. The Social Ecological Model (SEM) recognises the interwoven relationship existing between the individual and his or her environment. While individuals are responsible for instituting and maintaining the lifestyle changes necessary to reduce risk and improve health, individual behaviour is determined to a large extent by the social environment, e.g. community norms and values, regulations and policies.

The interaction between the learners, educators, NGOs, nurses, parents and the other role players at the school, health establishment or any other social institution are actions at the individual level, but are the key sources of support and reinforcement which is needed to ensure the success of the programme.

Furthermore, barriers to healthy behaviours should be shared among the community as a whole. As these barriers are lowered or removed, behavioural change becomes more achievable and sustainable. Thus, the most effective approach leading to healthy behaviours is a combination of the efforts at all levels – individual, interpersonal, organisational, community and public policy.

The following discussions further illustrate the application of the SEM to the findings of the current study.

6.6.1 THEME 1: ROLES AND RESPONSIBILITIES OF ROLE PLAYERS IN SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMME

This theme relates to the four major roles of the role players in the programme, namely the provision of HIV and AIDS health services; provision of HIV and AIDS education; collaboration with other role players; and the monitoring and evaluation of the programme. More discussions of these roles with supportive literature are presented in Chapter 5.

The following is the alignment and merging of the identified roles with the levels of the SEM. The core and principles of the SEM is the point of significance in the alignment.

6.6.1.1. Provision of HIV and AIDS health services by the various role players

Individual level

For the provision of HIV and AIDS service to be effectively provided, the point of departure for the programme implementation is the individual. Being the centre level, the other five levels are concentrically arranged around the individual level. In this study, the individual was represented by the various role players – the learners, educators, nurses and the NGOs. The focus needed to be on their knowledge and skills, beliefs and values, and self-efficacy.

According to Mulaudzi and Peu (2014:5), the nurse is said to be the liaison person between the various role players: the community, the organisation, and the public policymakers. The authors allude the nurse's roles have expanded from giving health education in schools to the provision of integrated holistic healthcare services which include physical, spiritual, psychological and educational, facilitative, administrative, and socioeconomic dimensions. The outlined roles of the nurses require them to have the knowledge and skills enabling them to provide effective services and instilling in them belief in their ability to succeed and accomplish the task. Their sense of self-efficacy plays a major role in how they approach the goals, tasks and challenges they have to face in the provision of these services.

From this study, the nurses indicated they had the basic knowledge of HIV and AIDS as well as the skills related to the prevention of HIV and AIDS among the learners. However, they were not satisfied with the basic knowledge they already had. They wanted to be skilled further and needed strengthening of their capacities.

But, contrary to their assertion, the study findings indicated the nurses did not follow the principles of the youth-friendly services (YFS). They were simply rendering a service to the youth parallel to the codes of YFS. According to the WHO (2012b:2), the common agenda for action in adolescent

health and development is developing the adolescent and the prevention of and response to health problems if and when they arise. Geary, Webb and Norris (2015:10) reveal in the findings of their study no evidence of YFS as well. The authors further reiterate that services provided in their study settings were not in line with the requirements of YFS. Although the learners in their study said they were satisfied and happy, the assumption may be made that despite various factors affecting the provision of YFS at present, learners are gratified with the services provided.

• Interpersonal level

The interpersonal and individual levels are usually found to be clashing with each other. The interpersonal level addresses formal and informal social networks and social support systems that can influence individual behaviours. The networks and support systems include the family, friends, peers, co-workers, religious networks and customs or traditions. The current study findings showed the role players were relating well and they had programmes and systems of referral. Neither pressure nor discomfort was reported in this level in relation to the provision of health services. The functional social networks between the educators and nurses blended very well. It was found that the educators referred learners to the professional nurses for clinic visits. The contradicting finding was that there was no clear strategy to follow for referral.

Organisational level

In the hierarchy of the SEM the core individual level is followed by the interpersonal level with the organisational level forming the third level. At the organisational level, institutional factors in the school and clinic to provide a workplace and an environment promoting access to the HIV and AIDS prevention programme that is current and relevant to the recipients of the service, are identified and defined. In this instance, the DoH has clinics as the access point for the HIV and AIDS prevention programme.

Community

In relation to the SEM, collaboration is associated closely with the interpersonal level. The community level of the SEM is defined by the social and cultural norms of the various role players. It involves the primary social relationships surrounding an individual and the relationships with peers, family, colleagues, co-workers and everybody else around. This association between collaboration and the interpersonal level require from role players to pay attention to factors such as social networks, communications levels, relationships with personal health issues, the level of relationship commitment with the other role players as well as with social support and trust.

The community level of the SEM looks at the relationship between the role players, learners, parents and analyses the involvement of parents, peers and community organisations in the school-based HIV and AIDS prevention programme. The position of the religious and cultural groups as well as community leaders in relation to school-based HIV and AIDS prevention programme is considered as well. Parents also form part of the community group as they live in the community together with the other social groups.

Parents were identified as an important partner in the programme in that their buy-in as the primary support structure of the learners at home is vital. Religious groups and leaders, community leaders, community social groups were further identified as key stake holders in the success of the programme. In other words, their contribution to the success of the programme must never be undermined in any way. The role players have to collaborate with them on all aspects and keep them up to date with all the processes and stages of the programme. More importantly, empowering them with the skills they need to be active partners in the programme implementation is essential.

Public policy

This is fifth level of the SEM and is concerned with policies and guidelines that influence the behaviour of individuals in organisations, institutions as well as in the community. It further explores activities for HIV and AIDS prevention at policy level; such activities may involve interpreting and implementing existing policies.

The main role of a policy is to provide specific guidance towards implementing strategies to achieve the organisation's mission and goals. These may also be regulatory laws. According to the findings of this current study, almost all the participants were not aware of the policy that guides them in health promotion programme in schools. As mentioned before, the interrelatedness of the five levels in the SEM requires a multilevel approach towards the implementation of the school-based HIV and AIDS policy. In light of the aforementioned, increasing the knowledge and skills of the individuals involved in the programme and not influencing the relevant related public policies may not yield the desired positive outcomes.

The manifoldness of the school health policy is highlighted in the ISPH (NDoH and DBE 2012:10). Its purpose is to contribute to the improvement of the general health of school-going children, better the environmental conditions in schools, and address health barriers to learning by

improving education outcomes via access to school, retention within school and achievement at school.

The monitoring and evaluation of the school-based HIV and AIDS prevention programme is part of level 5, the public policy level. Proper evaluation involves evaluation done throughout the five levels of the SEM.

6.6.1.2 The provision of HIV and AIDS education

Four of the five levels of the SEM apply to the role of providing HIV and AIDS education. The levels are; individual, interpersonal, organisational and public policy. The individual as the provider of the service remains the centre level of the programme.

Individual level

The individual as the provider of the service remains the centre level of the programme. For the individual to be effective in providing HIV and AIDS education, they have to possess the knowledge and skills.

Interpersonal level

Collaboration was identified in the current study as a role applicable to all the different role players. For the successful rendering of health education on HIV and AIDS, there must be collaboration between the nurses, the educators as well as the NGOs. The collaboration will assist in the transference of knowledge from those who are specialised in the area of HIV and AIDS and on health issues to the educators. This will ultimately enhance the accuracy of the information that will be transmitted from the educators to the learners through the Life Orientation subject and by all other means identified in the study, like clinic visits and campaigns. Hence, the relationship between these role players should be such that proper collaboration and referral occur.

Organisational level

Based on its structure, vision, the needs of society and the culture and values of the organisation and constituents, institutions and organisations provide an environment to implement the programme and change policies. This level may be reached through political groups, law makers, religious members and any other leadership structures.



The school environment was identified as a hindrance to the provision of a service or an opportunity to give information about HIV and AIDS. This is totally contradictory to the multilevel approach of the SEM. The school as an institution is in level 4, the organisational level. For any health programme, the organisation has to ensure it provides an enabling environment if the programme is to yield success, efficiency and effectiveness. It is vital to take note of the other spheres of the environment – the psychological and social – and not just the physical environment. In line with this assertion, Mulaudzi and Peu (2013:4) declare school health nurses should without a doubt be aware of the psychological and social aspects of the school environment.

• Public policy

The HIV and AIDS education category is directed mainly by level 5 of the SEM, the public policy. Various policies and guidelines are essential for defining the type and extent of HIV and AIDS education for the learners. In other words, the policies and laws on this level regulate and support healthy practical actions. The government is responsible for establishing national policies and guidelines on health issues. Meanwhile, institutions are responsible for the development of operational policies based on the national policies. In the current study the Department of Health and the Department of Education determine what will be taught to the learners. It was found that the DBE endorsed a policy for Life Orientation and life skills as an official curriculum subject to be taught and assessed in schools. Hence, policies as developed by both the department of health and education may positively or negatively influence the uptake of the HIV and AIDS education programme.

6.6.1.3 Monitoring and evaluation of the programme

The findings of the study were that all the role players have the role of monitoring and evaluating the school-based HIV and AIDS prevention programme. The goal of this role is to monitor the effects of the programme as being implemented on the leaners. This role is applied in levels 3 and 4 of the SEM.

Community level

The role players have a duty to monitor the involvement of the parents, religious leaders and groups as well as all other community in the programme. Their response to the programme has to be monitored closely.

Organisational level

The school as well as the clinic is to provide an enabling environment to ensure monitoring and evaluations of the programme are done. In other words, the institutions have to provide for resources that will assist in the monitoring and evaluation of the programme. An individual should be identified as being responsible for monitoring and evaluation. This exercise is to identify gaps in the programme that may be closed while the programme is still running.

6.6.2 THEME 2: CHALLENGES WITH THE SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMMES

The study identified challenges experienced by the role players in the quest to implement the school-based HIV and AIDS prevention programme. Three major challenges were identified, namely departmental challenges, inadequate resources and personal barriers.

The identified challenges may be aligned to the organisational level of the SEM. But, as indicated in the overview of the model, there is interrelation of the challenges with the other levels of the model. One challenge is capable of affecting the other and ultimately they form a web of challenges affecting every level. The challenges identified in the current study incorporated all five levels of the SEM resulting in various challenging obstacles preventing the successful implementation of the programme. Generally, institutions and organisations play a pivotal role in the provision of any service. Ideally, the manner in which the service is provided should ensure an enabling environment for the success or failure of the programme. But, in this instance, the role played by the individual level, interpersonal level, community level as well as the public policy level may not be undermined. The risk factors associated with the other levels have an influence and is dependent on the risks identified on the organisational level as well. The following structure in Figure 6.1 illustrates all the challenges identified in every level of the SEM.

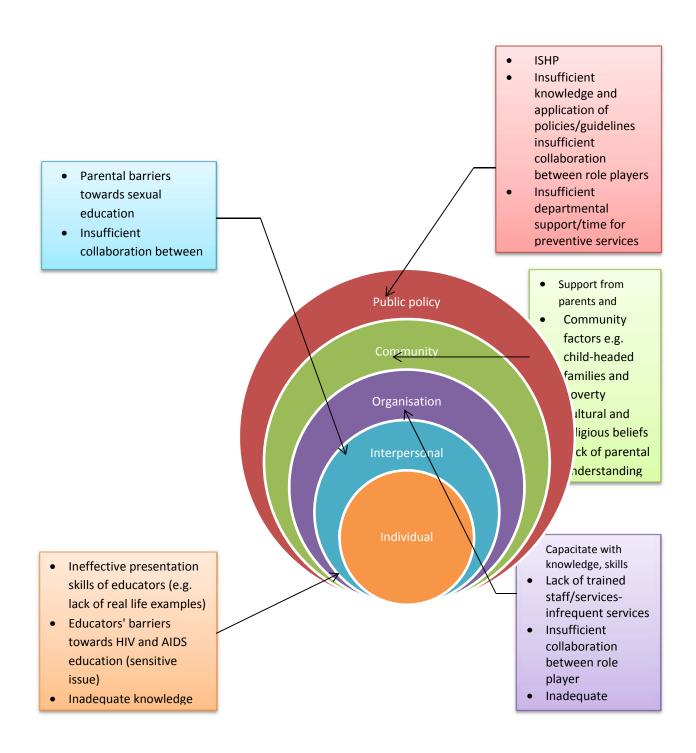


Figure 6.1 Alignment of challenges identified to all the level of the SEM

• Individual level

As indicated in section 6.2.1in this level three main characteristics of an individual are focused on. The study findings found that the role players lacked almost all characteristics marked as key in the inner circle level, namely the individual. The educators were found to use skills that were not effective. They were unable to express themselves and to use examples that would make the learners understand and realise that HIV and AIDS is a real life and debilitating disease. Another factor identified was the cultural and religious beliefs of the role players –it played a negative role in the programme implementation. Educators were found to have cultural and belief systems conflict with the programme expectations. The educators were forced to teach sex education which most of them felt was against their beliefs and cultures. They went to the extent of mentioning in their culture talking about sex with children is taboo. This is in line with the finding of Kuo, et al (2016:109), namely that discussing sex and teaching sexual education was definitely not allowed in certain cultural groups. This phenomenon may not only be associated with educators only, but nurses, learners, NGOs and other role players as well when considering they all stem from very diverse cultural and religious South African communities. Jones, et al (2013:13) confirms educators are uncertain on how to discuss sexuality with learners and some are also culturally reluctant to do SO.

The issue of inadequate knowledge was identified as another challenge. This will ultimately affect the accuracy of the information that is passed from the educators to the learners. Nurses also felt they needed continuous in-service training to keep themselves up to date with the latest developments in HIV and AIDS since much research has been done and new discoveries made in this field. Being more knowledgeable would assist them to pass current information to the educators as well as to learners who visited them at the clinic for youth-friendly services.

Interpersonal level

The relationships of the role players, learners with their families and people around them play an important role in enhancing or halting the progress of the programme. As the primary people in the lives of the learners receiving the programme, parents decide whether it is allowed for their children as learners to be exposed to the programme at school. The study findings showed there were clearly barriers from the parents' side towards sexual education at school. Some parents were against the teaching of sex education in schools as they believed it would encourage their children to experiment with what they were taught at school about sexuality. Parents also associated risky sexual behaviours among learners with the lessons taught in schools.

Another challenge was the communication between parents and their children with regard to sexuality. It was found to be totally inadequate. Most of the parents were not comfortable to speak to their children about sex let alone HIV and AIDS. Harper, et al (2014:139) support this finding by stating they found in some cultures parent-child communication about sexual matters was discouraged. Instead, parents preferred to take their children to the clinic and health centres for nurses to initiate talks about anything related to sex and sexual health issues.

Furthermore, the influence of peers in the programme was not investigated. Peers who focus on education and are knowledgeable about safe sex could assist with the HIV and AIDS prevention programme. After the parents, the next circle of people whom the learners may trust is their peers as they spend most of their time together and they therefore tend to communicate with them more openly and freely about anything and everything (Frantz 2015:5; Menna, Ali and Worku 2015:7).

Additionally, it was found that collaboration between parents and the other role players was not totally functional. Fortunately, nurses held occasional information sessions with the parents to clarify issues and misconceptions about sexuality education and the programme. Nurses used these sessions to introduce or talk about other sexual-related issues concerning adolescents and youths.

Organisational level

In this level of the SEM, the challenges related to the organisations' or the social institutions' rules and regulations for operations are discussed. The discussions centre on how or how well services are provided to an individual or group. The physical and human resources that enhance or halt the progress of the programme were identified in the current study. It was found that the role players were not adequately trained to roll out the programme to the schools. In the clinics there were no dedicated personnel who were allocated to run with the programme. The same situation was experienced with the school health services. Service provision was infrequent; when and where it was done depended on when the services were requested or whether there was an awareness programme running. In addition, minimal collaboration between the role players was exhibited.

The clinic and the health centre had no physical structure or adequate space to use for the running of the YFS. This was detrimental in that the expectations and standards for the YFS could not be achieved. Adding to the issue of resources, neither the school and clinic nor the community health centre had material resources they could make use of. They needed pamphlets, visual aids, posters, videos, television sets and various other aids to assist them with the teaching of the content subjects. The organisations were unable to provide them with such essential equipment

which could only contribute towards the success of the programme. Staff members attested to going around to other organisations requesting teaching aids to teach effectively. According to Maseko (2016: np) Mpumalanga's school health programme was battling with human, physical and financial resources to run the programme efficiently.

The issue of staff shortages in the clinic and community health centre was also a challenge. The staff in the clinic had to run both the normal services of the clinic together with the YFS which they experienced as extremely challenging. In the schools, the challenge the staff members faced was that educators were not given an opportunity to volunteer to teach Life Orientation as well as that they were given a lot of work on top of this subject. This was related to the belief organisations have that Life Orientation is not a difficult subject to teach neither is it an important school subject. These organisational challenges were also identified by De Klerk (2013:12-13).

Community level

In this level social, economic and physical environmental factors that determine the health status of the community are discussed. In the current study various social issues were identified; poverty and child-headed families greatly affected the efficiency of the programme. It was further found that with child-headed families, risky life styles as well as alcohol abuse became a way of survival for the youth. Poverty often leads to young children becoming involved with older men to get money to support their families.

The cultural and religious beliefs of the role players also negatively impacted on the uptake of the programme. The norms, values and belief system were an impediment to the success of the programme. Parents were not free to talk to their children about HIV and AIDS and sexuality and some of the educators had similar belief systems. The fact that the parents did not understand the school health programme in relation to HIV and AIDS was a further challenge. The information the learners received from their community negated the uptake of what the nurses, educators and NGOs were teaching them. In other words, the society in which the recipient and the facilitators of the programme live poses a threat to the success of the programme. The collaboration of role players is the solution. For the teachings and the programme to be accepted in the community, the programme implementers need to win the trust of the community members.

Public policy

Public policies can drive conflicts and economic disruption affecting the provision and uptake of programmes and services (Baral, Logie, Grosso, Wirtz and Beyter 2013:4). These authors state

policies and laws of any state or government provide the general framework for shaping the risk of the marginalised population as well as the general population.

In the study, factors found causing challenges in this level were policies that govern and direct the programme in the schools and in the health facilities. The findings of the study were that all the role players were not aware of the ISHP. This ultimately means all the role players were not aware of the expectations of this policy in their service delivery journey. Another alarming factor was that the institutions seemed to lack basic policies on HIV and AIDS; this made it difficult for the role players to function as guided by government prescripts. This may be related to the lack of appropriate communication from the government to the institutions with regard to policies and regulations guiding their practice.

Additionally, it was found that there was insufficient support by the government in relation to the provision of the services. The allocation of periods to Life Orientation was the main argument. The participants believed the government needed to show interest in the subject by prioritising it and providing resources that will facilitate the success of the programme. In conclusion, the public policy factors have been found to impact on the uptake of the school-based HIV and AIDS prevention programme.

6.6.3 THEME 3: SUGGESTIONS / NEEDS FOR HIV AND AIDS PREVENTION PROGRAMME

The participants in the study brought the following to the table as suggestions and needs to be considered in the implementation of the school-based HIV and AIDS prevention programme: the provision of adequate resources as well as identifying the appropriate target population to include in the implementation of the programme. The identified suggestions and needs will be aligned to the SEM as well.

Individual level

For the programme to be effective, the individual (in this case the various role players) must possess all the knowledge and skills they need to be able to run the programme efficiently and accurately. Their attitude towards the programme should be such that it allows for the roll out of the programme. The role players as well should be self-dedicated to the programme and trained to have and use all the skills needed.

Interpersonal level

The success of the programme was also identified to be in the hands of the family, the parents and the peers. The suggestions in this level were that parents need to be fully brought into the programme. Enhanced communication between parents and their children on issues related to sex and sexual health matters is essential. Additionally, the role players need to start using various methods of passing on correct information whereby the peers should be incorporated into the programme. A referral system for the parents and the peers should be established to ensure the continuity of service provision. The role players need to collaborate continuously with the parents and all in the social circle of the learners.

Community level

In the community level, all the key stakeholders must be involved in the programme implementation. The community leaders, social groups in the community as well as the religious leaders and groups should become involved in the programme. The support and involvement of these community stakeholders will increase the confidence of the recipients of the programme and ultimately the uptake of the programme. UNESCO (2016:10) endorses the involvement of parents, community members and religious leaders as all will convey the same truthful message to those who need the information. There will be no conflicting information passed on to the learners.

Organisational level

The organisation has a major role in the success of the programme because it is the custodian of the programme. All resources and needs of the programme have to be supplied by the organisation. The institutions have to ensure they have suitable and dedicated staff for all the services to be rendered in the programme. Attention should be given to pre-service training of the role players to assure they have the knowledge and skills needed to run the programme (UNESCO 2016:10). The institutions has the role to empower all role players with knowledge and skills, this can be done through in-service training. Educators must be suitable and prepared to understand the subject is a priority subject. Training must also be given to all role players at regular intervals and when necessary.

The institutions have the responsibility of providing resources to the role players to successfully implement the programme. The organisations have to supply the role players with policies and all the guidelines related to their functioning. According to Baral, et al (2013:4), policies determine the allocation of economic resources for education, healthcare, job training, financial assistance as well as the HIV and AIDS prevention programme. In terms of other resources, they need to supply role players with all the teaching aids needed. The physical environment as well should be

adequate, that is, the department of health have to provide adequate and appropriate venues for teaching and rendering the YFS. The institutions also have to foster involvement of SHS, the multidisciplinary team and the NGOs.

This collaboration and involvement of all the stakeholders will foster continuity of care as well as referral to other services as the need arises. Educators must always form part of the role players. The governing bodies of the institutions have to further ensure that they correctly identify the right target for the programme. They have to ensure that the programme is also rolled out from primary schools through to high school. This will increase the opportunities for all the learners to be exposed to the programme.

Additionally, it is the responsibility of the institutions to set up a dedicated monitoring and evaluation system for the HIV and AIDS prevention programme in schools, clinics and CHCs. This will assist in monitoring the progress, the effects of the programme as well as for identifying gaps.

Public policy

As indicated above, public policies and laws provide a framework for shaping the functioning and risk for the role players and population. When policies are adequately communicated to all the role players and institutions they are intended for, it promotes the institutions' ability to provide the necessary preventive or harm reduction services. These policies will be passed to institutions and organisations as laws. Actions taken in accordance with these laws will encourage the uptake of the programme legally.

Hence, all the constituents must be empowered with all the knowledge and skills as stipulated in the policies. In this study all the role players in schools, clinics and CHC must be provided with the ISHP and be guided through it so they may be able to function effectively.

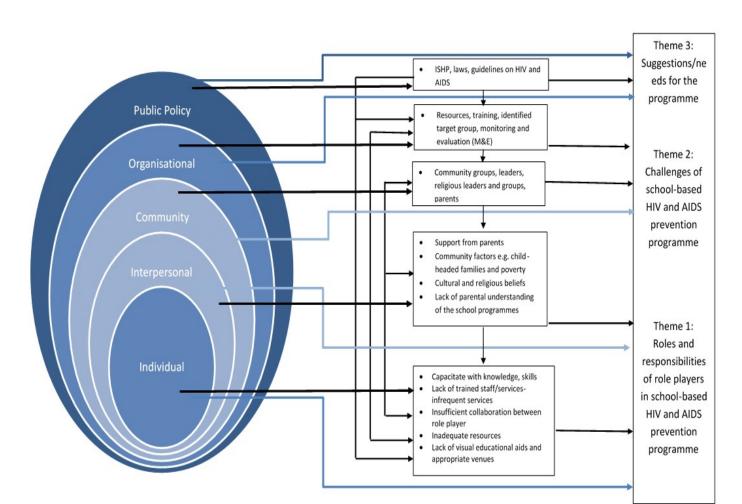


Figure 6.2 Presents a summary of the alignment of the themes and the SEM and interrelations.

Figure 6.2 Summary of the alignment of the themes and the SEM and interrelations

6.7 SYNTHESIS AND CONCLUSIONS OF THE FINDINGS WITH REFERENCE TO THE SEM

6.7.1 Individual level

Conclusion: The role players had insufficient knowledge with regard to policies and guidelines in relation to the implementation of the school-based HIV and AIDS prevention programme and other sexual and reproductive health services. They also lacked the presentation and facilitation skills and attitudes necessary to educate and impart relevant and accessible knowledge on HIV and AIDS prevention.

List of research project topics and materials

Recommendations:

- Empower nurses with relevant knowledge and skills with regard to the provision and establishment of YFS.
- Develop strategies to increase the behavioural skills of the nurses as this will result in a
 positive personal belief system on the prevention of HIV and AIDS.
- Work on building a positive attitude of all the role players with specific attention to their beliefs and values system.
- Enhance self-efficacy of the role players in an attempt to influence their attitudes regarding:
 - guiding policies for the provision of the school-based HIV and AIDs prevention policies; and
 - o roles as stipulated in the ISHP.
- Develop programme to intentionally work on improving the role players' readiness to change.
- The role players need to undergo training to be able to deliver good quality and efficient HIV and AIDS education. (Plan for training of all the role players).
- Reviewing of the content of the Life Orientation curriculum and life skills education in collaboration with all the relevant stake holders.

6.7.2 Interpersonal level

Conclusion: The inner circle of the learners was not fully involved in the programme. Lack of parental involvement and understanding of the school programmes was found to be a challenge. Peers were also excluded from the programme.

Recommendations:

- Involve the young people and peers at school as well as in the community to increase the
 relevance and effectiveness of the programme and address peer influence as well.
- Involve parents give them information on the school health programmes, the content of the sex education and the value of the youth reproductive services to obtain their buy-in and support for the programme.

- Create a social network platform to increase communication lines within the role players' circle.
- Plan regular meetings with stakeholders for feedback as well as for planning further activities.

6.7.3 Community level

Conclusion: There was a lack of collaboration and involvement with the community leaders and groups, religious leaders and groups, parents, community social groups, and all the other stakeholders. Norms, values, cultural and religious beliefs of the role players clashed with the programme activities and expectations from the role players.

Recommendations:

- Organise community-wide demonstrations and marches to increase the awareness of school-based HIV and AID prevention programmes.
- Involve and make use of community organised groups as well as community leaders to spear head the programme.
- Involve NGOs to support and train community groups and the other stakeholders as identified.
- Create a social network platform to increase communication lines within the role players' circle.
- Develop guidelines for coordination and collaboration of services and programme activities.
- Plan and implement capacity building programmes for all role players to assure they are all competent to perform their roles and are empowered to be efficient.

6.7.4 Organisational level

Conclusion: Institutions were unable to provide an enabling environment for the role players; policies and guidelines were not used to guide the provision of services in the institutions; the physical environment was not conducive for learning; resources (both human and material resources) for role players to facilitate learning were inadequate; a platform for collaboration of the

role players was not available; a monitoring and evaluation system for the programme was not available; a target group for the programme had not been adequately identified.

Recommendations:

The institutions, in other words the clinics, must provide an enabling environment for the effective implementation of the school-based HIV and AIDS prevention programme. This may be realised by taking the following actions.

- Increasing access and establishment of proper YFS in all clinics and healthcare centres.
- The establishment and provision of school health services in all schools (on-campus comprehensive health and wellness services).
- Establishing as well as adopting the health promoting models in all schools.
- Provision of a friendly, culturally competent environment.
- Integration of services that may be helpful in the implementation of the school-based HIV and AIDS prevention programme in schools.
- Allow nurses to lead the school-based HIV and AIDS education project in schools with the assistance of the educators and the NGOs.

Curriculum:

- Schools' needs have to be identified and well designed for correct and proper implementation of HIV and AIDS education.
- Ensure the HIV and AIDS prevention programmes are school-based and the educators are properly guided on the curriculum content to ensure effective teaching and improve the efficiency of the programme.
- o Review of current curriculum in collaboration with other stakeholders.

Environment:

- Ensure the school environment is physically, psychologically and socially supportive for HIV and AIDS education.
- Improve access to health services for the youth.

Provide support and establish referral systems and services for all role players.

6.7.5 Public policy

Conclusion: The Department of Education and Department of Health both did not prioritise the school-based HIV and AIDS prevention programme with the subject Life Orientation in particular not receiving the necessary attention and support. There was a lack of communication with the organisations in relation to policies and laws that govern and direct the functioning of the various role players. In the schools as well as clinics the ISHP functioning level was way below standard.

Recommendations:

- Give priority to key reproductive and sexual health services.
- Track policy and educate key decision-makers in the school-based HIV and AIDS programme system and structures on policy issues; assist the schools, health sectors and districts to access and implement policies, regulations, procedures and administrative acts.
- Offer technical assistance at all times to the lower levels.
- Develop a system to measure and assess the impact of the HIV and AIDS prevention programme in schools (school-based surveillance system) to track and monitor the progress of the programme as well as the school health policies and practices thereof.
- Monitor the application and acceptance of the HIV and AIDS prevention curriculum.

6.8 PRELIMINARY STATEMENTS

From the above alignment, discussions and synthesis of findings and the SEM, the following preliminary statements emerged. These statements will inform the guideline development process in Phase 2 of the study.

Table 6.3 Preliminary statements

SEM LEVELS	STUDY THEMES AND CATEGORIES	PRELIMINARY
		STATEMENTS
1. Individual	Theme 1: Roles and responsibilities of role players in school-based HIV and AIDS prevention programme • Provision of HIV and AIDS health services (nurses) • Provision of HIV and AIDS education (nurses, educators and NGOs)	Strengthening of the capacity of all local role players in relation to their role in school-based HIV and AIDS prevention and service programmes
	Theme 2: Challenges with school-based HIV and AIDS prevention programmes Ineffective presentation and facilitation skills of educators (e.g., lack of real life accessible examples) Insufficient knowledge of policies/guidelines relevant to school-based HIV and AIDS programmes and application thereof Cultural and religious beliefs and barriers Lack of parental understanding of the school HIV and AIDS prevention programmes Theme 3: Suggestions/needs for school-based HIV and AIDS prevention programmes	

	 Empower and equip all role players with knowledge and skills to fulfil their roles in school-based HIV and AIDS prevention programmes Continuously upskill educators with relevant knowledge, attitudes and techniques to effectively implement HIV and AIDS prevention programmes Ensure sufficiently trained and dedicated staff 	
2. Interpersonal	Theme 1: Roles and responsibilities of role players in school-based HIV and AIDS prevention programme • Ensuring collaboration (referral system) between role players/services Theme 2: Challenges with school-based HIV and AIDS prevention programme • Insufficient collaboration between role players • Cultural and religious beliefs Theme 3: Suggestions/ needs for school-based HIV and AIDS prevention programmes • Ensure collaboration between role players	Foster participation and involvement of parents and other community stakeholders to embrace cultural diversity and enhance the programme uptake
3.Community	Theme 1: Roles and responsibilities of role players in school-based HIV and AIDS prevention programme • Ensure collaboration (referral	Foster participation and involvement of parents and other community stakeholders to embrace

	avetem) hotuson rais	cultural diversity and
	system) between role	
	players/services	enhance the programme
	Monitor and evaluate the	uptake
	programme: educators' and	
	nurses' views of the programme	
	Theme 2: Challenges with school-based	
	HIV and AIDS prevention programme	
	The and Albo prevention programme	
	Community factors, e.g. child-	
	headed families and poverty	
	Insufficient collaboration between	
	role players	
	Cultural and religious beliefs	
	Parental barriers towards sexual	
	education	
	Guddallon	
	Theme 3: Suggestions/needs for HIV and	
	AIDS prevention programme	
	Involve community, church,	
	parents and nongovernmental	
	organisations(NGOs)	
4. Organisational	Theme 1: Roles and responsibilities of	
	role players in school-based HIV and	implementation of the
	AIDS prevention programmes	school-based HIV AND
	Provide HIV and AIDS health	AIDS prevention
	services	programme
	 Provide HIV and AIDS education 	
	Monitor and evaluate: educators', nurses' and NGOs' views on the	Develop a school-based
	nurses' and NGOs' views on the	surveillance system to
	parents' roles and responses	track, monitor and
	towards the HIV and AIDS	evaluate progress of the
	programme	programme and

common practices

Theme 2: Challenges with school-based HIV and AIDS prevention programmes

- Insufficient departmental support/time for preventive services
- Health and education department priorities, e.g., Life Orientation not a priority
- Lack of visual educational aids and appropriate venues

Theme 3: Suggestions/needs for HIV and AIDS prevention programme

Adequate resources:

- Appropriate educational aids and venues; Department of Health to provide appropriate educational resources
- Dedicated prevention programmes with indicators for monitoring and evaluation (M&E)
- Consistent involvement of school health teams (SHS)
- Involvement of multidisciplinary team
- Involvement of nongovernmental organisations (NGOs)
- Target population
 - o Include primary schools
 - o Include educators

5. Policy/enabling	Theme 1: Roles and responsibilities of	Increase access to all
environment	role players in school-based HIV and	relevant practice policies
	AIDS prevention programme	and guidelines
	 Providing HIV and AIDS health services Providing HIV and AIDS education 	
	Theme 2: Challenges with school-based HIV and AIDS prevention programme	
	 Insufficient knowledge of policies/guidelines and application thereof 	
	Theme 3: Suggestions/needs for school-based HIV and AIDS prevention programme	
	Continuously upskill educators with relevant knowledge, attitudes and techniques to effectively implement HIV and AIDS prevention programme	

6.9 CONCLUSION

In this chapter, it was indicated that ecological models contribute to understand how people interact within their environments. This understanding could be used to develop effective multilevel approaches to improve health behaviours of selected target populations. This may, additionally, improve the success of HIV and AIDS prevention programmes in public health.

The three themes that emerged from the study were aligned to the five levels of the SEM. The interrelations of the individual, interpersonal, community, organisational and public policy levels were demonstrated by means of diagrams and figures. After synthesising the alignment,

preliminary statements were formed in line with the recommendations made in the concluding synthesis. This chapter marks the end of Phase 1. Phase 2, the Delphi technique and process to develop the initial statements into guidelines for effective implementation of school-based HIV and AIDS prevention programmes will be discussed in Chapter 7.



CHAPTER 7

DEVELOPMENT AND REFINEMENT OF GUIDELINES FOR LOCAL ROLE PLAYERS TO IMPLEMENT THE SCHOOL-BASED HIV AND AIDS PREVENTION PROGRAMME

7.1 INTRODUCTION

This chapter is dedicated to Phase 2 of the study. Therefore, Chapter 7 focuses on the development of guidelines for local role players to implement the school-based HIV and AIDS prevention programme as envisioned by the Integrated School Health Policy (ISHP). Phase 1 (Chapters 4, 5 and 6) centred on exploring and describing the roles and challenges of local role players in implementing the school-based HIV and AIDS prevention programme Suggestions and needs to ensure effective and efficient implementing of the programme were explored. The empirical findings of phase 1 were aligned with the concepts of the SEM which led to the formulation of a set of preliminary guidelines. The development of the preliminary guidelines is discussed in this chapter.

According to Qaseem, Forland, Macbeth, Ollenschlager, Phillips and Van der Wees (2012:530), guideline recommendations should be clearly stated and based on scientific evidence of benefits. In the current study, the researcher used the findings of this study to draft the preliminary guideline statements as stated in Chapter 6. The researcher further aligned the evidence with the SEM which produced six preliminary guidelines.

7.2 MERGING OF ADAPTED SEM MODEL AND FINDINGS TO INFORM THE GUIDELINE

In Chapter 6, section 6.6, the three major themes of the study were merged and aligned with the five (5) concepts of the Social Ecological Model (SEM) (refer Figure 7.1). In Theme 1, the roles which were aligned with the concepts of the model were the provision of HIV and AIDS health services; the provision of HIV and AIDS education, collaboration with other role

players, and monitoring and evaluation of the programme. These concepts were discussed exposing the interrelatedness of the concepts in each role. It denotes the importance of recognising all the individuals who in the current study were the role players; the interrelationships between the role players and the learners; its impact on the programme uptake; the influence and role of the community on the implementation of programme; and the organisation and impact of the policy on the implementation of the school-based HIV and AIDS prevention programme.

The various elements of the themes and concepts of the SEM were merged to form a framework to guide the development of the guidelines. The adapted framework was used to develop guidelines to implement the school-based HIV and AIDS prevention programme in high schools and was efficiently implemented by all the responsible role players.

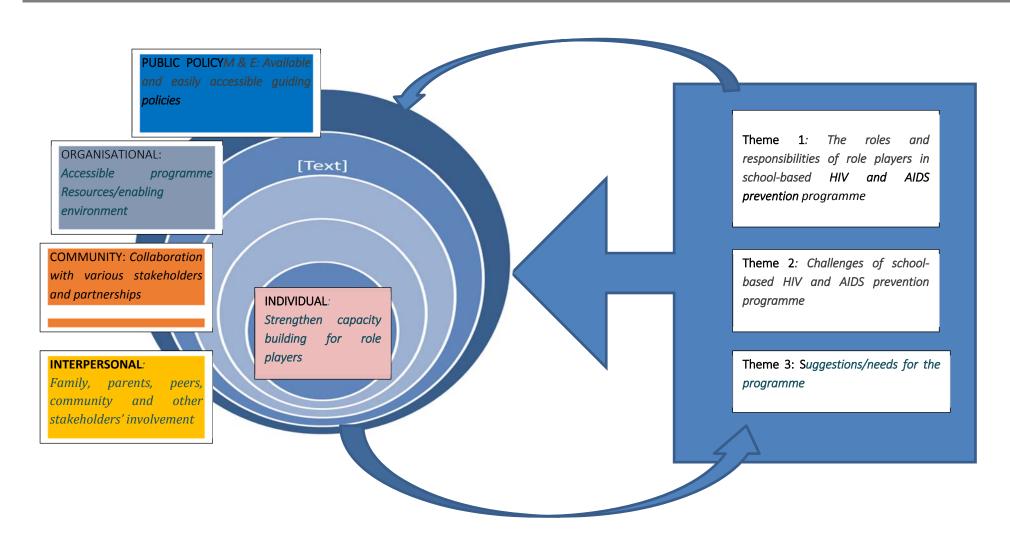


Figure 7.1 Adapted CBS's framework for implementing the school-based HIV and AIDS prevention programme

7.3 DEVELOPMENT OF THE GUIDELINES

The WHO (2012c:1) defines guidelines as "recommendations about health interventions whether they are clinical, public health or policy recommendations which are systematically developed evidence-based statements to assist providers, recipients and other stakeholders to make informed decisions about appropriate health interventions" (WHO 2003:2). A recommendation provides information about what policymakers, healthcare providers or patients should do. It implies a choice between different interventions which have an impact on health as well as implications for the use of resources. Guidelines are recommendations intended to assist providers and recipients of healthcare and other stakeholders to make informed decisions (WHO 2012c:1, NICE 2014:11). In the current study, the guidelines developed served as recommendations aimed at bridging the gap between the findings of this study and the improvement of the implementation of the school-based HIV and AIDS prevention programme.

According to the WHO (2012c:1), internationally recognised standards and methods for guideline development have been adopted. These standards and methods are to ensure that the guidelines are free from bias and meet public health needs. The principles adopted by the WHO states recommendations are based on a comprehensive and objective assessment of the available evidence, and the process used to develop the recommendations is very clear. Similar principles have been adopted by NICE. According to NICE (2014:14), one of the key principles for developing guidelines insists guideline recommendations need to be based on the best available evidence. NICE (2014:30) further states for some guidelines, a conceptual framework may be used to help define the key issues involved in a broad topic area as well as to specify where more focused and clearly defined topics fit in. They add topics are mapped onto the vectors of causation outlined in the framework, i.e. population, environment, society and organisations and cross-classification according to the potential level of intervention which is population, community, organisation, family and individual. The framework may also be used to construct a logic model.

In the current study, the principles were compatible as stated by the WHO (2011:1) and NICE (2014:14, 30). The principles instruct using the best available evidence and robust and transparent methods to develop recommendations that are clearly written. The recommendations need to further involve people affected by the guideline (including stakeholders and organisations that represent the interests of people using services, their family members, carers and the community; bodies that represent professionals and practitioners working in health and social care, local authorities, providers and commissioners of care and services; commercial industries and research

bodies); advance equality and make social value judgements which consider the feasibility of implementing the recommendations (WHO 2011:1; NICE 2014:14,30).

The guidelines developed in this study is a constituent of information development aimed at improving the effectiveness and efficiency of the implementation of the school-based HIV and AIDS prevention programme in high schools. The body of evidence on which the guidelines of this study were based, was obtained from the discussions, literature support and the alignment with the theoretical framework used in this study as discussed in Chapters 5 and 6 respectively. Dickoff, James and Weidenbach (1968:415-35) identified six elements to consider in the development of practice theory, namely: agent, context, recipient, dynamic, procedure and purpose. Instead of contextualising the six elements and applying them to the development of the current guidelines, the current researcher identified 5 principles from a variety of documented attributes and characteristics.

7.4 GUIDING PRINCIPLES USED FOR THE DEVELOPMENT OF GUIDELINES

For the quality of any guideline to be recognised, there are principles or attributes that must be recognised and followed. The common use of these characteristics and/or attributes can facilitate acceptance and implementation of guidelines developed. For quality purposes, the Scottish Intercollegiate Guideline Network (SIGN) criteria formed the basis of the development and validation of the guidelines in the current study. SIGN was established in 1993 with the objective of improving the quality of healthcare for patients in Scotland by reducing variations in practice through the development and dissemination of national clinical guidelines containing recommendations for effective practice based on current evidence.

Validity: The guideline is based on scientific evidence of analysed data as well as a model. The correct interpretation of the data collected to support the implementation of the guideline is of importance for the guideline to be valid (Rosenfeld and Shiffman 2009:13). In the current study, the analysed data was supported with literature and aligned to the SEM and subsequently the preliminary guideline statements were drafted. Therefore, in this context, the guideline will assist role players to implement the school-based HIV and AIDS prevention programme efficiently.

Reliability: The guideline will produce similar results if applied in similar circumstances given the same evidence and methods for development. According to SIGN (2015:2), guidelines should yield similar results when applied to similar circumstances.

Clarity: This principle is based on the assurance that the guideline is clear, precise, logical, simple and unambiguous. The terms used in the guideline are clearly defined and the intentions of the

guideline clearly stated. The process of developing the guideline is also clear and easy to follow. In the current study, the panel of experts reaffirmed the clarity of each guideline in the three consecutive rounds.

Applicability: The fundamental attribute of applicability is that the guideline should explicitly define and state the target population. Guidelines must be specified to the population that will benefit most from its use (Holy, Salmond and Saimbert 2017:342). The guideline must be easy to apply as well. Guidelines implementation must be monitored and evaluated to measure the impact on the targeted population. In this study, the guidelines were presented for critique to a panel of experts to review and measure its applicability. The guidelines were developed for local role players involved in the implementation of the school-based HIV and AIDS prevention programme, viz school health nurses, ward based outreach teams (WBOT), educators, parents and NGOs.

Flexibility: The guideline may be adapted to suit diverse contexts, e.g., geographical or cultural. Hence, the guidelines must be flexible and adaptable to suit the diverse local settings and the contexts which could be geographical, social or cultural.

7.5 THEORETICAL GUIDANCE ON GUIDELINES DEVELOPMENT AND REFINEMENT

The researcher drafted the guidelines for role players to implement the school-based HIV and AIDS programme guided by the AGREE II instrument and the findings of this study, the discussions with literature support, the discussion of the findings based on the SEM as well as the conclusions thereof as described in Chapters 4, 5 and 6. A set of six guideline statements were drafted.

According to AGREE II (2013:1), the potential benefits of guidelines are only as good as the quality of the guidelines themselves. Therefore, appropriate methodologies and rigorous strategies in the guideline development process are important for the successful implementation of the resulting recommendations. AGREE II (2013:4) identified stakeholder groups who were familiar with and could utilize the AGREE II instrument. Guideline developers were identified to use it for the purpose of following a structured and rigorous development methodology. An internal assessment was also done to ensure that their guidelines were sound. In the current study, the researcher used the modified AGREE II for the purposes indicated above. To ensure that the guidelines would be of quality and may be recommended to be used in practice, various domains were analysed and applied (AGREE II 2013:10) (Refer to Table 7.1).

Table 7.1 Domains according to AGREE II

Domains	Focus of the domains	Application of the domains to	
		the study	
Domain 1: Scope and	The domain is concerned	In this study the aim of the	
purpose	with the overall aim of the	guidelines was to provide	
	guideline and the target	guidance about the	
	population.	implementation of the school-	
		based HIV and AIDS	
		prevention programme.	
		The scope or the target	
		population would therefore be	
		the local role players involved	
		in the implementation of the	
		programme, viz the nurses	
		(primary healthcare and school	
		health nurses), educators,	
		parents and NGOs.	
Domain 2: Stakeholder	This domain focuses on the	The guidelines in this study	
involvement	extent to which the	were based on the data	
	guideline was developed by		
	the appropriate	•	
	stakeholders and	the NGOs. In addition, during	
	•	the Delphi process of refining	
	intended users.	the guidelines, experts in the	
		field of health, school health,	
		HIV and AIDS, Life Orientation	
		curriculum implementers, education specialists and	
		education specialists and NGOs formed part of the panel.	
		NOO3 formed part of the parter.	
Domain 3: Rigour of	Rigour of development	Data was collected from the	
development	relates to the processes	various role players, the data	
	used to gather and	was analysed, discussed and	
	synthesise the evidence as	supported by related and	

	well as methods used to	relevant literature; additionally,	
	formulate recommendations	a theoretical framework was	
	and update them.	used to strengthen the findings.	
Domain 4: Clarity of	This domain deals with the	The language used in the	
presentation	language, structure, and	guidelines is simple, clear and	
	format of the guideline.	specific.	
Domain 5: Applicability	Applicability pertains to the	The guidelines were applicable	
	, .		
	likely barriers and	to the target population as they	
	facilitators to	were based on the findings	
	implementation, strategies	from the target population.	
to improve uptake, and		Nonetheless, the resource	
resource implications of		implications to the various	
	applying the guideline.	organisations to implement the	
		during the implementation.	

7.6 METHOD OF GUIDELINE DEVELOPMENT, CONSOLIDATION AND REFINEMENT

7.6.1 Research design: The Delphi technique

In the current study, for the research design the researcher used the Delphi technique to develop and validate the guidelines. The aim of Phase 2 was to develop, refine and validate the guideline statements (as discussed in Chapter 6)as well as to obtain consensus on the drafted guidelines.

According to Peeraer and Van Petegem (2015:50), the Delphi technique is "an anonymous multiround surveying technique for gathering and synthesising experts' and stakeholders' judgements
and opinions on matters relating to complex policy considerations". De Villiers, De Villiers and Kent
(2005:639) indicate in their study that the Delphi technique is the essence of consensus forming.
The Delphi technique is widely used and accepted as a method for gathering data from participants
within a domain of expertise (Ab Latif, Mohamed, Dahlan and Nor 2016:89). Furthermore,
McMillan, et al(2016:661) affirms the Delphi technique is commonly used to develop guidelines
with and for health professionals. In the current study, the Delphi technique was the appropriate
method to use since health professionals were used to develop the guidelines.

Vernon (2009) as cited in Grove, et al (2013:435) describes the Delphi technique as a technique that measures the judgments of a group of experts for the purpose of making decisions, assessing priorities or making a forecast. The Delphi technique is a research approach used to gain consensus through a series of rounds of questionnaire surveys, usually two or three, where information and results are fed back to panel members between each round (Hanafin 2004:4). Moreover, Hsu and Sandford (2007:1) refer to the Delphi technique as a method for attaining convergence of opinion regarding real world knowledge solicited from experts within certain topic areas. They further explain the technique as "a group communication process which aims to achieve convergence of opinion on a specific real world issue".

For the current study, a modified Delphi design was used to solicit consensus from the experts on the drafted guidelines. According to Avella (2016:311), a modified Delphi is the process whereby the initial alternatives in response to the researchers' questions are carefully selected before being provided to the panel. These types of designs do not typically consult the expert panel to generate answers to Round 1 question. Avella (2016:312) reiterate that in the modified Delphi, the researchers collect the initial answers to the questions through other means and present them to the panel to begin the process of seeking consensus.

This explanation of the modified Delphi design has the same meaning as the description of the classical Delphi described by Van Zolingen and Klaassen (2003:318). The classical Delphi is aimed at obtaining stability in responses among the experts on a specific issue (Van Zolingen and Klaassen2003:318). In the current study, the researcher conducted a series of interviews with individuals and groups outside the study panel, discussed and summarised the results and then presented them to the panel as a set of draft guidelines. (Refer to Chapters 3, 4, 5 and 6). This method is in line with the modified Delphi although the main aim was to reach an agreement on the set of draft guidelines. Analytically, the researcher used aspects of both the classical Delphi and the modified Delphi for Phase 2 of the current study.

The main objective of using this method to develop guidelines was to use the collected data from all the role players and obtain input from the experts in a group decision making setting. This would ensure that the guidelines were in line with the expectations of the experts in the field of HIV and AIDS prevention in schools. Brett, Staniszewska, Simera, Seers, Mockford, Goodlad et al (2017:3) agree with the following characteristics Mckenna (1994:1222) determined as of central importance in the Delphi technique: data is obtained from a panel of experts; no face to face meetings occur among the experts; a sequence of interviews is used; consensus of opinion emerges in a systematic manner; anonymity on responses is guaranteed; patterns of agreement are determined;

and two or more rounds are used with a summary of the previous round's results communicated. The process in the current study met all of these characteristics of the Delphi technique. A panel of experts was used for the development of the guidelines. There was no face to face meeting between the experts; instead, emails were used to communicate with them. Anonymity was maintained as experts did not know each other and they were also unaware of the responses of all the other experts.

The main advantage of the Delphi design is achieving consensus in areas of uncertainty as well as in situations lacking in relationship. The Delphi technique provides anonymity to respondents, a controlled feedback process thus offering freedom of expression to all panel members (Hanafin 2004:5; Avella 2016:315; Ab Latif, et al 2016:91). Recruitment of panel members are not restricted by geographical boundaries owing to modern technology providing ways for electronic means of communication; thus, international views on issues of public health may be obtained with ease (Shariff 2015:2; Avella 2016:315). Four advantages, namely anonymity, iteration, controlled feedback, and statistical aggregation are emphasised by Skulmoski, Hartman and Krahn (2007:2) anonymity encourages participants to express opinions freely without pressure to conform to the views of the group; iteration allows participants to change their views as the data collection progresses from one round to the next; controlled feedback provides an opportunity for Delphi participants to clarify or change their views; and statistical aggregation which allows for a quantitative analysis and the interpretation of data. Central to this study and the key advantage of the Delphi technique is that it has a potential to recognise and acknowledge the contribution of each participant (Hanafin 2004:8; Shariff 2015:2). The contribution made by each expert in this study was of great value in the validation of the guidelines. The broadened approach to the four advantages highlighted by Skulmoski, et al (2007:2) affirmed using the Delphi technique would advance the candour of experts to formulate or appropriate thorough and comprehensive ideas and feedback so that guidelines could be developed for use by all stakeholders. Prioritising formal education on HIV and AIDS has to be maintained as an on-going process and should remain available over the course of a lifetime (Lindberg and Maddow-Zimet 2012:336).

Conversely, the Delphi design has some disadvantages. One potential disadvantage may lie with the researcher imposing her or his own preconceptions to the expert panels –more specifically with regard to the modified design. This may be avoided if the researcher recognises her or his role as that of a facilitator and not a contributor. Low responses and time factors are also major issues when using the Delphi techniques (Shariff 2015:3; Ab Latif, et al 2016:91). The low response rate is mostly related to the distribution of the questionnaire, of which emails were used and technological failures may not be overruled unlike when interviews are done, the response

percentage is very high. Experts are often given a time frame to have responded by and mostly the participants have to be reminded to send back their responses.

Practically, the Delphi process involves the following steps: selection of the participants and sampling; sample size; negotiating access to the participants; number of rounds; data collection; data analysis; ethical measures; validity and reliability as well as measures to ensure the trustworthiness of the findings.

7.6.2 Research methodology

In this section the research method followed in Phase 2 is presented and discussed. Attention is paid to the (selection of the participants); data collection (tools and process); the data for each of the three rounds; and the presentation of the developed guideline. In section 7.6.2.1 the selection of participants is addressed fully. This includes the sample size in section 7.6.2.1.1 and negotiating access to participants in section 7.6.2.1.2.

7.6.2.1 Population and sampling(selection of participants)

The key to a successful Delphi study lies in the meticulous selection of suitable participants because the end result is very much dependent on the knowledge and cooperation of the panellists (Gordon 1994:5). According to Hsu and Sandford (2007:3), the selection of Delphi participants is in general subjected to the disciplinary areas of expertise required by the specific issue under investigation. In this study, the population frame comprised of experts from the education sector, HIV and AIDS prevention experts in schools as well as health professionals in health promotion. In the context of the current study, a single heterogeneous panel of experts was selected. This was prompted by the nature of the school-based HIV and AIDS prevention programme which is multidimensional, and an aspiration to create a set of guidelines which may be used in the province.

According to Linstone and Turoff (2002:65), the following are the three main ingredients for creating a successful panel:

- stakeholders those who are or will be directly affected;
- experts those who have an applicable specialty or relevant experience;
- facilitators those who have skills in clarifying, organising, synthesising, stimulating and, when it seems appropriate, individuals who can supply alternative global views of the culture and society.

The researcher selected a group of experts in education, in school health as well as in the health profession to be on the panel. This is in line with the aforementioned three principal ingredients. The researcher purposively identified a few experts and then used snowball sampling to identify and recruit more experts to participate in Phase 2 of the study. The Delphi participants met four requirements which rendered them suitable candidates: they were all skillful in and had specialised knowledge of the issues under investigation; their capacity and willingness to participate; all had sufficient time to participate in the Delphi; and they exhibited effective communication skills (Adler and Ziglio (1996) cited in Skulmoski, et al 2007:10).

7.6.2.1.1 Sample size

According to Mullen (2003:41), the number of experts to be used in a Delphi study is reported to be varied and non-prescriptive. McMillan, et al (2016:655) state there is no standard method to calculate the size of the panel. Gray (2016:92) supports a small number by mentioning that Delphi studies do not need large numbers of participants for validity. McMillan, et al (2016:655) suggests a sample of 15 experts as adequate, although a larger sample may be used. Skulmoski, et al (2007:10), however, remind researchers a number of factors should be considered in deciding on the size of the sample. The size may range from a minimum of four to thousands depending on the nature of the topic under study (Skulmoski, et al 2007:10). According to Shariff (2015:3), the minimum sample size is 10 as a smaller size does not generate enough ideas. Because the sample size is not set, and after considering the various viewpoints of the mentioned researchers, a purposive heterogeneous sample of 20 experts was recruited for the purpose of the current study. Although 20 experts were sampled and recruited, the panel in Round 1 consisted of 13 participants; there were 12 on the panel in Round 2, and 13 participants in Round 3. Participation for the entire study consisted of 13 unique participants, regardless of the round.

Table 7.2 provides a summary of the descriptive information of the experts who took part in the development of the guidelines in the current study.

Table 7.2: Descriptive information of the panel of experts

SERIAL	POSITION	OCCUPATION	EXPERIENCE
NO			
1.	Chief director hospital services	A medical doctor and specialist in obstetrics and gynecology.	10+ years
2.	Chief director district health services	Professional nurse	10+ years
3.	Director school health services (national)	Professional nurse	10+ years
4.	Director school health services and HIV and AIDS prevention programme (provincial)	Professional nurse	10+ years
5.	Senior lecturer	Professional nurse	10+ years
6.	Senior lecturer	Professional nurse	10+ years
7.	Public health specialist	Educator, public health specialist and medical doctor	10+ years
8.	Researcher	Researcher NGO	10+ years
9.	School health services officer	Professional nurse	10+ years
10.	Life skills curriculum implementer	Educator, curriculum implementer officer	10+ years
11.	Life Orientation educator	Educator, life skills trainer	10+ years
12.	Life skills programme developer for education	Public health specialist NGO	10+ years
13.	Social worker	Social worker	5 years

The researcher used various strategies to access and to negotiate with the participants to be part of the panel of experts during this phase. The following section addresses the strategies used to negotiate access to the participants:

7.6.2.1.2 Negotiating access to participants

Negotiating access involved several strategies such as telephonic conversations, face to face verbal discussions, website searches, discussions with people running NGOs in the province, personalised invitations and reminder emails.

Telephonic conversations: The researcher telephonically extended invitations for participation to all experts identified and referred to by others from both governmental and non-governmental sectors in education, health, community and academic institutions. Other identified experts were sent personalised invitations via emails.

Website searches: The researcher conducted website searches for experts in school health and HIV and AIDS prevention programmes. The searches yielded some results, and the researcher wrote personal emails to the identified potential candidates inviting them to serve on the panel of experts.

Reminders: In cases where responses were not received, the researcher sent reminder emails even to those whose invitations bounced back. Responses were received; however, some declined to participate citing heavy workloads while others indicated lack of experience in the formulation of guidelines.

7.6.2.2 Data collection

The data collection tools and the process of data collection will be discussed in sections 7.6.2.2.1 and 7.6.2.2.2 respectively.

7.6.2.2.1 Data collection tools

The researcher compiled closed-ended guideline statements that addressed the empirical data collected in Phase 1 of the study. The compiled guideline statements served as the questionnaire to collect data in this phase. Clear instructions were given on how to use the tool. Each guideline statement was to be rated on a four-point Likert scale for validity, reliability, flexibility, clarity and applicability. The rating scale items included were:

- 1= Strongly disagree
- 2=Disagree
- 3=Agree
- 4=Strongly agree

Jamaloodien (2014:12) justifies the use of a tool based on the Likert scale by stating it would result in a more accurate reflection of research evidence in guidelines. Giannarou and Zervas (2014:66) as well mention questionnaire design- which refers to the Likert scale as one of the most fundamental issues in Delphi application. A space for the experts to write comments and make suggestions was provided on the tool. After the tool was compiled, the researcher piloted it before the actual process of data collection would commence.

Piloting the tool

According to Fox and Bayat (2012:102), the best way to determine whether a research instrument is adequately designed, is to pretest it. Gray (2016:94) provides evidence that doing a pilot study is essential if one wants to determine whether the data collection tool is good or of a standard that it will actually render relevant, clear and insightful data about the topic. Gray conducted a pilot study before attempting the main study. He found piloting the tool was an immense help to determine whether the survey instrument he intended to use in his main research would be valid and if the instructions and questions were clear, simple and understood by the participants. Powel (2003:378) indicates that pilot testing is optional, but for the purpose of identifying ambiguities and improve feasibility of the administration, it is useful. In this study, the pilot round was done to determine whether the tool was clearly understandable, unambiguous and feasible. A purposive sample of five experts was selected to pilot the tool. The tool was developed from the guideline statements in Chapter 6. In this study the pilot round was done to check for problems and correct areas of misunderstanding (Fox and Bayat 2012:102).

The comments of the experts advised the researcher to define the target group as the criteria for clarity requires. The tool was then refined as per suggestions and comments of the experts.

7.6.2.2.2 Data collection process

Before explaining the data collection process, it is of value to discuss the process of deciding on how many rounds of reiterations should be done.

Number of rounds

Skulmoski, et al (2007:11) asserts the number of rounds is variable and dependent on the purpose of the research. The purpose of the current study was to obtain consensus on the drafted quidelines for the role players involved in the implementation of the school-based HIV and AIDS prevention programme. According to Mullen (2003:46), literature advocates the number of rounds can range from two to four or more if consensus is not easily achieved. The number of survey rounds is usually decided in advance and it depends upon the level of disagreement expected. Aronson, Janke and Traynor (2012:2) and McMillan, et al (2016:658) agree most studies use two rounds but occasionally only a single round can suffice to achieve consensus. These authors further state in the modified Delphi process, more than two rounds increases panel attrition and therefore it is rarely done. In the current study, the researcher initially decided on three to four rounds. The decision on the number of rounds was based on that the researcher anticipated having a large and heterogeneous number of experts taking part in the study. She later realised the number of experts recruited was small to manage the diverse judgements and chose the three rounds modified Delphi process. According to Shariff (2015:3), each of the three rounds has a certain purpose. In round one (thesis stage) the purpose is to create ideas. In round two (antithesis stage) to review and evaluate the ideas are reviewed and evaluated against the group summaries and in round three (synthesis stage) the ideas are re-evaluated to arrive at a consensus.

The data collection process for the three round modified Delphi technique was done over a three-month period, from September 2017 to December 2017. The tool was sent via email to the 20 identified experts together with the formal invitation to take part in the study as well as the information leaflet and letter of consent (refer to Annexure B). The guideline development process took place over a number of rounds during which experts rated and commented on the statements and gave justification for their comments on the draft guidelines. Experts were allowed to suggest changes to modify the statements in areas considered to be important for the implementation of the school-based HIV and AIDS prevention programme. Towards the end of the deadline for each round, the researcher sent a letter of reminder to each expert. Each expert was given a code, e.g., Expert 1, for the purpose of tracing the responses which eased the process of data analysis. The details of the process were also shared with the panellists by way of feedback. Responses

gathered in one round were provided to the panellists in subsequent rounds by way of a revised questionnaire and feedback (Refer to Annexure I).

In between the rounds, the researcher had an opportunity to incorporate the comments of the panel and revise the guidelines. This process was stopped after a predefined criterion was reached enabling the group of experts to achieve a consensus forecast on the guidelines (Grove, et al 2013:436; Hsu and Sandford 2007:2). For the purpose of this study, the researcher considered 80% as the consensus point. This meant that the panel had reached agreement when 80% of the experts agreed with the drafted guideline statements.

The first Delphi rounds focused on the development of guideline statements and consensus building. Round 2 focused on the evaluation of the revised guideline statements and building consensus, while the last round was to confirm the experts' final agreement on the guidelines. The three iteration rounds will be described after the overview of how data analysis was done in the current study.

7.6.2.3 Data analysis

There are two purposes for analysis in a Delphi study. First, the analysis should provide feedback between rounds for respondents and, secondly, it should be able to identify when consensus has been reached. According to Shariff (2015:4), data analysis in Delphi can be done in two ways - the qualitative data analysis and the quantitative data analysis. In a qualitative data analysis, the unstructured data from the questionnaire is transcribed, then analysed with relationships, patterns, similarities and differences identified and then grouped accordingly. Finally, the grouped concepts are developed into the second round questionnaire. On the other hand, in the quantitative data analysis, descriptive statistics are used to analyse the data. This is mostly used in the second and third round analyses because the questionnaires are designed to collect the nominal and ordinal data (Shariff 2015:4). The author reiterates that the nominal data examines the percentages in terms of percentage agreement while the ordinal data examines the measures of the central tendency and includes the means and level and dispersion level. In short, the statistical analyses are to measure the level of agreement related to the concepts in the questionnaire. Furthermore, the statistical tests relevant are the percentage agreement (PA), mean (M) and standard deviation (SD). The PA and M were relevant to the current study and were used but the SD was found to be irrelevant. In the current study the data analysis took place in a number of rounds as described above. Both qualitative and quantitative data analyses were done. Descriptive statistics were used to the mean and percentage agreement. Data analysis was done after each round and the results used to develop questionnaires for the next round.

The following schematic illustration in Figure 7.2 exhibits the guideline development process from Phase 1 to Phase 2.

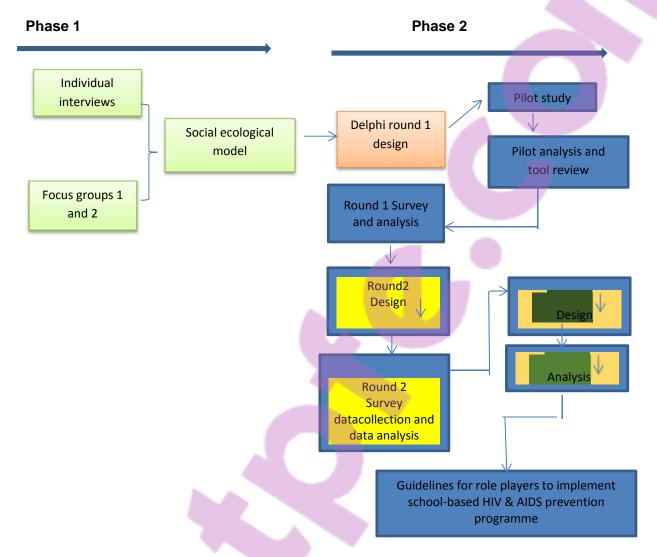


Figure 7.2 Schematic illustration of the process of the guideline development from Phase 1 through to Phase 2

Figure 7.2 shows the step by step process followed in Phase 1 which formed the source of the empirical data forming the basis of the preliminary guideline statements to the three iteration rounds of the Delphi process.

The three rounds process and its analysis follow next.

7.6.2.4 ROUND 1

Data collection and data analysis

In essence and traditionally, the first round of the Delphi serves as an introduction to the study (Keeney, Hasson and McKenna 2011:70). The first round is also considered as a gathering of the initial expert opinions to create a questionnaire and tool for Round 2. Twenty experts in the health, education, social welfare, HIV and AIDS as well as non-governmental sectors were identified and invited to participate in the study (refer to section 7.6.2.1). The data collection tool, information leaflet and consent forms were sent to all the experts by email. In this round the experts were requested to comment on and rate the guideline statements. Each guideline was to be rated for validity, reliability, clarity, applicability and flexibility. A space for comments and suggestions from the experts was provided. The rating scale proposed the following ratings applied:

- 1= Strongly disagree
- 2= Disagree
- 3= Agree
- 4= Strongly agree

The instructions on the tools requested the expert to rate the guidelines according to the criteria provided; mark the appropriate criteria block with an X; critically analyse and evaluate the guidelines; indicate any identified area of modification and write comments and/or suggestions in the space provided below the guidelines; and to return the completed questionnaire within three working days to the researcher after having received it. This agreed with the suggestion of Keeney, et al (2011;70) that in Round 1 the researcher sends an information pack to each panel member which includes a cover letter and instructions on how to complete the Round 1 questionnaire.

After three days, one expert requested via email to be excluded due to a busy schedule. After another two weeks, a reminder email was sent to the experts followed by telephone calls four days after the reminder email. Two other experts requested to be excluded due to heavy workloads. Of the 17 initially targeted experts, three responses were received. A second reminder was sent to the remaining experts after four weeks of sending the data collection package. A total of 12 responses were received in the following six weeks.

All 12 experts responded with feedback, although some exceeded the deadline. As indicated above, Round 1 allowed the experts to privately express their opinion on and rate each draft guideline statement. All the data received was consolidated, categorised, compared, manipulated

and analysed as suggested by Chilemba, Van Wyk and Leech (2014:1193-4). From the ratings, a quantitative analysis was done and a mean score was calculated for each guideline statement. The received suggestions and comments were collated and translated into refined guideline statements to be used as a data collection tool for Round 2. The researcher then documented the report and summary sheet that would serve as a feedback mechanism for all the experts.

7.6.2.5 ROUND 2

Data collection and data analysis

In this round the updated guideline statements were sent only to the 17 (from the original 20 experts) who chose to participate. The three experts who were left out were those who indicated in writing to the researcher before the first round they would be unable to be part of the panel. Delphi panellists received the updated guideline statements from Round 1. They were asked to evaluate the revised guidelines. In other words, they were to respond again using the same rating scale, and add their comments and/or suggestions regarding the responses. From the 17 panellists, 13 responses were received after three weeks. Two reminders were sent after a week had passed without any response from the four experts who did not reciprocate.

In analysing Round 2, areas of disagreement and agreement were identified after the guidelines were revised to incorporate the responses of the expert panellists. The main comments by the panellists stated they agreed with the guideline statements and the importance of the guideline was pointed out. The comments were analysed and the guideline statements revised based on the suggestions and comments made; however, a follow-up made to one of the experts' comments did not yield any positive response. Furthermore, a statistical analysis to determine the mean (M) and percentage agreement(PA) was done in this round. Consensus was already reached on some of the guideline statements in Round 2. A summary sheet indicating the agreement was prepared with the refined and agreed upon guidelines as a form of feedback and a tool to collect the last round of data.

7.6.2.6 ROUND 3

Data collection and data analysis

According to Mengual-Andrés, Roig-Vila and Mira (2016:6), the Delphi process is considered complete when consensus and stability levels have been defined since the application of another round would not provide significant variations in the results. In the current study, consensus was reached in Round 2. The purpose of this round was to confirm the judgment by the experts. This round also served as a feedback mechanism to the experts to inform them of the final outcome of

the process as consensus was already reached in Round 2 on some of the guideline statements. In Round 3, the final guideline statements were sent to the 13 experts who responded in Round 2.

The feedback and summary of the analysis from the comments and suggestions obtained in Round 2 were also emailed to the experts. The experts were asked to confirm their evaluation as analysed in Round 2. Of the 13 experts, 97% confirmed agreement via email while the remaining 3% revised their ratings and comments.

In the third round the Delphi panelists received a revised set of guidelines which included the items and ratings summarised by the researcher in the previous round. They were again requested to review their judgment based on the further revision of the guideline or specify reasons for remaining outside the consensus. In this final round the researcher distributed the list of the guidelines, their ratings, minority opinions and items achieving consensus. This round provided a final opportunity for participants to review their judgment (Underhill 2004:3;Hsu and Sandford 2007:3). These served as the final summary and feedback report to the group of experts.

The main comments by the panellists were that of agreeing with the guideline statements and pointing out the importance of the guideline. Moreover, all 13 confirmed that consensus had been reached. The percentage agreement (PA) was 95% and above, and the mean score (M) score 19.2 and above. The collective agreement among the expert panellists that consensus had been achieved defined the end of the iteration rounds and guidelines were developed and validated.

7.7 PRESENTATION OF DEVELOPED GUIDELINE

This section presents the six guidelines developed along with the rationale and the actions to be taken to meet its expectations. All six guidelines are supported by findings from a review of literature and the field study, and represent expert consensus. The guidelines are composed of the following: name; aim; scope; and the developed guideline plus the rationale and actions to be taken.

7.7.1 Name of the guideline

The name of the guideline was derived from the title of the study, namely "Guidelines for role players to implement the school-based HIV and AIDS prevention programme".

7.7.2 Aim of the guidelines

The aim of the guidelines is to promote and enhance the implementation of the school-based HIV and AIDS prevention programme in the local high schools.

7.7.3 Scope of the guidelines

The target users of these guidelines are the local role players involved in the implementation of the school-based HIV and AIDS prevention programme, viz school health nurses, ward based outreach teams (WBOTs), educators, parents and NGOs.

7.7.4 Developed guidelines

Each guideline statement has an accompanying rationale to motivate its existence as well as actions to be done by the target users.

Guideline 1: The custodians of the school-based HIV and AIDS prevention programme are to facilitate strengthening capacity building for the local role players (school health nurses, ward based outreach teams (WBOTs), educators, parents and NGOs) in relation to their roles in the implementation of the school-based HIV and AIDS prevention programme.

Rationale:

Strengthening capacity for the various role players is for the benefit of the role players as well as the success of the programme as the skills and knowledge required to efficiently implement the programme will be developed, improved and retained. The CDC (2013a:3) advocates for capacity building assistance as a strategy for school-based HIV/STD prevention. This advocacy concurs with this guideline in the current study. Smith and Harrison (2013:6) report the educator participants in their study shared they needed someone from outside the education sector to teach them as educators more about sexuality, sex education as well as HIV and AIDS. This further affirms the need for strengthening the capacity of all the role players involved in the programme. Indeed, Frantz (2015:5) writes that peer educators who had been empowered with knowledge and skills found they approached the implementation of the programme differently; it ignited in them a willingness to continue the discussion beyond the classroom. This finding provides positive evidence of the sustainability of the intervention. In the same breath, Gates, Walker and Webb (2015:193) discovered in their investigation that many of the educators in their study also signified they needed further education in STI and HIV prevention and human sexuality.

The findings of these studies emphasise the importance of ensuring that all the role players are adequately skilled and knowledgeable to implement the programme and this guideline sufficiently. Sorace (2013:16) supports and emphasises the importance of capacity building for the role players by remarking that the unique nature of sexuality education critically requires on-going professional development. The National Adolescent and Youth Health policy (AYHP) 2017 suggests and advocate for providing healthcare workers with both pre and in-service training on Adolescent and Youth Friendly Services. This may be by incorporating an AYFS curriculum as an intervention to meet all the health needs of the adolescent and youth (DOH 2017:6). Psychosocial and communications skills that encourage and inspire the specific developmental needs of adolescents and youth must be included in the curriculum.

Actions:

- Conduct a skills audit to identity the competencies, abilities, knowledge and skills the role
 players have and determine which of these they need for them to be able to meet the goals
 of their roles in the programme.
- Provide a structured once-off intensive training session in the form of an open training or a traditional training session for the role players
- Offer opportunities for modular training courses where the various role players may enrol and be trained over a period of time.
- Invite technical experts to provide updated information on the programme to continually enhance the knowledge and skills of the role players especially when there are changes.
- Identify and recruit experienced role players and stakeholders to be mentors to the inexperienced role players. Develop mentorship programmes to facilitate experience, knowledge and sharing of their skills.
- Develop coaching programme to strengthen the application of new knowledge.
- Plan and use workshops and in-service education for the various role players may also assist to collaborate and share knowledge and skills.
- Enhance a platform for strengthening capacity of the role players in relation to the culture and norms of the society.
- Provide for both formal and informal training on the programme implementation to role players at regular intervals.

 Seek assistance and guidance to ensure that professional development support programmes are coordinated from provincial level down to the health institutions where they should be implemented by the various role players.

Guideline 2: The custodians of the school-based HIV and AIDS prevention programme are to foster participation and involvement of other local role players (school health nurses, primary healthcare (PHC) nurse, educators, parents and NGOs) in an effort to embrace cultural diversity and enhance the programme uptake within the individual's frame of reference.

Rationale:

According to the CDC (2013a: 2), after the family, schools are one of the primary entities responsible for the development of young people. This assertion directly puts the parents and the family in the position of taking responsibility to become involved and take part in the implementation of the school-based HIV and AIDS prevention programme. This guideline will seek to foster change in various role players' attitudes. This means the parents will have to recognise the advantages of working together in an effort to guide learners to reduce new infections through the effective uptake of the programme. Collaborative efforts with all the identified role players will hopefully change and reduce challenges related to cultural clashes of the role players as well as those of the learners. UNESCO (2016:52) indicates that in many contexts parents/guardians as critical stakeholders need to be consulted on and orientated to the programme offered to their children in schools. This will ensure the acceptance and successful integration of life skills-based HIV and sexuality education in the curriculum.

Additionally, Sorace (2013:12) states well thought out policies for school-based sexual health education and access to services developed collaboratively with parents, educators, administrators, learners and other community members will reflect the needs of the learners and the values of the community. It is further reiterated that parents and guardians are critical partners in education, especially sexual health education. As such, parents are typically notified when sexual health education will occur, informed about what course material will be provided, and given the opportunity to review curricula and to excuse their child/children from instruction without penalty for all or part of the instruction (Sorace2013: 12). Ensuring that parents are engaged as partners in sexual health education is not a strange phenomenon; it is an important activity to gain their support and assure their involvement in the school-based HIV and AIDS prevention programme. Research has shown that good, quality parent-child communication about sexuality

can delay the initiation of sexual activity and increase the use of contraceptives – specifically condoms (Sorace 2013: 13).

It is the opinion of Asampong, Osafo, Bingenheimer and Ahiadeke (2013:9) that parents and guardians can provide supportive environments in which their adolescent children can have access to useful information which will give them a better understanding of the development of their sexuality so that they know how and why to avoid untimely risky sexual behaviours. When it comes to adolescent sexuality, children are first and foremost part of a family. Parents thus have the primary and significant influence in their children's lives and the parents' attitudes, opinions and behaviours have tremendous impact on their child's or children's attitudes and behaviours. Asampong, et al (2013:9) further allude that talking about sexuality in many African cultures is perceived as a taboo, allowing only ceremonial rites or authorised persons to discuss the subject with young people. So, if the parents are involved the role players will be aware of those cultural beliefs and clashes between the role players and parents and within role players will be avoided.

Actions:

- Develop a clear standard operating procedure on how to effectively collaborate with other role players.
- Enhance a platform for strengthening the capacity of the role players in relation to the culture and norms of a society.
- Involve all role players and other community key stakeholders in decision making on sex education, HIV and AIDS education, reproductive health and all other related programme activities.
- Schedule meetings and events whereby all the role players will share their knowledge and skills as well as empowering each other.
- Provide information leaflets and booklets to parents and other community members in languages they understand for them to refer to when they are teaching sexual issues, healthrelated issues as well as HIV and AIDS.
- Involve parents by giving them information on the school health programmes, the content of the sex education, and the value of the youth reproductive services to get their buy-in and support for the programme.

- Provide opportunities for parents to volunteer to provide education on HIV and AIDS as well as sex education to learners.
- Collaborate with the community organisations to provide parent education on various HIV and AIDS and other related topics.
- Support and encourage the teaching and learning of HIV and AIDS prevention at home between parents and their child/children by instilling interest in the parents about sexuality, HIV and AIDS, and STIs.
- Provide teaching and learning aids that may be easily used at home to foster and encourage parents and other community members to become involved in the teaching and learning on HIV and AIDS.
- Provide opportunities for involving the young people and peers at school as well as in the community to increase the relevance of the programme, its effectiveness as well as to improve peer influences.
- Create a social network platform to increase communication lines within the role players' circle.
- Provide clear communication lines and channels that will enhance collaboration and partnerships.
- Engage and mobilise key social groups in the community through campaigns.
- Adapt the programme to the community's cultural needs and be culture sensitive.

Guideline 3: The custodians of the school-based HIV and AIDS prevention programme are to facilitate multi-sectorial collaboration among the local role players, and forming partnerships with key stakeholders from relevant government and non-governmental sector(s) within the different levels.

Rationale:

Accentuating the importance of multi-sectorial collaboration, Gates, et al (2015:194) indicates that an effective multi-departmental strategy will require unified messages and curricula that are evidence-based and population-specific. This broader approach to preventing and reducing STIs will also entail abandoning silo-based strategies in which departments address issues narrowly, utilising expertise and resources unique to their agencies. This approach highlights the importance of multi-sectorial collaboration as one approach from one sector or department may not be

effective across all groups or settings. And as they collaborate, they will be making other stakeholders aware of the activities of the school-based HIV and AIDS prevention programme and the programme itself.

Sorace(2013:19) supports collaboration as it serves as a critical connection point between the medical and educational communities; establishing a direct linkage between academic achievement and learner health by ensuring learners gets the care they need to stay in school. Hence, both the health and education sectors are aware of the programmes rendered for the benefit of the learners and the uptake will thus be improved.

In their study Salam, Haroon, Ahmed, Das and Bhutta (2014:8) establish community-based interventions increase HIV awareness and risk reduction interventions are effective in improving knowledge, attitudes, and practice outcomes as evidenced by the increased knowledge scores for HIV and AIDS, protected sexual encounters, condom use, and decreased frequency of sexual intercourse. This can only be possible when there is collaboration and involvement of the community in strategies and interventions directed to the improvement of sexual health education and youth-friendly services.

Actions:

- Establish clear communication channels with and between the role players and the partners.
- Organise permitted community-wide demonstrations and marches to make people aware of the school-based HIV and AIDS prevention programme.
- Develop guidelines for coordination and collaboration of services and programme activities.
- Involve and make use of the community organised groups as well as community leaders in spearheading the programme.
- Involve NGOs to support and train community groups and other stakeholders as identified.
- Plan and implement capacity building programme for all role players in order to ensure that they possesses the knowledge they need.
- Support role players through the provision of human resources, equipment and teaching aids, and adequate physical space to function optimally with no disturbances.

Guideline 4: The custodians of the school-based HIV and AIDS prevention programme with the local role players are to promote the implementation of the school-based HIV and AIDS prevention programme.

Rationale:

The need for local role players to promote the implementation of the school-based HIV and AIDS prevention programme will enhance the sustainability of the programme and maximum utilisation of the programme.

In a study done by Omage and Omage (2013: 312) the need to inculcate knowledge and raise awareness of sex and sexual activities among adolescents was highlighted. Further emphasised was the importance and necessity of incorporating topics on HIV and AIDS education into the academic curriculum of secondary schools. In cases where this already exists, stronger emphasis should be placed on educating the learners regularly. Importantly, educators, counsellors and other stakeholders within the educational system are not to bypass the topic as majority of these youths are said to be in a stage where they are very aware of changes in their body, especially the presence of sex urges, and may want to experiment or already seriously sexually active.

To improve the quality of lives of people living with HIV and AIDS, the Cambodian HIV and AIDS Education Care (CHEC) expands its work with key multimedia systems and networks such as television, radio, public forums, and conferences which they use as instruments targeting public education and advocacy on HIV and AIDS (Omage and Omage 2013:314). These authors suggest the following: an aggressive mode of educating youths on HIV and AIDS with emphasis on preventive care to help salvage the fun time of our youth and the nation at large; school clubs planning seminars and campaigns on HIV and AIDS and sex education for their learners regularly; and the government to assign health personnel to visit schools to see to educators' and learners' welfare in the area of HIV and AIDS education and prevention (Omage and Omage 2013:321).

These assertions and emphasis support the importance of role players responsible for the implementation of the school-based HIV and AIDS prevention programme in promoting the implementation of the programme in all possible ways. Hence, the CDC (2013a:3) devised a strategy to help districts and schools deliver exemplary sexual health education emphasising HIV and other STDs prevention; increase adolescents' access to key sexual health services; and establish safe and supportive environments for learners and staff. This is done to promote the implementation of school-based HIV and AIDS programme.

Actions:

- Ensure and foster the provision of comprehensive school health services such as adolescent-friendly sexual and reproductive health services for learners in schools and all the public health establishments.
- The provincial as well as district levels should support the local role players through the
 provision of sufficient human resources to be able to meet the needs of the learners in
 schools, public health institutions, and at any point of contact with adolescents.
- Ensure the optimal provision of equipment to the role players and all the necessary teaching aids they need to optimally provide the services.
- Ensure adequate physical space for role players to be able to function optimally with no disturbances.
- Foster accountability of the programme implementation by all the role players. This may be
 done by ensuring that the district health managers are visible and seen supporting the
 implementation of the programme as well as monitoring its progress.
- Lobby for the departmental support to ensure the provision of an enabling environment to render the school-based HIV and AIDS prevention programme.
- Involve other role players in developing marketing strategies to market the programme by the Department of Basic Education, Department of Health as well as the role players though awareness campaigns and media briefs.
- Make use of technological available methods that are adolescent-friendly and commonly used by adolescents.

Guideline 5: The custodians of the school-based HIV and AIDS prevention programme together with the local role players must have full access to all policies, especially those related to the school-based HIV and AIDS prevention programme to guide them through the implementation of the programme.

Rationale:

In their projected strategies, the CDC (2013a:10) suggests educating key decision makers on policy issues to help districts and schools to implement policies including laws, regulations,

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procedures, administrative actions, incentives, or voluntary practices of governments and other institutions related to HIV and AIDS and STIs prevention (policy). This was put as a strategy justifying the importance of access as well as having knowledge on all legislative transcripts related to the school-based HIV and AIDS prevention programme. All the local role players need to be aware of the policies and guidelines governing their efficient functioning in schools as well as in public health institutions.

The strengthening of capacity for the various role players on all legislations, policies guidelines and any other relevant documents on the school-based HIV and AIDS prevention programme and/or reproductive health services will thus build confidence in the role players to function within their legal and ethical expectations. This rationale is in line with the assertion made by Sorace(2013:8) that policies ensure that institutions and role players are held accountable for the implementation of sexual health education and on-going access to these services.

According to Sorace (2013:8), policies have outcomes, and in the case of policies on sexual health, the desired results are young people who have the information, education and skills to make healthy, responsible decisions and access sexual and reproductive health services. The author further indicates the outcomes of policies in the area of sexual health education; the outcomes are often stated as: whether sexuality or HIV education is required; how it is provided (e.g., medically accurate, comprehensive, and age-appropriate) and who is providing it (e.g., trained, qualified professionals); the role of parents; and course content. In relation to access to services; policies include information as to when, how, and by whom referrals are made as well as what services are available. This information and outcomes from the policies is very vital for the school-based HIV and AIDS prevention programme, as the role players will get guidance on running the programme.

Objective 6 of the National Adolescent and Youth Health Policy (AYHP) 2017 emphasises the importance of policy to role players, this objective advocates for the empowerment of adolescents and youth to engage with policy and programming on youth health (DoH 2017:9). This also ensure that programmes are designed and implemented based on the needs and objectives of the intended recipients. In other words, the policy awareness and knowledge is not only appropriate to the implementers of the programme, but to the recipients of the care as well. It is thus very crucial that the school-based HIV and AIDS prevention programme meet the needs of the leaners and benefit them.

In conclusion, the National Adolescent and Youth Health Policy 2017 advocates for accessibility of the policy to service providers and to the public - which is the purpose of this guideline. List of research project topics and materials

Furthermore, targeted national campaigns are used as a strategy to communicate and make AYHP accessible. These national campaigns are used to communicate the strategic aims and commitments of the AYHP to government partners at national, provincial and local levels, to the broader public, and importantly to adolescents and youth. In line with these statements, all service providers need to have access of the policies that guides their provision of service; and know its provision in relation to the delivery of the care or service required.

Actions:

- Do national road shows to make people aware of the laws and policies governing the provision of HIV and AIDS prevention programmes.
- Strengthen capacity from national level to local level of all applicable policies and guidelines on the provision of the school-based HIV and AIDS prevention programme.
- Offer opportunities for role players to take part in debates relating to the official school curriculum on HIV and AIDS, reproductive health and any other issues concerned with the health of learners.
- Develop checklists and distribute it to all areas in contact with learners to check for the needed and availability of policies related to the school-based HIV and AIDS prevention programme.
- Organise policy awareness campaigns at provincial and district levels.
- Prioritise the health of learners in all programmes planning for learners through prioritising the provision of key sexual health services.
- The national, provincial and district offices to offer technical assistance and support at all times to the lower local levels which is the implementation level.
- Track policy and educate key decision makers on policy issues, and assist schools, health sectors and districts to implement policies, regulations, procedures and administrative Acts.
- Identify individuals from the provincial and district levels to monitor the policy issues quarterly. This will strengthen the local role players to empower themselves on policies and make sure they have the documents in their working stations.

Guideline 6: The custodians of the school-based HIV and AIDS prevention programme together with the local role players are to develop clear and easily accessible school-based surveillance systems to be implemented by all the local role players to track, monitor and evaluate the progress and impact of the programme including the general practices

Rationale:

Monitoring and evaluation (M&E) is an important activity to be done in and for any programme. It needs to be developed and made available to track and measure the implementation of programmes. In the same way the school-based HIV and AIDS prevention programme needs a surveillance system to identify areas of improvement on the programme implementation, the short-and long-term effect of the programme on the learners as well to evaluate the entire programme.

According to the DoH (2017:10), in the delivery of adolescent and youth health services, the following must be assured: efficient reporting processes; the participation of the youth and diverse stakeholders in continuous monitoring and evaluation; measuring of relevant changes at local, provincial and national levels; measuring of diagnostic and treatment effectiveness, detection and treatment rates (outcomes) as well as long-term health effects and socioeconomic parameters (impacts). It is thus imperative to realise that a guideline is needed to measure the effectiveness and impact of the school-based HIV and AIDS prevention programme.

Actions:

- The district managers are to develop evaluation tools to be used by the local role players in their day to day functioning while implementing the school-based HIV and AIDS prevention programme.
- Monthly reports on services rendered should be written and collated by the local role players and be submitted to the district health offices.
- Monthly progress reports of the school-based HIV and AIDS prevention programme must be written by the local role players to monitor their progress in the implementation of the programme.
- Establish and develop a linked monitoring and evaluation system to existing effective programmes for adolescents.
- Ensure the development of a result-based monitoring of the programme.

- Develop a school-based surveillance system to track, monitor and evaluate the progress of the programme as well as the utilisation of all other sexual and reproductive health and HIV and AIDS prevention programmes.
- Plan meetings for all role players to give feedback on the programme regularly.

7.8 ENSURING TRUSTWORTHINESS

In this section strategies used to ensure the trustworthiness of the guideline development process are explained. By simply making use of the Delphi process in the development of the guidelines, it already rendered the guidelines to be valid and reliable.

To enhance the credibility and acceptance of the guidelines, the researcher had to ensure that the experts on the panel reflected the full range of stakeholders who had an interest in the results of the study. The panel members purposefully selected for participation using the Delphi method consisted of experts from various domains which all had an interest in the results of the study. These domains were education, school health, health, life skills, and social services. In addition; the panelists were experienced and knowledgeable experts from various disciplines in the domains.

The development of these guidelines was based on a systematic review of the existing evidence as discussed in Chapters 5 and 6. The use of the existing evidence further validated the developed guidelines. The process of developing this guideline was explicit and transparent; such a process minimises distortions, biases, and conflicts of interest. After each round, a summary sheet was sent to the experts to inform them of comments and ratings made that influenced the refinement of each of the guidelines developed. Moreover, provision was made for these guidelines to be revised when new important evidence warrants modifications of the recommendations. Purposive sampling was used to select the experts to be part of the panellists in the study. This was done to obtain a full and thick description of the phenomenon under investigation as well as to obtain the real lived experiences of the participants in their own words. Purposive sampling thus allowed for transferability of information.

7.9 DISSEMINATION OF GUIDELINES

The National Guideline Clearing House (2014:11) asserts in the case of preventive services guidelines, implementation needs to go beyond traditional dissemination. For this reason, authors identify various promotional efforts in recognition of the added barriers affecting preventive care in

most practices thereby assuring the delivery of recommended preventive care. Dissemination strategies have changed dramatically in our modern era owing to continuously changing technological advancements and increased access to electronic information. Thus, apart from traditional dissemination, strategies used for the dissemination of the guidelines developed for local role players to implement the school-based prevention programme for HIV and AIDS need to comply with the constantly evolving technological trends. To be successful, approaches for implementing prevention have to be tailored to the local level and deal with the specific barriers at a given site of dissemination.

With regard to the current study, the researcher will share the information with the two high schools who were participants, the district health manager in the Bushbuckridge region, the Mpumalanga Department of Health as well as the Mpumalanga Department of Education. Discussion forums may be advantageous to discuss the implementation of the guidelines.

7.10 VALIDATION, REVIEWING AND UPDATING THE GUIDELINES

Making use of the Delphi technique covered the validation of the guidelines as experts were used to develop the guidelines. However, this set of guidelines needs to be validated by means of evaluating them with a criterion to measure its quality before they can be disseminated for use. Shekelle, Wolf, Grimshaw, Schunemann, and Eccles (2012:2) indicate that guidelines must be rated for relevance, acceptability, comprehensiveness, and application. To ensure the guidelines remain current, they have to be reviewed and updated every three to five years after implementation. The intention is for these guidelines to be reviewed in three years' time; however, if new evidence on the school-based HIV and AIDS prevention programme emerges in the meanwhile, the guidelines will be reviewed and updated accordingly.

7.11 CONCLUSION

This chapter was dedicated to Phase 2 of the study. Phase 2 entailed the development of guidelines for local role players to implement the school-based HIV and AIDS prevention programme. The principles and process of guideline development were presented and discussed in detail. Developing the guidelines by using AGREE 11 and the Delphi method was thoroughly described. Lastly, the six final guidelines together with each guideline's rationale and actions were presented. The next chapter is the final chapter in this study. In Chapter 8 the study conclusions, limitations and recommendations for further research are addressed.

CHAPTER 8

FINDINGS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

8.1 INTRODUCTION

Chapter 7 discussed development and refinement of guidelines for local role players to implement the school-based HIV and AIDS prevention programme. In this chapter, Chapter 8, the researcher summarises the key findings from all the data sources; draws conclusions based on the findings of the study and provides concluding remarks; discusses limitations that hampered the study; and presents recommendations for future research on the implementation of the school-based HIV and AIDS prevention programme.

8.2 AIM OF THE STUDY

The aim of this study was to develop guidelines to support and enhance the implementation of the school-based HIV and AIDS prevention programme in Bushbuckridge, Mpumalanga province.

8.3 OBJECTIVES OF THE STUDY

The objectives of the study were met in two phases. In Phase 1, the empirical phase, the objectives were to explore and describe the roles and challenges of the local role players in the implementation of the school-based HIV and AIDS prevention programmes in local high school settings. The second objective was met in Phase 2 during which the guidelines for local role players to implement the school-based HIV and AIDS prevention programme in local high school settings in Bushbuckridge, Mpumalanga were developed and described.

8.4 RESEARCH DESIGN AND METHODS

A qualitative design was followed to comprehensively explore and describe the implementation of the school-based HIV and AIDS prevention programme. The exploration and description of the roles and challenges of role players in the implementation of the programme yielded rich data to develop guidelines for the local role players to implement this HIV and AIDS prevention programme.

The researcher used the naturalistic paradigm to understand, describe and interpret the roles of and challenges experienced by the local role players to implement the school-based HIV and AIDS prevention programme in high school settings. The study was done in a natural setting. The philosophical assumptions underlying a constructivist paradigm were used to construct an understanding of the implementation of the school-based HIV and AIDS prevention programme. Therefore, interpreting, reconstructing and putting ideas and structures together in new ways were central to the study. Choosing the Social Ecological Model as the framework allowed the researcher to further examine the multiple effects and interrelatedness of social elements in the implementation of the school-based HIV and AIDS prevention programme. The use of this framework in the study assisted the researcher to identify and understand practice problems more clearly thereby contributing to the improvement of practice solutions (Ahmed, Bruce and Jurcik 2018:4). The SEM further strengthened the interpretation of findings from the face to face interviews as well as that of the focus group interviews.

Phase 1 of the study had two objectives, namely to explore and describe the roles of the local role players in the implementation of the school-based HIV and AIDS prevention programmes in local high school settings; and to explore and describe the challenges experienced by the local role players in the implementation of the school-based HIV and AIDS prevention programme in local high school settings. Phase 2 had one objective, to develop and describe guidelines for local role players to implement school-based HIV and AIDS prevention in local high school settings. Next, a summary of the two phases and their findings are presented and discussed.

8.4.1 Phase 1

Phase 1 of this study had two objectives, namely to explore and describe the roles of local role players to implement the school-based HIV and AIDS prevention programme and to explore and describe the challenges of local role players to implement the school-based HIV and AIDS prevention programme.

Objective 1

To explore and describe the roles of local role players to implement the school-based HIV and AIDS prevention programme.

The roles of role players in school-based HIV and AIDS prevention programme

The combined findings from the participants indicated all the role players had important roles to play in the implementation of the school-based HIV and AIDS prevention programme. Five major roles for the local role players were identified by the participants. These roles were: providing HIV and AIDS health services; giving HIV and AIDS education; ensuring collaboration (referral system) between role players and services; educators and nurses view of the programme and monitoring and evaluation of the programme.

The participants emphasised their involvement in the following: youth friendly services (YFS); clinic visits; HIV and AIDS education; life skills education; Life Orientation (LO) and health education; information sessions; counselling; school health programmes; and campaigns. Collaboration among role players and services as well as a referral system for referring the learners to relevant services was highlighted.

The study findings further revealed the educators were the key facilitators for the programme. The nurses and the NGOs were involved as support and supplementary structures in the implementation of the school-based HIV and AIDS prevention programme. This finding is in contradiction with the prescription of the Integrated School Health Policy (ISHP). According to the Integrated School Health Policy 2012, the nurse is supposed to be the facilitator as well as team leader of the programme processes and activities (NDoH and DBE 2012:20).

The participants also identified the role players to be involved in the implementation of the school-based HIV and AIDS prevention programme. The identified role players consisted of health promoters; medical doctors; primary healthcare (PHC) and HIV trained nurses;

educators; parents; church leaders; psychologists; social workers; police officers; and NGO members. The belief shared by all the participants that learners are community members who take part in all community activities determined the inclusion and involvement of parents, Church leaders, and community social group members in the school-based HIV and AIDS prevention programme.

The monitoring and evaluation of the programme was described in two ways by the participants. The educators and nurses evaluated the short- and long-term effects and impact the programme had on the learners' sexual and reproductive health (SRH) lifestyle. The finding of the study revealed the school-based HIV and AIDS prevention programme implemented by educators and nurses yielded both positive and negative effects.

Learners were found to be interested and liked the programme. The positive effect was associated with their interest in all sexual-related issues. This was observed in their openness during discussions; sometimes to the extent that some learners would continue discussions started in class with the nurses in the clinic after school. It was further observed that relationships between the educators, nurses, NGOs and the learners changed; whereas at first learners' communication seemed awkward and forced, drastic improvement was soon observed when learners started sharing confidential information about their families. This positive reaction from the learners served as clear evidence that there is much potential for the programme to accomplish the desired outcomes. On the other hand, from the expected constructive changes in the learners' sexual and reproductive health behaviours, minimal changes were unfortunately evident as alluded by the participants in the study. The same numbers of learners were still seen at the clinic and community health centre for Sexual Transmitted Infection treatment and teenage pregnancy. Naturally, it was a disappointing outcome for the various implementers of the school-based HIV and AIDS prevention programme because it de facto implied the importance of the unilateral programme aimed at preventing HIV and AIDS among learners was not sufficiently acknowledged by the programme implementers. However, it is important to refrain from drawing conclusions or making unsubstantiated inferences in a long-term research study. The utterances by the participants in this study confirmed risky sexual behaviours with resultant high-risk exposure to HIV and AIDS. The participants confirmed new cases of HIV and AIDS among the youth are diagnosed on monthly basis. This was a cause of concern for the participants whose expectations is responsible sexual behaviour resulting from the school-based HIV and AIDS prevention programme.

Objective 2

To explore and describe the challenges of local role players to implement the school-based HIV and AIDS prevention programme

Challenges with the school-based HIV and AIDS prevention programme

The findings indicated the role players experienced numerous challenges. The challenges were encountered from both the Department of Health as well as the Department of Education, and also included inadequate resources and personal barriers which hampered the implementation of the school-based HIV and AIDS prevention programme. The participants verbalised that departmental support was inefficient and insufficient because the time allocation for preventive services was haphazard and simply not considered as vital. Moreover, it was found there were no adequate support structures from the local, district or provincial levels of the health department.

With regard to resources, it was found that resources to be used by the role players to implement the programme were inadequate. The shortage of resources varied from material resources to physical and human resources. The lack of adequate physical and material resources mostly applied to inappropriate physical space and equipment needed to run the programme well. The lack of visual educational aids and other material resources was interpreted by participants as the major contributor to the negativity exhibited by the learners towards the programme. The unavailability of physical space made the implementation of youth-friendly and reproductive health services extremely difficult for the nurses and they struggled to meet the standards and principles of these services in an overcrowded, confined classroom setting. Hence, the uptake of the programme by the learners was affected by the learning environment which was not up to standard.

Various factors were revealed in relation to the challenge with the physical and human resources the role players had to deal with during the implementation of the school-based HIV and AIDS prevention programme. A multitude of factors in the learners' social environment deprived them emotionally, economically, and educationally. Extreme poverty and the high number of child-headed households emerged as challenges that significantly affected the implementation of the programme. In Chapter 3, section 3.2 the study settings were described as Acornhoek, an under-resourced rural village in a remote area of Bushbuckridge, Mpumalanga, and Thulamahashe, a township in the same geographical

area but with resources and different social classes of inhabitants. The social environment of the learners residing in these two settings differed profoundly; however, the social environment had no differing impact on the role players as they all experienced almost the same challenges in their working environment. Poverty and child-headed families were more prevalent in the village than in the township and it could therefore be seen as a possible contributing factor to the difference in the social class of the people residing in the two areas.

Social workers and other social service officials were found to be not actively involved as role players in the implementation of the school-based HIV and AIDS prevention programme. There was a referral system to social workers for relevant cases found in the schools, but their actual contribution to the day to day activities of the implementation of the school-based HIV and AIDS prevention programme was seen to be lacking.

In terms of the challenges related to personal barriers, the findings indicated there was a shortage of trained and dedicated staff and services to directly deal with the implementation of the programme. The role players were found to lack knowledge on the policies governing their functioning in schools regarding HIV and AIDS with no clear way to the availability of and access to the policies. They lacked the necessary skills to enhance their functioning to efficiently implement the programme and were also found to have inadequate knowledge to successfully teach learners on HIV and AIDS. The lack of knowledge and skills mostly applied to the educators. By far the majority of educators who taught the subject Life Orientation had no adequate knowledge or correct information about HIV and AIDS to transfer meaningful and informed knowledge to the learners. Although nurses were also found to be not particularly trained in HIV and AIDS, they did have basic knowledge about HIV and AIDS, sexually transmitted infections (STIs) and other related infections and this translated to the reasonable implementation of the programme.

Culture and religion was a further challenge as some role players classified education on sexual and reproductive health as against their personal, cultural or religious beliefs. As a result, the process of the programme by role players who were opposed to its content and teaching it impeded the implementation of the programme. Thus, by implication, culture and religion were perceived as quite important determinants to the successful and responsible implementation of the HIV and AIDS prevention programme.



Moreover, the policies and guiding documents were found to be unavailable at the institutions. This was a major challenge as it exacerbated the inability of the role players to officially follow the process of the programme implementation as guided by the organisation through policy and appropriate, relevant guidelines.

The involvement of parents in the programme was a challenging factor. Problematic issues encountered with the parents' involvement in the programme included their lack of knowledge and of skills, culture and religion as well as their dedication to uphold the social norms and values of their community. The social expectations parents had for their children had a negative impact on the programme. Culture defined the communication flow between the parents and their children; specifically in relation to discussions about sexuality and any other reproductive health topics the cultural influence was polarised. Whereas one group of parents seemed to be willing to support the programme, most parents were set against it. Of significance is the fact that many parents did not understand the purpose of the school programme on HIV and AIDS and neither did they have an understanding of the reason why reproductive health services were rendered in the clinics. In other words, the learners' parents were simply uninformed and unenlightened about the programme which was a barrier towards sexual education. Although the schools had School Governing Bodies (SGBs) that formed part of the community/parent management structure of the school, it was deduced that the lack of a clear and open line of communication on areas concerning the school curriculum is the major challenge.

Suggestions and needs for school-based HIV and AIDS prevention programme

Based on the challenges articulated under Theme 2 of the study findings, the participants made suggestions to support and improve the uptake and enhance the implementation of the school-based HIV and AIDS prevention programme. In the participants' collective opinion, the provision of adequate resources would increase the uptake of the programme. They envisaged scaling up the resources would alleviate the departmental challenges as well as the material and personal challenges identified above. The participants suggested the establishment of a dedicated school-based HIV and AIDS prevention programme with consistent involvement of the school health teams, NGOs and members of the multidisciplinary health team. This programme would deal with all the issues relating to HIV and AIDS, but without addressing the issues combined in the Life Orientation curriculum.

Capacity building of the role players on policies and skills needed to implement the programme was also suggested as a need to enhance the programme. The allocation of dedicated and passionate role players in the programme was a further suggestion. Collaboration and forming partnerships with NGOs and other stakeholders in the government as well as outside of the government were suggested to reduce the lack of resources because the programme will not benefit if the sharing of resources occur. The participants further suggested adopting a system whereby every school has a healthcare delivery service in the school with a qualified and knowledgeable school nurse always available. Rather than sourcing from the clinics and general school health services, such an in-school system would ensure the school has the necessary resources for the implementation of the programme.

Participants further proposed the reviving of school health services in the area. They shared if, at the time of study, such services were available in the area at all there was no visible indication of the services or their availability. Continuous intervention using the programme to prevent and reduce HIV and AIDS was suggested. The importance of identifying the target population for the programme implementation —which meant including primary schools, parents and other community structures in the programme — was also highlighted. In conclusion, the participants suggested monitoring and evaluation of the programme was done in the health establishments as well as in the schools to identify gaps and keep track of the progress of the programme implementation.

8.4.2 Phase 2: Development of guidelines

The purpose of Phase 2 of the study was to develop guidelines for local role player to implement the school-based HIV and AIDS prevention programme. This section met the last objective, namely to develop guidelines for local role player to implement a school-based HIV and AIDS prevention programme.

The process of formulation and developing the guidelines is discussed in detail in Chapters 6 and 7. The empirical findings presented and discussed in Chapter 5 informed the process of guideline development. Literature sources and the Social Ecological Model (SEM) supported the interpretation and organisation of the findings of the study. The findings were merged with the concepts of the SEM to scientifically support the study findings. Furthermore, the SEM guided the development of the guidelines as the interrelatedness of the social elements found in the study was explored. (Refer to Chapters 5 and 6).

8.4.2.1 Methodology

The researcher used the findings from Phase 1, information gained from an extensive literature review as well as the SEM to draft guidelines for role players to support and enhance the efficient implementation of the school-based HIV and AIDS prevention programme. A set of six (6) guideline statements were drafted and developed. The Delphi technique was used to validate and rate the drafted guidelines. A detailed description of the Delphi technique and processes followed is provided in Chapter 7 (refer to sections 7.3; 7.4; 7.5 and 7.6). The experts were purposefully selected from the health, education, HIV and AIDS prevention as well as the NGO environments. By the end of the third round, the 80% consensus was reached as envisaged. Thirteen (13) experts out of the twenty (20) recruited experts participated in the three-round Delphi process to refine the guideline statement.

8.4.2.2 The development group

It is important to ensure that the development group is experienced, knowledgeable, and multidisciplinary and comprises healthcare and other professionals. In this study, twenty (20) experts were purposefully selected from the health, education, HIV and AIDS prevention as well as the NGO environments. Twelve (12) and thirteen (13) experts respectively participated in the three-round Delphi process to validate and refine the guideline statement. Among the group of experts were professors in health care, chief directors in health services, directors of programmes in health, education and life skills education specialists; public health specialists, researchers, experienced primary healthcare nurses as well as a member from social services. All experts had 10 years' or more experience in their respective fields. The descriptive information of the experts involved in the development and refinement of the guidelines is tabulated in Chapter 7, Table 7.2.

8.4.2.3 Guiding principles

The researcher followed principles for developing guidelines as documented by WHO (2011:1); NICE (2014:14; 2014:30) and the AGREE II (2013). The guideline development was based on the best available evidence; a multidisciplinary panel of experts was used; the consumers of the programme were included; the validity and usefulness of the guideline were evaluated; and provision for revising the guidelines was put up. Each guideline statement was rated on a four-point Likert scale for validity, reliability, flexibility, clarity and applicability. The theoretical bases and principles that guided the development of the guidelines are fully discussed in Chapter 7, sections 7.4 and 7.5 respectively. The data collection tool is also thoroughly described in Chapter 7, section 7.6.2.2.1.

Rating of the tool by the experts was done in a series of three Delphi rounds as presented in Chapter 7, sections 7.6.2.4; 7.6.2.5 and 7.6.2.6. Thirteen (13) experts rated the guidelines in the last round; 97% of the experts maintained their Round 2 ratings and comments while the remaining 3% refined their ratings and comments.

Table 8.1 shows the final summary of the ratings of each guideline by experts

Table 8.1 Final summary sheet of ratings for the guidelines per criteria

GUIDELINE																				
Rating scale	Criteria																			
1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree	Validity: The guideline will assist role players to implement the school-based HIV and AIDS prevention programme					Reliability: The guideline will produce similar results if applied in similar circumstances given the same evidence and methods for development			Clarity: The guideline is clear, precise, logical, simple and unambiguous				gui def	delin ines		explicitly states the	Flexibility: The guideline may be adapted to suit diverse contexts, e.g., geographical or cultural			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Guideline 1				13				13				13				13			1	12
Guideline 2			1	12				13				13			1	12			2	11
Guideline 3			2	11				13			1	12				13				13
Guideline 4			3	11			2	11				13			1	12				13
Guideline 5			1	12			1	12			2	11				13			2	11

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Guideline 6			13			13		1	12		3	10		1	12
Subtotal (n)		7	72		3	75		4	74		5	73		6	72
Total score (n)		79			78			78		78			78		

8.5 DESCRIPTION OF THE FINAL GUIDELINES

The guidelines were developed as described in Chapter 7. A brief summary of the development is provided under section 8.4.2 of this chapter and subsequent subsections. The final guideline will be described under the following headings:

- Name of the guidelines
- Aim of the guidelines
- The scope of the guidelines
- · Description of guidelines
- Trustworthiness in guidelines development
- Sharing guidelines information
- · Updating of guidelines

8.5.1 Name of the guidelines

The title of the guideline is, *Guidelines for local role players to implement the school-based HIV and AIDS prevention programme*. The title was derived from the title of this study.

8.5.2 Aim of the guidelines

The aim of the guidelines is to promote and enhance the implementation of the school-based HIV and AIDS prevention programme in the local high schools.

8.5.3 Scope of the guidelines

The aim of the guidelines is to provide guidance to all the role players involved in the implementation of the school-based HIV and AIDS prevention programme in local high schools in Bushbuckridge, Mpumalanga. It is envisaged that the appropriate and efficient implementation of the programme will benefit the learners, parents, communities and South Africa as a whole in lowering the new infection rates of HIV and AIDS among adolescents and youth in high schools. The school-based HIV and AIDS prevention programme is a multi-sectorial and interdepartmental programme; it is a programme that requires a team effort from all the identified sectors in the Integrated School Health Policy 2012. Although these guidelines target the local role players in the school-based HIV and AIDS programme, the school health nurses and primary healthcare nurses are the main custodians and target of the implementation of the school-based HIV and AIDS prevention programme from the health department.

8.5.4 Description of guidelines

The full description of the developed guidelines together with each guideline's rationale and actions to be taken to meet the expectation of each guideline are described in Chapter 7, section 7.7.4.

8.5.5 Trustworthiness in guidelines development

To ensure the guidelines are trustworthy, the Delphi technique was used in the process of developing the guidelines. Experts were used to refine and validate each guideline. Purposive sampling was used to assure knowledgeable, skilled and experienced experts were selected to be part of the guideline development group. The detailed description of measures to ensure trustworthiness is fully described in Chapter 7, section 7.8.

8.5.6 Sharing guidelines information

This section explains the dissemination of the guidelines. Current and relevant strategies may be used to disseminate the guidelines. An information sharing session may be organised with the Mpumalanga Department of Health and Department of Education to share the findings of the study and the guidelines. The electronic media was also suggested to be used as well to share the guidelines on. This is presented and discussed in detail in Chapter 7, section 7.9.

8.5.7 Updating of guidelines

These guidelines will be reviewed and updated in three years or any time when new evidence on the school-based HIV and AIDS prevention emerge. Refer to Chapter 7, section 7.10 for more details.

8.6 RECOMMENDATIONS

This study presented the roles and challenges of the local role players in the implementation of the school-based HIV and AIDS prevention programme. Suggestions and needs to enhance the implementation of the school-based HIV and AIDS prevention programme were submitted by the role players. The study revealed that the most effective approach leading to healthy behaviours is when a concerted and decisive effort is made at all levels – at individual, interpersonal, organisational, community, and public policy levels. In the view of the guidelines developed for role players to implement the school-based HIV and AIDS prevention programme, recommendations were made. This finding further affirms that recommendations be submitted to the policymakers, nursing practice and for future research.

8.6.1 Recommendations to the National Department of Health and Department of Basic Education (Policymakers)

- It is recommended that the National Department of Health and the Department of Basic Education conduct workshops and road shows to orientate the role players. To further disseminate new policies and guidelines on HIV and AIDS to gain the cooperation of the role players and ensure a common understanding of documents thereby improving the implementation of the programme.
- Both the departments are to involve all the stakeholders and role players in the development of the Life Orientation curriculum to ensure it includes all that is necessary as per inputs of the implementers of the curriculum.
- Identify designated custodians of the programme who will ensure the implementation process and monitor the uptake of the programme.
- Work on increasing the importance of Life Orientation as a school subject by prioritising it
 like all the other learning areas where there are formal assessments at the end of the year
 to increase the weight of the subject.
- Promote partnership and collaborations with NGOs and other available partners involved in the prevention of HIV and AIDS to increase sponsors and sharing of resources to be used in the implementation of the programme.
- Ensure the on-site comprehensive health services in high schools. This will enhance the planning and implementing of the school-based HIV and AIDS prevention and will allow for maximum collaboration with the other role players and stakeholders involved in the programme implementation.

8.6.2 Recommendations regarding nursing practice

- Allow nurses to lead the school-based HIV and AIDS education project in high schools with the assistance of the educators and the NGOs.
- It is recommended that nurses urgently acquire the knowledge and skills they need to render youth-friendly services, reproductive health services for the youth as well as HIV and AIDS education.
- Provision should be made for professional growth to a level of self-directed learning on any issues related to the provision of healthcare services.
- Nurses are to provide opportunities for community involvement and awareness campaigns to inform them of the updates on sex education in schools and in the public health services.
- The district health managers should allocate all resources needed for the efficient implementation of the programme.

8.6.3 Recommendations regarding nursing education

- Nursing education should address the full inclusion of HIV and AIDS in the curriculum for nursing training.
- To provide opportunities and devise means to include guidelines and policies in the curriculum and continually updating training opportunities to be in line with new inventions and interventions promulgated and approved by the National Department of Health.
- Provide opportunities to educate the public on all issues relating to the issues of health of their children and getting involved in educating their children at home about sex and HIV and AIDS.

8.6.4 Recommendations for implementation of the guidelines

- The custodians of the school-based HIV and AIDS prevention programme should identify relevant key stakeholders and dedicated individuals who will lead the processes of the guideline implementation that would support the implementation of the guidelines.
- The guidelines were developed to enhance the implementation of the school-based HIV
 and AIDS prevention programme by the local role players; hence, the various role players
 in their different fields of practice should adapt these guidelines to be in accordance with
 their area of practice for them to be able to implement them.

8.6.5 Recommendations for further research

The following areas need to be researched further:

- A study to evaluate the guidelines for local role players to implement the school-based HIV and AIDS prevention programme.
- A study to evaluate the impact of Life Orientation as a school-based HIV and AIDS prevention programme on learners.

8.7 CONTRIBUTION TO THE BODY OF KNOWLEDGE IN NURSING

The exploration of the roles and challenges of role players in the implementation of the school-based HIV and AIDS prevention programme revealed a lack of access to policies in institutions which may be related to many challenges. The suggestions on this matter rested on including policies and guidelines in the curriculum of nurses so the student nurses may acquire knowledge on policies relevant and of value to their practice during training. Successful implementation of the school-based HIV and AIDS prevention programme can result in significant changes in knowledge

and attitudes that affect the sexual behaviours of young people which can lead to extensive decreases in HIV infection among young people.

Furthermore, the conceptual model developed during the process of guidelines development may be used to train school health nurses and primary healthcare nurses in rendering efficient school health programmes of any kind. The use of the Social Ecological Model in this study exposed the importance of the interrelatedness of social issues in any intervention. The conceptual framework may be used to map out interventions in the care of patients at a primary level of care and prevention.

The findings of this study will contribute to the scientific body of knowledge in nursing. It will further contribute towards the knowledge and skills building of role players on implementation of the guidelines in the future implementation of the school-based HIV and AIDS prevention programme.

8.8 LIMITATIONS OF THE STUDY

HIV and AIDS is still a sensitive topic to most people because of the stigma associated with it. This was a limitation in the study as the participants were still not comfortable to openly and freely get into discussions on issues around HIV and AIDS. The cultural background of the participants was a serious limitation because it made them cautious to discuss some issues around this topic. In one school, there was construction going on and it sometimes became difficult to hear the participants due to the noise from the outside. This resulted in some of the recordings being inaudible which made it very difficult for the researcher to hear participants' exact words during the transcription of the data which made the data analysis quite a time-consuming exercise.

The findings of this study may not be transferrable nationally because the study was conducted in two high schools and two medical facilities only. Time was also a limitation during the collection of the data as the participants were not available at the same time. Patients waiting in the health facilities caused some worry as the researcher could only conduct one or two interviews in a day. This contributed to the long time it took to complete the interviews as the researcher tried to avoid disturbing the provision of care to the patients.

8.9 FINAL CONCLUSION

The purpose of the study was to develop and describe guidelines for local role players to implement the school-based HIV and AIDS prevention programme in local high school settings Bushbuckridge, Mpumalanga. The study was guided by the following research question:

 How will guidelines for role players to implement the school-based HIV and AIDS prevention programme in local high school settings in Bushbuckridge, Mpumalanga be developed?

The specific objectives of the study were to:

- Explore and describe the roles of the local role players in the implementation of the schoolbased HIV and AIDS prevention programmes in local high school settings.
- Explore and describe the challenges experienced by the local role players in the implementation of the school-based HIV and AIDS prevention programme in local high school settings.
- Develop and describe guidelines for local role players to implement the school-based HIV and AIDS prevention in local high school settings in Bushbuckridge, Mpumalanga.

A qualitative, explorative, descriptive design and contextual study was conducted. Making use of the qualitative design offered the researcher an opportunity to uncover the coordination of services among and participation of the local role players to collaborate in ensuring the efficient implementation of the HIV and AIDS programme in schools. The Social Ecological Model was used as a framework to examine and further discuss the findings in relation to the multiple effects and interrelatedness of social elements in school-based HIV and AIDS prevention programmes.

The study was conducted in two phases. The first phase was the empirical phase. The roles of local role players in the implementation of the HIV and AIDS prevention programme in school settings were explored and described. Three major themes emerged from the empirical data analysis; the roles of the local role players, the challenges in and the suggestions and needs for school-based HIV and AIDS prevention programme. The conclusions reached after discussing the findings of the three themes were; the role players had insufficient knowledge about policies and guidelines relevant to the implementation of the school-based HIV and AIDS prevention programme and other reproductive health services. They also lacked the necessary skills and attitude to educate and impart knowledge on HIV and AIDS prevention. It was concluded that role

players needed to be capacitated with the knowledge and skills to efficiently implement the programme. The study further concluded that the inner circles of the learners (peers) were not fully involved in the programme.

A lack of parental involvement and understanding of the school health programmes was a formidable challenge. The lack of (minimal) inter-sectoral collaboration and active involvement the community leaders, community groups, religious groups and leaders, community social groups adds further to the challenges. Getting parents, community and church leaders as well as social and religious groups in the community involved as shareholders in the programme was critical because their culturally inherited views were actually preventing learners to reap the benefits of being exposed to accurate information on HIV and AIDS prevention. All these stakeholders needed to be familiarised with the school health programmes. They needed to be informed of the content of the sexual health education and the value of the youth reproductive services to get their buy-in and support for the programme.

Furthermore, some role players' norms, values, cultural and religious beliefs which clashed with the programme activities and the educators' expectations were real impediments to the implementation of the programme. It was critical for the stakeholders and role players to be on the same level and to be assured that the HIV and AIDS school and health programmes did not encourage risky sexual behaviours, but was a combined attempt to curb such behaviours among the youths in high school.

Both the National Department of Health and the Department of Basic Education did not provide an adequate and enabling implementation framework for the role players. There were no policies and guidelines available to guide the provision of services in the institutions and the physical environment was not conducive for learning as well as for rendering sexual and reproductive health services. The inadequacies included lack of both material and human resources for role players to facilitate learning on HIV and AIDS prevention. It was commented on that platforms for collaboration and partnership building among the role players were not available.

The participants commented that there were no dedicated staff members available in the health centres and school to implement the programme efficiently. The school curriculum on Life Orientation was found to be inadequate to cover all the aspects of HIV and AIDS prevention programmes as it deals with other components and not only HIV and AIDS. The time allocated for Life Orientation was not enough to be effective as a school-based HIV and AIDS prevention programme. Life Orientation as a school-based HIV and AIDS prevention programme is seen to be

not a priority programme by the National Department of Health and the Department of Basic Education. This is evident in unavailability of dedicated material and human resources to enhance the implementation of this programme. There were no clear guiding channels of communicating new policies and the implementation of such policies from the mother departments. This result in policies not well implemented by the various role players as well as retarding the progress envisaged. The escalation and distribution of the ISHP, which is the directive from both the departments, is insufficient and is not made available to the implementation levels.

There was no evidence or records in the institutions to provide information specifically on the implementation of the school-based HIV and AIDS prevention programme. This supports and confirms the assumption that there are no monitoring and evaluation systems for the programme. The lack of monitoring and evaluation severely restricts the identification of gaps and progress of the programme. In turn, the available role players do not have full accountability of the implementation of the school-based HIV and AIDS prevention programme.

Role players in their various spaces are experiencing a variety of challenges in their implementation of the programme. Finally, in considering the findings of this study, an ideal school-based HIV and AIDS prevention programme will have a comprehensive approach that focuses on dealing with the numerous and varied challenges constraining the implementation of the programme on individual, interpersonal, community, organisational and public policy levels. The programme has to be youth-friendly and be a collaborative effort from the side of all the role players. In the second phase, six guidelines in line with the Social Ecological Model were developed to the benefit of all the role players involved in the implementation of the school-based HIV and AIDS prevention programme. The guidelines developed will also guide the implementation and efficiency of the programme. Skills and knowledge, multi-sectorial collaboration and coordination of services, marketing of and information sharing on the programme as well as the monitoring and evaluation of the programme were the vital elements of the guidelines.

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ANNEXURE A

INFORMATION LEAFLET AND INFORMED CONSENT PHASE 1

ANNEXURE A: INFORMATION LEAFLET AND INFORMED CONSENT PHASE 1

TITLE OF STUDY: Developing guidelines for local role-players to implement the school-based Human Immune Virus and Acquired Immune Deficiency Syndrome prevention programme in Bushbuckridge, Mpumalanga

Dear Participant

1) INTRODUCTION

We invite you to participate in a research study. This information leaflet will help you to decide if you want to participate. Before you agree to take part you should fully understand what is involved. If you have any questions that this leaflet does not fully explain, please do not hesitate to ask the researcher, **Sekgobela C.B**.

2) THE NATURE AND PURPOSE OF THIS STUDY

The aim of the study is to explore the roles and challenges of various local role-players using the Social Ecological Model (SEM) to the implementation of school-based HIV and AIDS prevention programme and developing guidelines to improved and efficient implementation and successful partnership among the local role-players, coordination of services and collaboration of the programme in Bushbuckridge, Mpumalanga Province.

3) EXPLANATION OF PROCEDURES TO BE FOLLOWED

Focus group interviews as well as in depth individual interviews will be conducted. The focus groups discussions will be done using an interview guide. It will be done in an identified area in one of the identified schools. It will take approximately 1 to 2 hours depending on information saturations. The discussions will be audio taped and field notes will be written as well. The individual interviews will take place in the clinic in an identified room there. An interview guide will be used to guide the interview. It will take about 45 to an hour. The interview will be audio taped as well. The participants will be notified of the results of the study once it is completed.

4) RISK AND DISCOMFORT INVOLVED

There are no risks in participating in the study. Some of the questions we are going to ask you may make you feel uncomfortable, but you are free not to answer them. The interview will take about 45 minutes of your time.

5) POSSIBLE BENEFITS OF THIS STUDY

Although you will not benefit directly from the study, the results of the study will inform development of relevant policies, inform programming and practice and eventually contribute to the effective implementation of the HIV and AIDS prevention programs in school.

6) WHAT ARE YOUR RIGHTS AS A PARTICIPANT?

Your participation in this study is entirely voluntary. You can refuse to participate or stop at any time during the interview without giving any reason. Your withdrawal will not affect your access to the facility in any way.

7) HAS THE STUDY RECEIVED ETHICAL APPROVAL?

This study has received written approval from the Research Ethics Committee of the Faculty of Health Sciences at the University of Pretoria and the schools circuit office as well as from the District health manager. The copies of the approval letters are available if you wish to have one.

8) INFORMATION AND CONTACT PERSON

The contact person for the study is Dr M.D. Peu who is my supervisor. If you have any questions about the study please contact her on this no: 012 354 2133. Alternatively you may contact my cosupervisor Dr M De Waal on: 012 354 1113.

9) COMPENSATION

Your participation is voluntary. No compensation will be given to the participant and there is no cost involved in participating in the study.

10) CONFIDENTIALITY

All information that you share with me will be kept strictly confidential. However, as information is shared in the group, this may affect confidentiality. Once we have analyzed the information no one will be able to identify you. Research reports and articles in scientific journals will not include any information that may identify you. Your names will not be mentioned in any report or article.

CONSENT TO PARTICIPATE IN THIS STUDY

I confirm that the person asking my consent to take part in this study has told me about nature, process, risks, discomforts and benefits of the study. I have also received, read and understood the information in the information leaflet regarding the study. I am aware that the results of the study, including personal details, will be anonymously processed into research reports. I am participating willingly. I have had time to ask questions and have no objection to participate in the study. I understand that there is no penalty should I wish to discontinue with the study and my withdrawal will not affect any access to the facility in any way.

I have received a signed copy of this informed consent agreement.		
Participant's name (Please print)		
Participant's signature:		
Researcher's name(Please print)		
Researcher's signature Date		
Witness's name (Please print)		
Witness's signature Date		
Tricioso o digitataro		



ANNEXURE B

INFORMATION LEAFLET AND CONSENT FOR THE DELPHI TECHNIQUE PHASE 2

INFORMATION LEAFLET AND CONSENT FOR THE DELPHI TECHNIQUE: PHASE 2

Dear Expert

1.1 INTRODUCTION

This is an invitation to participate in a research study. This information leaflet will help you decide if you want to participate in the study. Before you can make that decision you should fully understand what is involved. If you have any questions that the leaflet does not address, please do not hesitate to ask the researcher.

1.2 THE NATURE AND PURPOSE OF THE STUDY

I am developing guidelines for role-players to implement the school-based HIV and AIDS prevention programme in high schools.

You as an expert are a very important source of information for refining the guidelines. It is hoped that the nurses and the other local role-players will use the guidelines in the implementation of the school based HIV and AIDS prevention programme. The invitation is for you to participate in a consensus building that will be conducted using the Delphi technique. I have identified you as a possible participant in this exercise because of your expertise in the field of HIV and AIDS, delivery of public health services including school health services and Life Orientation as subject in schools.

1.3 EXPLANATION OF PROCEDURES TO BE FOLLOWED.

Should you agree to participate in the study:

- You will be required to refine the draft guidelines for local role-players to implement the school based HIV and AIDS prevention programme
- All the correspondence pertaining to the process will be done through email
- Experts that will participate in the study will remain anonymous to one another and your input will be regarded confidential
- Rounds of data collection will be due until a consensus is reached among experts

1.4 RISK AND DISCOMFORT

There are no risks in participating in this study.

1.5 POSSIBLE BENEFIT OF THIS STUDY

There will be no direct benefit to you for participating in this study. Your participation will help in refining the guidelines for role players, therefore you will have contributed to the call to reduce the rate of new HIV and AIDS infections in the country's next generation.

1.6 WHAT ARE YOUR RIGHTS AS A PARTIPANT

Your participation in this research is voluntary. You can refuse to participate in the study or withdraw from it at any point without giving any reason or decline to respond to any issues raised. This will not affect you in any way.

1.7 HAS THE STUDY RECEIVED ETHICAL APPROVAL?

The study received a written approval from the Research Ethics Committee of the faculty of Health sciences at the University of Pretoria

1.8 INFORMATION AND CONTACT PERSON

The contact person for this study is Ms Constance Balahliye Sekgobela. If you have any questions please contact me on cell no: 082 4652 483 or you can contact my supervisors Prof MD Peu on 082 534 4245 and Dr Maretha De Waal 082 920 0169.

1.9 COMPENSATION FOR PARTICIPATING IN THE STUDY

There will be no compensation

1.10 CONFIDENTIALITY

All correspondence and records obtained in this study will be kept private and confidential. After the analysis no one will be able to identify you. Additionally, any person who may be involved in analysing the data will sign a confidentiality clause to ensure that the information remains strictly confidential. Reports and articles in scientific journals will not include any information they may identify you.

2. CONSENT TO PARTICIPATE IN THIS STUDY

I confirm that the person asking my consent to take part in this study told me about the nature, process, risks, discomfort, and benefits. I have also received, read and understood the above written information (information leaflet and informed consent about this study. I am aware that the results of the study, including personal details will be anonymous proceeded into research report. I am a participating willingly. I have had time to ask question and have no objections to participate in the study. I understand that there is no penalty should I wish to discontinue with the study and my withdrawal will not affect me in any way.

I hereby consent voluntarily to participate in the study.

Expert's name	
(Please Print)	
Expert's signature	Date
Researcher's name	
Researcher's Signature	Date
Witness's name	
Witness's signature	Date

ANNEXURE C

INTERVIEW GUIDE FOR THE NURSES AND THE DISTRICT HEALTH MANAGERS

ANNEXURE C: INTERVIEW GUIDE FOR THE NURSES AND THE DISTRICT HEALTH MANAGERS

TOPIC: Developing guidelines for local role-players to implement the school-based Human Immune Virus and Acquired Immune Deficiency Syndrome prevention programme in Bushbuckridge, Mpumalanga

1. INTRODUCTION

Good morning and welcome my name is I am a nurse by profession and a PhD scholar at UP. I am here to interview you about school-based HIV and AIDS prevention programmes and the role-players involved in the implementation of the programme.

My aim is to get rich information on the issue under discussion in order to be able to increase the effectiveness of the HIV and AIDS prevention in high schools. The information obtained from you as role players will be used to increase the effectiveness of the HIV and AIDS prevention in high schools.

The interview will be audio taped, for me to be able to capture all the information. There is no right or wrong answer and we want to hear from you for the purpose of improving our services delivery to the learners in schools and I will write down field notes during the interviews. There is no right or wrong answers. The interview will last for about 45 minutes to an hour depending on the extent of our deliberations as well as data saturation.

STOP TO ASK IF THEY NEED ANY CLARIFICATION

BROAD OPENING QUESTION

1. What kind of HIV/AIDS prevention programme do you have at the school?

PROGRAMME CONTENT (INDIVIDUAL AND COMMUNITY)

PROBING QUESTIONS:

- Is it a formal or an informal program?
- Is life orientation as an official school subject included as well? Follow up the answer given.
- What are the topics covered in Life Orientation with regard to HIV and AIDS?
 - How do you present the content
 - o How do learners respond to the content?

- What challenges do you experience from parents when you talk to the children about sex?
- What are the attitudes of parents towards the inclusion of sex education in the HIV and AIDS prevention programme?
- Do you think this is sufficient/ effective? ... follow up
- Are there any challenges that you are experiencing.

WHAT IS YOUR SUGGESTION TO IMPROVE THIS/ENHANCE THE PROGRAMME?

IMPLEMENTATION

2. Tell me about the role you play and the resources in the implementation of the school- based HIV and AIDS prevention programme?

PROBING QUESTIONS:

- What role do you play in the implementation of the school- based HIV and AIDS prevention programme?.....follow up...how when, etc
- What are the guidelines that you are following to implement the HIV and AIDS education in schools?
- What are the resources that you have and need at the school to be able to implement the programme efficiently? Follow up..
- What skills do you need to be an effective implementer of the programme? Follow up.....
- What skills and knowledge do you have as an implementer of the programme?
- What can be done to empower the various role-players to function to their optimal capacity to ensure success of the programme?
- Is there any support system or structures supporting you in the implementation of the school-based HIV and AIDS prevention programme? What type of support would you like to have, by who, how often....
- What are the barriers to the implementation of the school-based HIV and AIDS prevention programme in schools? Follow up....

WHAT IS YOUR SUGGESTION TO IMPROVE THIS/ENHANCE THE PROGRAMME?

COLLABORATION, COORDINATION AND PARTNERSHIPS (INTERPERSONAL)

3. Who are the local role-players with whom you collaborate to implement HIV and AIDS prevention programmes? How do you coordinate your actions?

Probing questions:

- What do you think are roles of the district health manager and the nurses in the prevention of HIV and AIDS in schools?
- To what extent do you think there is collaboration and coordination between the role-players? Is there a need for change?
- What are the barriers to collaboration of the various role- players?
- What do you think should be done to ensure that there is collaboration, coordination and partnerships between role-players as stipulated in the Policy (ISHP)?
- Are you aware of this Policy?

We are now approaching the end of this session; is there anything else that you want to add to all the information you have already given me?

Is there any question that you think I should have added to my questions?

6. CONCLUSION

Thank you so much for answering my questions. Do you have any questions that you would like to ask me? Thank you so much for the opportunity you granted me to do this study.

ANNEXURE D

FOCUS GROUP INTERVIEW GUIDE FOR THE PRINCIPALS, EDUCATORS, SGBs AND NGOs

ANNEXURE D: FOCUS GROUP INTERVIEW GUIDE FOR THE PRINCIPALS, EDUCATORS, SGBs AND NGOs

Topic: Developing guidelines for local role-players to implement the school-based Human Immune Virus and Acquired Immune Deficiency Syndrome prevention programme in Bushbuckridge, Mpumalanga

Arrival

Refreshment

1. INTRODUCTION

Good morning and welcome my name is I am a nurse by profession and a PhD scholar at UP. We are here to talk about school-based HIV and AIDS prevention programmes; in particular we are going to discuss issues surrounding the stakeholders involved in the implementation of the programme.

My aim is to get rich information on your roles and challenges as parents, NGO and teachers in the implementation of the school-based HIV and AIDS prevention. The information obtained from you as role players will be used to increase the effectiveness of the HIV and AIDS prevention in high schools.

The discussion we are going to have is called a focus group. For those of you who have never participated in one of these sessions, I would like to explain a little bit about this type of research.

Focus groups are used to gather information informally from a small group of individuals who have a common interest in a particular subject, in this instance you are all involved in the well-being of the learners in the school. As you all know HIV and AIDS prevention is important. I would also like to introduce to you my assistant who will be assisting me to write down all the notes I need. Our discussion will be audio taped, for me to be able to capture all the information. There is no right or wrong answer and we want to hear from everyone here for the purpose of improving our services delivery to the learners in this school. The discussions will last for about an hour and a half depending on the extent of our deliberations.

GROUND RULES:

- Respect each other's opinion
- One person at a time

STOP TO ASK IF THEY NEED ANY CLARIFICATION

BROAD OPENING QUESTION

What kind of HIV/AIDS prevention programme do you have at the school?

List of research project topics and materials.

PROGRAMME CONTENT (INDIVIDUAL AND COMMUNITY)

PROBING QUESTIONS:

- Is it a formal or an informal program?
- Is life orientation as an official school subject included as well? Follow up the answer given.
- What are the topics covered in Life Orientation with regard to HIV and AIDS?
 - o How do you present the content
 - O How do learners respond to the content?
 - What challenges do you experience from parents when you talk to the children about sex?
 - What are the attitudes of parents towards the inclusion of sex education in the HIV and AIDS prevention programme?
- Do you think this is sufficient/ effective? ... follow up
- Are there any challenges that you are experiencing.

WHAT IS YOUR SUGGESTION TO IMPROVE THIS/ENHANCE THE PROGRAMME?

IMPLEMENTATION

2. Tell me about the role you play and the resources in the implementation of the school- based HIV and AIDS prevention programme?

PROBING QUESTIONS:

- What role do you play in the implementation of the school- based HIV and AIDS prevention programme?.....follow up...how when, etc
- What are the guidelines that you are following to implement the HIV and AIDS education in schools?
- What are the resources that you have and need at the school to be able to implement the programme efficiently? Follow up..
- What skills do you need to be an effective implementer of the programme? Follow up.....
- What skills and knowledge do you have as an implementer of the programme?
- What can be done to empower the various role-players to function to their optimal capacity to ensure success of the programme?

- Is there any support system or structures supporting you in the implementation of the schoolbased HIV and AIDS prevention programme? What type of support would you like to have, by who, how often....
- What are the barriers to the implementation of the school-based HIV and AIDS prevention programme in schools? Follow up....

•

WHAT IS YOUR SUGGESTION TO IMPROVE THIS/ENHANCE THE PROGRAMME?

COLLABORATION, COORDINATION AND PARTNERSHIPS (INTERPERSONAL)

3. Who are the local role-players with whom you collaborate to implement HIV and AIDS prevention programmes? How do you coordinate your actions?

Probing questions:

- What do you think are roles of the district health manager and the nurses in the prevention of HIV and AIDS in schools?
- To what extent do you think there is collaboration and coordination between the role-players? Is there a need for change?
- What are the barriers to collaboration of the various role- players?
- What do you think should be done to ensure that there is collaboration, coordination and partnerships between role-players as stipulated in the Policy (ISHP)?
- Are you aware of this Policy?

We are now approaching the end of this session; is there anything else that you want to add to all the information you have already given me?

Is there any question that you think I should have added to my questions?

6. CONCLUSION

Thank you so much for answering my questions. Do you have any questions that you would like to ask me? Thank you so much for the opportunity you granted me to do this study.

ANNEXURE E

PERMISSION REQUEST (MPUMALANGA DEPARTMENT OF HEALTH)

ANNEXURE E: PERMISSION REQUEST (MPUMALANGA DEPARTMENT OF HEALTH)

UNIVERSITY OF PRETORIA

P.O. Box X20

Hatfield

0028

Mpumalanga Department of Health

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS

Dear Sir/ Madam

My name is Constance B Sekgobela, and I am a health science PhD student at the University of Pretoria. The research I wish to conduct for my Doctoral thesis involves developing guidelines to implement School-Based HIV and AIDS prevention programmes in high schools in Bushbuckridge, Mpumalanga. My research project will involve focus group discussions with the principals, Life Orientation educators as well as the SGBs from the identified high schools. Primary Health Care nurses and the district manager will be interviewed as well. The information obtained will be treated with confidentiality and will be used solely for this research. This project will be conducted under the supervision of Dr M.D Peu and Dr M De Waal. I thus hereby wish to apply for permission to conduct my research in four of the identified schools in your district.

I have provided you with a copy of my thesis proposal which includes the copies of the research instrument, information leaflet and consent forms.

It is my presumption that the research findings will make a creditable contribution towards collaboration, coordination and partnership of all the role players in effective and improved implementation of the HIV and AIDS prevention programme in high schools. I undertake to provide the Department of Education with a copy of the full research report. For any further information in this regard, please contact me on 0824652483.

Thanking you in advance for your time and consideration in this matter.

Yours sincerely

Constance Sekgobela

ANNEXURE F

PERMISSION REQUEST (MPUMALANGA DEPARTMENT OF EDUCATION)

ANNEXURE F: PERMISSION REQUEST (MPUMALANGA DEPARTMENT OF EDUCATION)

UNIVERSITY OF PRETORIA

P.O. Box X20

Hatfield

0028

Mpumalanga Department of Education

Private Bag X11341

Nelspruit

1200

REQUEST FOR PERMISSION TO CONDUCT RESEARCH IN SCHOOLS

Dear Sir/ Madam

My name is Constance B Sekgobela, and I am a health science PhD student at the University of Pretoria. The research I wish to conduct for my Doctoral thesis involves developing guidelines to implement School-Based HIV and AIDS prevention programmes in high schools in Bushbuckridge, Mpumalanga. My research project will involve focus group discussions with the principals, Life Orientation educators as well as the SGBs from the identified high schools. Primary Health Care nurses and the district manager will be interviewed as well. The information obtained will be treated with confidentiality and will be used solely for this research. This project will be conducted under the supervision of Dr M.D Peu and Dr M De Waal. I thus hereby wish to apply for permission to conduct my research in two of the identified schools in your district.

I have provided you with a copy of my thesis proposal which includes the copies of the research instrument, information leaflet and consent forms.

It is my presumption that the research findings will make a creditable contribution towards collaboration, coordination and partnership of all the role players in effective and improved implementation of the HIV and AIDS prevention programme in high schools. I undertake to provide the Department of Education with a copy of the full research report. For any further information in this regard, please contact me on 0824652483.

Thanking you in advance for your time and consideration in this matter.

Yours sincerely

Constance Sekgobela

ANNEXURE G

UNIVERSITY OF PRETORIA ETHICS APPROVAL

The Research Ethics Committee Faculty Health Sciences, University of Preferic compiles with ICH-GCP guidelines and has US Federal wide Assurance

- FWA 00002557. Approved do 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 22/04/2014 and Expires 22/04/2017



Faculty of Health Sciences Research Ethics Committee

23/01/2015

Approval Certificate New Application

Ethics Reference No.: 271/2014

Title: Developing guidelines for local role-players to implement the school-based Human Immunodeficiency Virus and Acquired Immune Deficiency Syndrome prevention programme in Bushbuckridge, Mpumalanga.

Dear Ms Constance Sekgobela

The **New Application** as supported by documents specified in your cover letter for your research received on the 27/07/2014, was approved by the Faculty of Health Sciences Research Ethics Committee on the 22/01/2015.

Please note the following about your ethics approval:

- Ethics Approval is valid for 1 year.
- Please remember to use your protocol number (271/2014) on any documents or correspondence with the Research Ethics Committee regarding your research.
- Please note that the Research Ethics Committee may ask further questions, seek additional information, require further modification, or monitor the conduct of your research.

Ethics approval is subject to the following:

- . The ethics approval is conditional on the receipt of 6 monthly written Progress Reports, and
- The ethics approval is conditional or the research being conducted as stipulated by the details of all documents submitted to the Committee. In the event that a further need arises to change who the investigators are, the methods or any other aspect, such changes must be submitted as an Amendment for approval by the Committee.

We wish you the best with your research.

Yours sincerely

Professor Werdie (CW) Van Staden

MBChB MMed(Psych) MD FCPsych FTCL UPLM

Chairperson: Faculty of Health Sciences Research Ethics Committee

The Faculty of Health Sciences Research Ethics Committee complies with the SA National Act 61 of 2003 as it pertains to health research and the United States Code of Federal Regulations Title 45 and 46. This committee abides by the ethical norms and principles for research, established by the Declaration of Helsinki, the South African Medical Research Council Guidelines as well as the Guidelines for Ethical Research: Principles Structures and Processes 2004 (Department of Health).

ANNEXURE H

PERMISSION FROM THE MPUMALANGA DEPARTMENT OF HEALTH



Department of Fleatilla Mpumalanga Provincial Government

Deubling No. 3, No. 7 Gevernment Burk Gold, Blogwille Ped, Recurson 2, Mlomarch, 1209. Mjuna oktopa Peter Bay N 11295. (Minanta in 1969, 1740) 1766-1419. no. (2747) 1766-3129. Page 04-1761-3459, pp. (2747) 1760-3769.

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Ms. Constance Sekgol P.O Box 142 THULAMAHASHE 1365	oelu	26 January 2015
Dear Ms. Constance S	ekgobela	
LOGAL ROLE-PLAYER	SEARCH & ETHICS APPROVAL: DEV RS TO IMPLEMENT THE SCHOOL-BAS INE DEFICIENCY SYNDROME PREVER PUMALANGA	ED HUMAN IMMUNE VIRUS
Provincial Research and fermat that you sent.	l Ethics Committee has approved your re	search proposal in the latest
PRRECIRER MP 2014	RP6_332	
Kindly ensure that you page that project has been	rovide us with the soft and hard copies o	f the report once your

271011008 DATE



Kind regards

MR. MOLEFE MACHABA RESEARCH AND EPIDEMIOLOGY

ANNEXURE I

PERMISSION FROM THE MPUMALANGA DEPARTMENT OF EDUCATION

APPROVAL TO CONDUCT RESEARCH FOR MS C.B. SEKGOBELA: PhD



Private Bag X 11341
Nelspruit 1200
Government Boulevsrei
Riverside Park
Sullding 5
Mpumalange Province
Republic of South Africa

Litiko leTemfundvo - Umnyango weFundo - Bepartement van Onderwys - Umnyango wezeMfundo Enquiries: H.A. Baloyi (013) 766 5476

Miss C.B. Sekgobela
University of Pretoria
P O Box X20
hatfield
0028

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RE: APPLICATION TO CONDUCT RESEARCH: MS C.B. SEKGOBELA

Your application to conduct research was received on 03 December 2014. The title of your study is: "Developing guidelines for local role-players to implement the school-based Human Immune Virus and Acquired Immune Deficiency Syndrome prevention programme in Bushbuckridge, Mpumalanga." The research objectives, significance and overall design of your study give an impression that the outcomes of the study will be useful and valuable in the implementation of school-based HIV and AIDS prevention programme. Your request is approved subject to you observing the content of the departmental research manual which is attached. You are required to discuss with the principals of the sampled schools regarding the approach to your observation and data collection as no discuption of tuition will be allowed. You are also requested to adhere to your University's research of thics as spett out in your research ethics document.



APPROVAL TO CONDUCT RESEARCH FOR MS C.B. SEKGOBELA; PHD

In terms of the attached manual (2.2, build number 4 & 6) data or any research activity can only be conducted after school hours as per appointment. You are also requested to share your findings with the department so that we may consider implementing your findings if that will be in the best interest of the department.

For more information kindly being with the department's research unit @ 013 766 5476 or a.balovi@education.mou.gov.za. The department wishes you well in this important project and pladges to give you the necessary support you may need.

		 	
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ANNEXURE J

TRANSCRIPT INDIVIDUAL INTERVIEWS

INDIVIDUAL INTERVIEW CLINIC A PARTICANT NO 1: Voice 028/2015.

INTERVIEWER:

Good morning, i have already introduced myself and the purpose of this interview. I will go directly to the interview'. I am going to ask a broad question; "what kind of HIV and AIDS prevention program do you have at the clinic that you are render into the nearby school"

<u>PARTICIPANT:</u> Giggle and laughing..."....ok....We are having a youth friendly clinic which is run especially during the weekends, so we teach the youth about STI, HIV, TB and family planning,.

<u>INTERVIEWER:</u> Ok

<u>PARTICIPANT:</u> : ...so what we do also, we motivate them to use condoms for males, and the female come for family planning we use dual methods, condoms and other method they prefer

INTERVIEWER: is that program formal or informal?

<u>PARTICIPANT:</u> Yes it is a formal programme

INTERVIEWER: How often are you running the youth friendly clinic?

PARTICIPANT: Every Saturday.....

INTERVIEWER: How is the attendance of the youth of the clinic or service?

<u>PARTICIPANT:</u> The attendance is very good, I believe it has to do with the fact that they are free and relaxed, the atmosphere that side is very welcoming to them

<u>INTERVIEWER:</u> so if I may follow up, what happens to the learners who come during the week when the youth friendly clinic is not open?

<u>PARTICIPANT:</u> They are seen by any other professional nurse on duty but for them to be able to benefit more, they need to come on those days as that is when they are being taught and more information is given with regard to HIV and Aids and the prevention thereof.

<u>INTERVIEWER:</u> Are you aware of life orientation as a school subject put in as a way of HIV and AIDS prevention as there is content on HIV

PARTICIPANT: Yes I am aware

INTERVIEWER: What is your role in the teaching of the subject?

<u>PARTICIPANT:</u> Ok, there is a good relationship between us and LO teachers in the nearby school. So whenever there is any program/ or anything health related that they feels we can intervene or take part in, or there is content that has health issues, she calls us to

come give the lessons to the learners. Sometimes she sends questionnaire for us to answer to assist them to understand the topics more. If there is a module on health issues she calls us as well or come to us to inform us that the will be a group of students that will be coming and what content we should teach them to intervene she calls us and where ever is possible she give u questioner to assist the students.

<u>INTERVIEWER:</u> So from that explanation what is your role towards the teaching of the Life Orientation?

<u>PARTICIPANT:</u> my role is that of passing the knowledge I have about HIV and AIDS to the teachers as well as the learners. I see myself as a mentor to the teachers and an advisor as well. And lastly is to give/offer them any assistance when there is health related issues through giving of information?

<u>INTERVIEWER:</u> do you see your role as collaboration, and coordination of services with the teachers?

<u>PARTICIPANT:</u> Yes, I see nurses as the middleman between the teachers and learners...coordinating the services and collaborate with the educators...

<u>INTERVIEWER:</u> In which form do you present your content to the students is it lecture or is there any method you are using?

<u>PARTICIPANT:</u> It is usually a question and answers style and we also do health talks, where we give them health education and afterwards ask them questions to check if they understood the content.

INTERVIEWER: How do you see the learners responding to such session?

<u>PARTICIPANT:</u> Ahh it is good, the response is excellent; they seem to be enjoying the programme soo much

INTERVIEWER: What makes you think the response is excellent?

<u>PARTICIPANT:</u> you can see that they enjoy the talks from the way they ask questions and showing more interest in the topic. And in case if you do not know the content and not well prepared for them..... *utati poyila,..laughing*.. Because they ask a lot of questions; hey

<u>INTERVIEWER</u>: Do you experience any challenges with parents when you are teaching learners about HIV and AIDS and sex education?

<u>PARTICIPANT:</u> Yes, but it is not a common in some schools, in one of the schools there is a principal atprimary school who had a challenge with the parents, he called the meeting and involved the clinic and a registered nurse attended the meeting to explain to the parents about sex we are not teaching them to do the procedure. After the explanation the response was very good. After that all was good, she went on to teach them about other STIs and the response was a positive one, they even took pictures with

the nurses, there are pictures on the wall to that effect. They were so happy and we left with no doubts because they knew what was presented to their children from the nurses. With good communication and information there is no problem, the challenges come with lack of knowledge, but as soon as they know, all is well.

<u>INTERVIEWER:</u> In other words you want to tell me that the parents are happy with the inclusion sex education and HIV their kids are getting at school?

<u>PARTICIPANT:</u> Yes, because the parents at home most of the parents do not have time to talk /educate to their children with regard to HIV and AIDS so they rely on the teachers. Some are not comfortable talking to their children about this topic because of their culture or religious belief, so at school when the children are taught, it lessen the burden for them

<u>INTERVIEWER:</u> ok, have you noted any change since the inception of both the programs you have indicated in the behaviour of the learners?

<u>PARTICIPANT:</u> Yes there is change as they come voluntarily for the testing of HIV, and that means they are taking responsibility of their lives.

INTERVIEWER: According to your observation, is the programme sufficient?

PARTICIPANT: It is not sufficient, as we do not have educational material, err.... what do we call the video that have mmmm. Let me say, we need resource like videos, educational material and posters. Yaa, we don't have resources...and pamphlets that we can give to them so they can read at home and get more clarification

INTERVIEWER: What is your suggestion to improve or enhance the programme?

<u>PARTICIPANT:</u> The suggestion, if we can have enough resources, material and human resources and physical space for the program because now we are just squeezing it in small rooms, computer with internet for the learners to explore more after we have done with our teachings. We don't have space that is adequate to use for the youth and the fact that when they come to the clinic they have to be seen by the other patients/clients who are sick is a challenge for them... And that make other learners to be uncomfortable as most of them do not want to be seen.

<u>INTERVIEWER:</u> In case of the human resources that you are talking about, how can that be tackled because it seems to be big challenge?

<u>PARTICIPANT:</u> In the clinic we are very short staffed and we have had professional nurses resigning. So if we can have the school health services, it may assist as the learners will be attended to in totality by the school health nurses.

<u>INTERVIEWER:</u> Do you have guidelines that guide your practice towards rendering services to the youth and learners?

PARTICIPANT: We have one but an outdated one

<u>INTERVIEWER:</u> Which guideline are you talking about here?

PARTICIPANT: Youth and adolescent, but it is outdated

<u>INTERVIEWER:</u> what about guidelines on HIV and AIDS in schools, what guideline are you following?

<u>PARTICIPANT:</u> I forgot he name of the document we are following, but that give us direction on how to handle HIV and AIDS in schools

<u>INTERVIEWER:</u> What do you think are the skills required for you as role player that you need to be able to function effectively?

<u>PARTICIPANT:</u> We need workshops on how to run the youth friendly clinic as we work according to the guideline but never workshopped, we need to be empowered

INTERVIWER: Except that, what else?

<u>PARTICIPANT:</u> Maybe the whole subject of life orientation according to the grade should be given to us so that when they come here, we able to emphases what they are being taught be stated from grade 1 to 12...content to compare and add as well as making sure that the content is accurate

<u>INTERVIEWER:</u> Have you communicated this suggestion to the teachers of LO in the neighbouring school?

<u>PARTICIPANT:</u> The thing is, i never thought about this until now when we are talking about the LO and HIV and AIDS prevention in schools.

INTERVIEWER: ok, but you will give this suggestion to the teachers you are working with?

<u>PARTICIPANT:</u> Yes, I will definitely do...., I think we need to be more involved and collaborate with the teachers more often.

<u>INTERVIEWER:</u> Any support structure supporting you in the implementation of school based HIV and AIDS prevention?

<u>PARTICIPANT:</u> Yes...the Mother and child coordinator or department is the one section that supports us a lot

INTERVIEWER: ok, I see. What type of support is this section giving you if I may ask?

<u>PARTICIPANT:</u> Mmmmm they support us by monitoring and evaluating the youth friendly clinic, by visiting us and requesting reportand sometimes, they do assist when we need material for teaching

INTERVIEWER: Is it sufficient?

PARTICIPANT: No, she just comes sometimes, yes sometimes

<u>INTERVIEWER:</u> What kind of supports would they add to the existing, how, how often and by whom?

<u>PARTICIPANT:</u> I have already indicated that we are short staffed, Because of shortage of staff, the involvement of the partners, NGO may help, if they may organise that. It could be much better.

INTERVIEWER: You also indicated that they visit your clinic, how often do they visit?

PARTICIPANT: at least monthly or quarterly

<u>INTERVIEWER:</u> What are the barriers to the implementation of the school based HIV and AIDS that you are experiencing in the clinic?

<u>PARTICIPANT:</u> Shortage of staff, this is the biggest barrier because when they come to the clinic, they find us very busy with the sick patients and find that there is no one to consult with them. Another challenge as indicated before is the shortage of material resources as well as the infrastructure

<u>INTERVIEWER:</u> From your observation and experience observation, who are the role players to be involved in the school based HIV and AIDS prevention programme?

PARTICIPANT: Health promoters, and who else?, the members of the multidisciplinary health team, that is, the doctors in case the is a sick learner, nurses PHC and HIV courses trained, teachers, parents, preachers, psychologist and social workers...

INTERVIEWER: Ok, What do you think is the role of the District manager?

<u>PARTICIPANT:</u> The main role of the District manager is to monitor the efficiency and effectiveness of the programme.

INTERVIEWER: Ok, Is the District health manager meeting this role?

<u>PARTICIPANT:</u> Mmmmm I will say yes as they do phone us to check if the program is still on and to check the statistics on how many youth seen

<u>INTERVIEWER:</u> How is the collaboration between the various role players who are currently running this programme?

<u>PARTICIPANT:</u> Hey, I will say the collaboration is just between the teachers and nurses only...and for us is easier as we are very close to each other. But otherwise a lot need to be done because all the people I mentioned above, the multidisciplinary team must work together as well as the school health services to ensure that prevention of HIV and AIDS in schools take a priority. Like on ideal clinic the must be a memorandum of understanding and it is not there.

<u>INTERVIEWER:</u> How can the collaboration and coordination between the role players be improved?

<u>PARTICIPANT:</u> Yaa...by communicating better through meetings and having a representative in all meetings or activities.

INTERVIEWER: Are you aware of the Integrated School Health Policy (ISHP)?

<u>PARTICIPANT:</u> No, maybe if I can say we do not have the school health services or nurses for that program, so we are sacrificing to be able to spare some times to go and teach them and in that way it will be difficult for us to know about such policies.

<u>INTERVIEWER:</u> We are about to end our interview, is there anything that you think I should have added in my questions or any input into the interview that we may use and benefit the school based HIV and AIDS programme. Any addition?

<u>PARTICIPANT:</u> Mmmm, I think we are covered but, the primary schools as well. They need more support as far as educating them, as the learners need to have the basic knowledge for HIV and AIDS prevention from the primary schools, and this will help them a lot will have ability to make decisions about their health and sexual matters.

<u>PARTICIPANT:</u> The issue of male circumcisions in schools as well should be emphasised as it is as well a Prevention mode for HIV and AIDS as well. On the other hand, those who still believe inn traditional male circumcision, HIV and AIDS prevention has to be taught to them, so we need to teach those more.

<u>PARTICIPANT:</u> Mmmmm. .If we can have enough resources, if we can have both human and material resources. It we have enough facility space and lastly if we can have computers with internet connectivity loaded with HIV and AIDS issues and its prevention. I think I have said a mouth full.

<u>Interviewer:</u> We have now come to the end of the interview. Thank you very much for your time and effort to assist in the study.



ANNEXURE K

GUIDELINE RATING TOOL

DEVELOPING GUIDELINES FOR LOCAL ROLE-PLAYERS TO IMPLEMENT THE SCHOOL BASED HUMAN IMMUNODEFICIENCY VIRUS AND ACQUIRED IMMUNODEFICIENCY SYNDROME PREVENTION PROGRAMME IN BUSHBUCKRIDGE, MPUMALANGA

DELPHI QUESTIONARE

Instructions:

- You are requested to rate the guidelines according to the criteria provided.
- Mark with an **X** in the appropriate criteria block.
- Feel free to critically analyse and evaluate the guidelines
- Please indicate any identified area of modification and write your comments and suggestions in the space provided below the guidelines.

• Kindly return the completed questionnaire within 5 working days after receiving it.

Rating scale	Crit	teri	а																	
1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree	gui	delinist yers olem sed d	ne r s nen sch A	ool- HIV IDS n	Relia The will simils if a simils circu and woul esse same state giver same evide meth deve	ar pp ar ms if d nti e me o	puide prod res blied stand exp prod ally ents	eline luce sults in ces erts luce the and for	guid clea logi and	ical,	e prec	nple	The exp	plica e (plicitly d sta pulati	guide / de te ta	eline efine	The may to con	/ be suit texts, grapł	guide adar dive	
Guideline 1	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

1. Strengthening	
of the capacity for	
all the role-	
players in relation	
to their role in	
school based HIV	
and AIDS	
prevention	
Comments:	
Instructions:	

- Mark with an X in the appropriate criteria block.
- Feel free to critically analyse and evaluate the guidelines
- Please indicate any identified area of modification and write your comments and suggestions in the space provided below the guidelines.

• Kindly return the completed questionnaire within 5 working days after receiving it.

Rating scale	Criteria				
1=Strongly disagree 2=Disagree 3=Agree	Validity: The guideline will assist role-players to implement the school-based HIV	Reliability: The guideline will produce similar results if applied in similar circumstances	Clarity: The guideline is clear, precise, logical, simple and unambiguous	Applicability: The guideline explicitly define and state target population	Flexibility: The guideline may be adapted to suit diverse contexts, e.g. geographical, or

4=Strongly agree	and pre pro	ven	tior		ess sam stat give sam evid met	uld entine eme en dene dene	ce a ds pmer	the and for									cult	ural		
Guideline 2	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
2. Foster																				
participation and																				
involvement of																				
parents in an																				
effort to																				
embracing cultural																				
diversity and																				
enhancing the																				
programme																				
uptake																				
Comments:		l																		

- You are requested to rate the guidelines according to the criteria provided.
- Mark with an **X** in the appropriate criteria block.
 Feel free to critically analyse and evaluate the guidelines

Please indicate any identified area of modification and write your comments and suggestions in the space provided below the guidelines. Kindly return the completed questionnaire within 5 working days after receiving it. Rating scale Criteria Validity: The Flexibility: 1=Strongly Reliability: Clarity: The Applicability: disagree guideline will The guideline guideline is The guideline guideline The assist roleproduce explicitly define will clear, precise. may be adapted 2=Disagree similar results players logical, simple and state target to to suit diverse implement if applied in and population 3=Agree contexts, e.g. schoolunambiguous the similar geographical, or based HIV circumstances 4=Strongly agree cultural **AIDS** and if experts and prevention would produce programme essentially same statements given the same evidence and methods for development **Guideline 3** 2 3 4 2 3 1 2 3 4 2 3 1 2 3 4 3. Multi-sectoral collaboration and forming partnership with key stakeholders relevant from sector(s) and at different levels Comments:

- You are requested to rate the guidelines according to the criteria provided.
- Mark with an **X** in the appropriate criteria block.
- Feel free to critically analyse and evaluate the guidelines
- Please indicate any identified area of modification and write your comments and suggestions in the space provided below the guidelines.

• Kindly return the completed questionnaire within 5 working days after receiving it.

Rating scale	Cri	teri	а																	
1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree	guidasss playimp the bas and pre pro	deliisist yersilem sed di ven gra	ne res nen sch Antior mm	ool- HIV IDS I	The will sim if sim circ and wou ess san stat give san evid met dev	illar appillar appill	exp prod ially ents ce ds pmei	eline luce sults in ces erts luce the and for	guid clea logi and una	cal, mbig	e prec sim uous	nple	The exp and pop	e (licitly star ulatio		line fine rget	The may to con geo cult	/ be suit texts grap ural	uide adap dive , dive	eted erse e.g. , or
Guideline 4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4

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4 Duaments the	 	1 1			I	ı	1	ı		ī	
4. Promote the											
implementation of											
the school- based											
HIV AND AIDS											
prevention											
programme											
Comments:											
											1

- You are requested to rate the guidelines according to the criteria provided.
- Mark with an **X** in the appropriate criteria block.
- Feel free to critically analyse and evaluate the guidelines
- Please indicate any identified area of modification and write your comments and suggestions in the space provided below the guidelines.
- Kindly return the completed questionnaire within 5 working days after receiving it.

Rating scale	Criteria					
1=Strongly	Validity: The	Reliability:	Clarity:	The	Applicability:	

disagree	_			will		_	guide		_	deline		is	The		guide		Flex	kibilit	y:	
2=Disagree	ass pla	yers	8	ole- to		ilar	prod res	sults	_	cal,	pred sin	nple	and	licitly I sta	te ta		The	_	guidel	
3=Agree	imp the			t ool-	if simi		olied	in	and	l Imbig	luous	6	pop	ulati	on				adap dive	
4=Strongly agree	bas	ed		HIV	circ	um	stand											texts	hical	e.g.
	and pre			IDS า			exp prod											ural		
	pro	gra	mm	ne	ess		ially													
							ents													
					give sam			the												
					evic	den		and					4							
					met dev		ds pmei	for nt												
Guideline 5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
5. Increase																				
access to all																				
relevant practice policies and											N									
guidelines																				
					4															
Comments:		<u>I</u>																		
			d	•																
		+																		
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	4																			
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- You are requested to rate the guidelines according to the criteria provided.
- Mark with an **X** in the appropriate criteria block.
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Rating scale	Cri	teri	а																	
1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree	gui ass pla	deli sist yers olen sed d	ne rs nen sch Antion	ool- HIV IDS 1	The will sim if sim circ and wou ess san stat give san evice met	ilar app ilar uld ent ene eme ene den	exp prod ially ents	elline uce sults in ces erts uce the and for	guid clea logi and	cal,	e pred	nple	The exp	blica e (llicitly I sta	guide de te ta	line fine	The may to con	y be suit itexts	guide adap dive	ted erse e.g.
Guideline 5	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
6. Develop a school based surveillance system to track, monitor and evaluate progress of the programme and common																				

practices.										
0										
Comments:										

ANNEXURE L

LANGUAGE EDITOR'S CERTIFICATE

Suzette M. Botes

FULL MEMBER: Professional Editors' Guild

19 February 2018

TO WHOM IT MAY CONCERN

I, Suzette Marié Botes (ID 5211190101087), confirm that I have edited the noted PHILOSOPHIAE DOCTOR in NURSING SCIENCE. However, the accuracy of the final work remains the responsibility of the student.

Student: Ms Constance Balahliye Sekgobela

Title:

DEVELOPING GUIDELINES FOR LOCAL ROLE PLAYERS TO IMPLEMENT THE SCHOOL BASED HUMAN IMMUNODEFICIENCY SYNDROME PREVENTION PROGRAMME IN BUSHBUCKRIDGE, MPUMALANGA

The edit included the following:

- Spelling
- Vocabulary
- Punctuation
- Grammar (tenses; pronoun matches; word choice etc.)
- Consistency in terminology, italisation etc.
- Sentence construction
- Suggestions for text with unclear meaning
- Logic, relevance, clarity, consistency
- Checking reference list against in-text sources
- Basic formatting

Thank you

Suzette M Botes (not signed – sent electronically)

060 619 3137

suzette.botes.21@gmail.com

LANGUAGE PRACTITIONER / EDITOR / FACILITATOR:

Aston University (UK)

Consortium for Language and Dimensional Dynamics (CLDD)

Health Advance Institute (HAI)

Milk Producers' Organisation - Institute for Dairy Technology

Milpark Business School

Sefako Makgatho Health Sciences University (formerly known as Medunsa)

South African Civil Aviation Authority (SACAA)

Stellenbosch University (US)

Tshwane University of Technology (TUT)

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University of Pretoria (UP)

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