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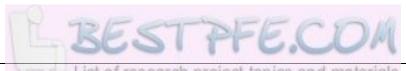


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"How wonderful that no one needs to wait a single moment to improve the world"

ANNE FRANK



# CHAPTER 1 OVERVIEW OF THE STUDY

# 1.1 INTRODUCTION AND BACKGROUND

Cancer contributed to 8.2 million deaths worldwide in 2012, and new cases of cancer are reported to have increased from 12.7 million in 2008 to 14.1 million in the same year (Torre, Bray, Siegel, Ferlay, Lortet-Tieulent & Jemal 2015:88). In South Africa, cancer contributed to 7% of all non-communicable-disease deaths in 2008 (World Health Organisation [WHO] 2011:174). Statistics South Africa (2009:62) included malignant neoplasms of the digestive, respiratory and intra-thoracic organs as one of the top ten causes of death for persons aged 50 years and older in 2007. Gender-specific statistics for that age group also categorised malignant neoplasms of the reproductive organs as one of the top ten causes of death in 2007 for males and females, respectively.

Should an individual be diagnosed with cancer, possible curative treatment options include radiotherapy, chemotherapy, surgery, psycho-oncology or palliative care. Both the diagnosis of cancer and its treatment imply change and the initiation of new needs for the afflicted individual (Albreht, McKee, Alex, Coleman & Moreno 2008:1452). Cancer treatment involves either hospitalisation or out-patient visits by the individual concerned. Hospital visits for the purpose of diagnosing or treating cancer are very stressful for patients and their families due to the uncertainties and fears associated with the prognosis of cancer (Dougherty 2010:301).

Cancer is a condition which affects a patient's physical and psychological states of being (Esbenson, Swane, Hallberg & Thome 2008:394). A systematic review of the physical and psychological effects of music therapy and music interventions in cancer patients reported that these measures are possibly linked to anxiety reduction and mood improvement in these individuals (Bradt, Dileo, Grocke & Magill 2011:17). Cited physiological outcomes included reductions in patients' blood pressure readings, heart rates and respiratory rates. Music was also reported to have an analgesic effect. However, these findings should be interpreted with caution as the quality of the data used in the study was found to be low (Bradt et al. 2011:17). Many of the trials had a high bias risk and blinding of the participants was not always possible. Thus, more research is needed in this regard. A reduction in pain and anxiety contributes

significantly to the overall health and quality of life of cancer patients. Any method that claims to have these effects needs to be thoroughly investigated.

The experience of emotional distress by cancer sufferers was vividly described by a patient in an article by Rykov (2008:193). The patient described her feelings of isolation and guilt as she observed family and friends making adjustments in their lives due to her illness. Her cancer diagnosis and the anticipation of her treatment resulted in feelings of anger, and she expressed fear regarding the possibility of suffering before her death. This kind of emotional distress impacts on the overall wellbeing and quality of life of the cancer patient.

In a study conducted by Esbenson et al. (2008:403) on cancer in the elderly, the diagnosis of cancer was perceived by patients as disruptive to family balance. Elderly patients feared becoming a burden on their next of kin as they viewed themselves as the providers and not the receivers of help. It was an additional burden to them when they witnessed the suffering that their cancer caused their children and grandchildren. Fatigue, a common symptom experienced by cancer patients, was found to considerably disrupt elderly cancer patients' daily activities. All of these factors illustrate how a cancer diagnosis can be experienced as a traumatic event – physically, psychologically and existentially (Esbenson et al. 2008:403).

Pain is one of the most common physical symptoms of cancer. In a study conducted by Alexopoulos, Koutsogiannou, Moratis, Mestousi and Jelastopulu (2011:444), 70% of the participants described their pain's intensity as high or extremely high, whereas 28% of the participants experienced the pain as moderate to low in intensity. Seven percent of the participants experienced such extreme pain that they said they would prefer to die, and 66.4% of the participants experienced continuous pain for an average of 12 hours a day. Most participants experienced pain in more than one area of the body. The pain was reported to reduce their physical activity levels whilst also causing fatigue, generalised weakness and sleep disturbances.

An individual's physical, psychological, emotional and social dimensions affect and are affected by their spiritual dimension. None of these dimensions exist in isolation (Ellison 1983:332). People living with cancer experience spiritual needs, as identified by breast cancer survivors in a study conducted by Levine, Yoo, Aviv, Ewing and Au (2007:221). A number of

spiritual themes emerged from the study by Levine et al. (2007:222). These included the experience of God as a comforting presence, a questioning of faith, anger at God, spiritual transformation of self and attitudes towards others, recognition of one's own mortality, deepening faith, acceptance and prayer.

Patients in physical and emotional distress are in need of care, which nurses are mandated to provide (Askinazi 2004:33). Nurses should therefore care for patients' physical, psychological, social and spiritual wellbeing, helping to enhance their overall sense of wellbeing (Lin & Bauer-Wu 2003:79). It is important that physical, psychosocial and emotional needs be addressed when providing nursing care to cancer patients.

Aldridge (2003:17) points out that music is being used effectively in various nursing interventions and that the use of music therapy in caring for cancer patients is prominent. The healing potential of music has been acknowledged and harnessed in an effort to address patients' physical, psychological, social and spiritual needs (Abrams 2001:222). This integrated approach is supported by current thinking in psychoneuroimmunology (PNI). PNI describes the communication that takes place between body systems in order to sustain health. Through neural pathways, psychological processes and emotional wellbeing influence the functioning of the endocrine and immune systems. This explains how the personality and nature of an individual can contribute to the development of a disease (Daruna 2004:100). On the other hand, the immune system also influences an individual's behaviour, motivation, cognition and emotions. Activation of the immune response by any physical or psychological stress causes the release of cytokines and other immune system substances. This is followed by electrical activity changes and neurotransmitter alterations in the central nervous system (CNS) which can lead to behaviour changes (Daruna 2004:94). PNI thus illustrates the importance of holistic nursing care.

The field of music therapy encompasses a number of practices and methods. One of these is the Bonny Method of Guided Imagery and Music (BMGIM), which is a receptive method of music therapy. BMGIM is a music-centred transformational therapy that facilitates self-awareness and the integration of the physical, psychological, social and spiritual dimensions of a being (Cadrin 2005-2006:5).



The implementation of BMGIM comprises four phases: prelude, induction, music travel and postlude. The prelude phase involves the exploration of the patient's current life experience. With a therapist's guidance the patient's attention is turned towards their inner world and a focus for the session is identified. This phase takes approximately 15–20 minutes. The next phase, i.e. induction, lasts for 2–7 minutes. The patient lies down in a comfortable position and a therapist, using words, guides the patient into a relaxed state. In the third phase, namely music travel, carefully selected music based on the focus of the session is played. The therapist guides the patient through an exploration of imagery that the music may evoke. This phase lasts for 30–50 minutes (Wigram, Pedersen & Bonde 2002:117).

During the final phase, i.e. the postlude, the music ends and the patient is guided back to an awareness of the present moment. The patient spends the next 5 to 10 minutes drawing on paper in order to capture the experience of the music travel. From a Jungian perspective the drawing also referred to as a mandala gives form to the images experienced during the music travel. Patients usually draw the images which were the most explicit in their music travel and the process of drawing clarifies and enriches these images. Through drawing the images are brought closer to consciousness and facilitate the patients' process of healing through integration and transformation (Bruscia & Grocke 2002:223). Further, the mandala is a symbolic representation of the current inner state and usually conveys the salient features of what has been gained during the music travel. Processing the mandala with the patient thus aids the therapeutic process. This is followed by a 10–20 minute dialogue between patient and therapist to link the experience with the focus of the session and the patient's daily life (Wigram et al. 2002:117).

In the BMGIM the patient listens to carefully selected western classical music (Korlin & Wrangsjo 2002:3). Western classical music has been found to have qualities that facilitate self-exploration. It also provides a depth of experience due to its harmonic and melodic complexities (Bonny 2002:150). Using this genre of music as part of the therapy induces memories, emotions, thoughts and images. The therapist guides and supports the patient throughout the process and the final phase allows for creative expression and verbal integration (Korlin & Wrangsjo 2002:4). The BMGIM allows patients to confront their questions and experiences, and to search for meaning in their current circumstances (Cadrin 2005-2006:5). The process enables patients to become more vividly aware of their current life circumstances

and experiences, as well as their inner strength and potential. This in turn makes healing, as well as transformational and spiritual experiences, possible (Korlin & Wrangsjo 2002:3). In a study conducted by Bonde (2005b:146), a patient described her experience of hope, joy and a sense of meaning gained through the BMGIM.

In a doctoral study by Raley (2006:107) on the healing experiences of BMGIM patients, it was found that after the therapy patients experienced a more positive self-perception and an increase in self-acceptance. BMGIM could be beneficial in the lives of cancer patients – enabling them to be actively involved in the management of the physical, psychological, social and emotional changes that result from cancer and its treatment.

Developing a culture of assessment and management of physical, psychological, social and emotional needs by nurses can enhance the caring aspect of nursing. In a health care setting, interpersonal interactions take place between patients and health care professionals. In a study conducted by Liu, Mok and Wong (2005:265), patients identified nurses as the most accessible of these professionals due to their 24-hour-a-day availability. Therapeutic and supportive nurse-patient relationships can contribute to the psychological, social, and spiritual wellbeing of the patients. This, in turn, could lead to an improvement in their overall health.

It is clear that the BMGIM could be used as a tool to increase the quality of nursing care provided to cancer patients. However, only very limited research can be found on the use of the BMGIM in the care of cancer patients. Furthermore, these studies have focused on the implementation of BMGIM during the rehabilitation phase of cancer survivorship. No research was found on the implementation and evaluation of the role of BMGIM in healing during the treatment phase of cancer. Therefore, I decided to embark on a project to systematically implement the BMGIM to complement the care provided in selected cancer interim homes in Gauteng, and to document the process and its outcomes.



## 1.2 PROBLEM STATEMENT

Ideally, nursing should involve caring for the physical, psychological, social and spiritual needs of a patient. However, due to limited resources, it is usually the patient's urgent physical needs that take priority (Williams & Kristjanson 2008:1070). According to Williams and Irurita (2004:807), this shift has been enabled by developments in pharmacotherapy and technology.

In a study conducted by Mulder, Vingerhoet and Breed (2008:101) it was found that the emotional distress caused by chemotherapy-induced hair loss is generally underestimated by physicians and nurses. The reason for this is a combination of health care professionals' underestimating or failing to identify these psychological challenges, and the failure of patients to communicate them to the health care professionals. Such situations are likely to result in insufficient and inappropriate care.

The WHO (2002:70) has identified psychosocial support as one of the principle methods of cancer treatment. The WHO (2002:80) also emphasises the need to provide basic emotional support to all patients diagnosed with cancer, to assess cancer patients for anxiety and depression, and to refer them to appropriate health care professionals where necessary.

The prevention and management of adverse physical and psychological effects that can accompany cancer diagnosis, anticancer treatment and post-treatment cancer care is described as "supportive cancer care" by the Multinational Association of Supportive Care in Cancer [MASCC] (2013:1) There is a projected global increase in incidences of cancer (Torre et al 2015:88). Thus, the need for supportive cancer care is also increasing.

As discussed above, the BMGIM has physical, psychological, social and spiritual effects that may enhance supportive cancer care (Bonde 2005b:146; Korlin & Wrangsjo 2002:3; Liu, Mok & Wong 2005:265; Raley 2006:107). The lack of research publications on the use of the BMGIM in the care cancer patients during the treatment phase of cancer implies that BMGIM is still not generally practiced. This study aims to systematically implement the BMGIM to complement care provided in selected cancer interim homes in Gauteng, South Africa, and to report these findings.



# 1.3 SIGNIFICANCE OF THE STUDY

The implementation of the BMGIM by nurses caring for cancer patients may endorse the practice of supportive cancer care. Allowing nurses to reclaim and refocus on the physical, psychological and spiritual aspects of nursing care may contribute to them experiencing a renewed sense of work satisfaction, thus increasing the employment and retention of nursing staff (Williams & Irurita 2004:814).

This study will inform health care professionals whether the BMGIM will be effective and sustainable when implemented during the treatment phase of cancer. Based on the findings of this study, recommendations can been made regarding the implementation of the BMGIM in cancer care programmes.

# 1.4 RESEARCH QUESTION

What is the complementary effect of the BMGIM on the physical, psychological and spiritual wellbeing of patients in selected cancer interim homes in Gauteng?

## 1.5 AIM AND OBJECTIVES

The aim of this study was to implement and evaluate the complementary effect of the BMGIM on the physical, psychological and spiritual wellbeing of patients in selected cancer interim homes in Gauteng, South Africa.

The objectives of the study are as follows:

- 1. To conduct a systematic review to identify methods that have been used to implement the BMGIM in other health care settings, and evaluate the reported effectiveness of the BMGIM in cancer care contexts (Phase 1);
- 2. To implement the BMGIM in selected cancer interim homes in order to introduce an existing music therapy method into a new setting (Phase 2);
- 3. To evaluate cancer patients' experiences during BMGIM therapy, as well as to evaluate the effects of the BMGIM on patients' physical, psychological and spiritual wellbeing for the duration of their stay in the cancer interim home (Phase 3).



# 1.6 CONCEPT CLARIFICATION

**1.6.1 Music therapy:** Music therapy refers to music interventions which are administered by professional music therapists. Music therapy involves activities such as listening to music, playing a musical instrument, singing, or composing music as part of a therapeutic process, as described by Dileo (2007) in Bradt et al. (2011:6). In this study a method of music therapy called Bonny Method of Guided Imagery and Music (BMGIM) was implemented by professional music therapists.

**1.6.2** Bonny Method of Guided Imagery and Music (BMGIM): 'The Bonny Method of Guided Imagery and Music (BMGIM) is a music-assisted transformational therapy that offers persons the opportunity to integrate mental, emotional, physical, and spiritual aspects of themselves. It is characterized by the use of specially sequenced western classical music designed to stimulate and sustain a dynamic unfolding of imagery experiences. Sessions in this one-to-one modality are conducted by facilitators who are formally trained in the BMGIM,' (Association of Music and Imagery 2012:1).

Training in the BMGIM takes place at three levels and is open to established health care professionals (Bonny 2002:17). Currently in South Africa only a limited number of music therapists are trained in the BMGIM. For the purposes of this study, all individual BMGIM sessions were conducted by BMGIM qualified music therapists. Furthermore, I collaborated with these professional music therapists during the planning and implementation of the study. In order to expand the exposure of other health care professionals to the method, I as a professional nurse am personally undergoing training in the BMGIM.

**1.6.3 Physical wellbeing:** The perceived and observed bodily functions or disruptions are referred to as physical wellbeing by Cella (1994:188). In addition, patients diagnosed with cancer experience a disruption in physical wellness due to pain, nausea and fatigue (Cella 1994:188). In this study, physical wellbeing was measured using the Symptom Distress Scale (SDS). The SDS was used to measure the following: nausea (2 items), appetite, insomnia, pain (2 items), fatigue, bowel, concentration, appearance, breathing, outlook, and cough.



- **1.6.4 Psychological wellbeing:** Kneisel and Trigoff (2013:4) consider a person to have sound mental health when their behavior, their interpersonal relationships, and their intrapersonal relationships with themselves are indicative of psychological, emotional and social health. In this study psychological wellbeing was measured using the Psychological General Well Being Index (PGWBI) so that the effect of the BMGIM on the psychological wellbeing of patients could be consistently reported.
- 1.6.5 Spiritual wellbeing: Ellison (1983:331) defines spiritual wellbeing as 'having a vertical and horizontal component. The vertical dimension refers to a person's sense of wellbeing in relation to God, and the horizontal dimension refers to a sense of life purpose and life satisfaction'. In this study, spiritual wellbeing was measured using the Spirituality Index of Well Being (SIWB). In addition, the PGWBI which has parameters that assess individuals' feelings on their 'inner personal state' (McDowell 2006:240) also contributed to a measure of patients' spiritual wellbeing.
- **1.6.6 Interim home:** In this study, "interim home" refers to a house which offers accommodation to cancer patients for the period of time during which they are receiving cancer treatment on an outpatient basis at a hospital. Patients in the interim home are self-caring. Their health is sufficient to allow them the independence required to live in such a home rather than a hospital.

# 1.7 PHILOSOPHICAL ASSUMPTIONS

## 1.7.1 Ontological assumptions

'In critical realism, reality is defined as that which can be seen to have an effect' (Babbie 2010:44). This essentially implies that an individual's reality is created by the consequences or effects of particular events in one's life. Persons diagnosed with cancer experience realities that are influenced by cancer and its treatment. The effects of supportive cancer care are also part of these individuals' realities. By comparing a patient's perception of reality before and after BMGIM therapy, I evaluated this method's effect on their physical, psychological and spiritual wellbeing.



# 1.7.2 Epistemological assumptions

In order to learn more about the perceptions of reality by individuals who receive BMGIM therapy, cancer patients on chemo- or radiotherapy received the BMGIM therapy over a period of time. Because I wished to evaluate the effects of the BMGIM by comparing patients' perceptions of reality before and after receiving BMGIM therapy, a quantitative measurement was appropriate for this study. However, the nature of the BMGIM is explorative and descriptive. Therefore, a qualitative approach was also used to explore the experiences of BMGIM patients. As the reality of BMGIM can be measured using both objective and subjective methods, research methods from both the quantitative and qualitative domains were used to investigate the phenomenon of the effect and experience of BMGIM. The knowledge generated using both quantitative and qualitative methods will indicate whether the BMGIM intervention will be effective during the treatment phase of cancer.

# 1.7.3 Methodological assumptions

The main methodological assumption underpinning this research was that the research question could be answered through a blended method by combining quantitative and qualitative research methods. This is discussed further in section 1.8.

#### 1.8 RESEARCH DESIGN AND METHODS

#### 1.8.1 Intervention research

Intervention research is about effecting change and making a difference in a caring environment (Fraser & Galinsky 2010:459). Bringing about change involves learning about treatments or strategies that work best to improve certain outcomes. It is through such research that more can be learned about the effectiveness of a particular intervention.

Intervention research involves the development and testing of specific interventions (Fraser, Richman, Galinsky & Day 2009:25). In this study I do not claim to develop the BMGIM intervention as it has already been well-developed. However, until this study, the intervention had not been implemented for the benefit of cancer patients who were receiving chemo- or radiotherapy. Therefore, the BMGIM intervention was seen as new within this context. Using the intervention research approach, I planned and implemented the BMGIM intervention in a cancer interim home and for cancer patients living in their private home where it had not been implemented before.



The five steps of intervention research as specified by Fraser et al (2009:36) were used to guide the implementation and evaluation of the BMGIM intervention in this study. The five steps of intervention research are to:

- 1. Specify the problem and develop a program theory
- 2. Create and revise program material
- 3. Refine and confirm program components
- 4. Assess effectiveness in a variety of settings and circumstances
- 5. Disseminate findings and program material

A detailed description of this study's research design, methods and the application of the five steps of intervention research are presented and described in Chapter 4.

#### 1.8.2 Research process

The research process involved four phases. In phase one, a systematic literature review was conducted to gain information regarding the *status quo* with respect to the implementation of the BMGIM in various contexts. The methodology and findings of the systematic review will be presented in Chapter 2 and 3 respectively. The review informed this study's BMGIM intervention and its execution.

Phase two of this study was focused on the implementation of BMGIM. Together with the multi-disciplinary team members and participating patients, I identified the most appropriate time slots for the BMGIM sessions. The sessions each followed the four phase structure as described in section 1.1. Sessions were conducted once a week for five weeks after one week of standard care (i.e. a care regime that excluded the BMGIM). The sessions were conducted by BMGIM-qualified music therapists.

Phase three of the research involved evaluation of the effects of the BMGIM on the physical, psychological and spiritual wellbeing of the participating patients. Data was collected via a demographic questionnaire, SDS, PGWBI and SIWB. In addition, session summary forms and a photographs of the mandala was also collected after each BMGIM session and an unstructured interview was conducted with each participant. The context, population, sampling method, data collection and data analysis which unfolded during the research process will be discussed in detail in Chapter 4.



# 1.9 QUALITY ASSURANCE

The following measures were taken to ensure that quantitative and qualitative data collected during the study were of an acceptable standard.

# 1.9.1 Measures to ensure Validity and Reliability

Measures to ensure internal validity, external validity and reliability were employed and will be described in Chapter 4, section 4.3.3.1.

#### 1.9.2 Measures to ensure Trustworthiness

Measures to ensure trustworthiness were used in the study and will be described in Chapter 4, section 4.3.3.2.

## 1.10 ETHICAL CONSIDERATIONS

Ethical guidelines need to be followed to ensure that research participants are not harmed in any way by the research process. The ethical principles of beneficence, respect for human dignity and justice were followed in this study.

# 1.10.1 Principle of Beneficence

According to the principle of beneficence, I ensured that no harm was done to the research participants (Creswell 2009:89). To ensure that the BMGIM was therapeutic, I worked in collaboration with professional music therapists and underwent BMGIM training myself. The BMGIM sessions could have brought about a release of emotions or experiences associated with the suffering induced by cancer. Where this occurred, these emotions and experiences were addressed in the postlude phase of the BMGIM session. Should the need have arisen, individual participants would have been referred to the psychologist.

Patients were not coerced to participate in the study (Creswell 2009:89). This was ensured by reassuring potential participants that their involvement was voluntary and could be withdrawn at any time during the study. Non-participation or withdrawal of participation did not in any way influence the care of the patient. I reserved the right to withdraw any participant from the study if this was deemed to be in their best interest. Potential participants were not offered any incentive for participation in the study.



# 1.10.2 Principle of Respect for Human Dignity

Embodiment of the principle of respect for human dignity was ensured by the timeous dissemination of information to potential participants prior to the study, thus allowing them to make informed decisions regarding their participation in the study (Creswell 2009:89).

Approval of the study was obtained from the Faculty of Health Sciences Research Ethics Committee of the University of Pretoria (Annexure A). Access to the cancer interim homes for the purposes of this study was granted by CANSA (Annexure B). Patients were given information verbally and in writing. The Participant Information and Informed Consent Document (Annexure C) was used to ensure that an informed decision had been made by all participants.

Potential participants were well-briefed regarding the extent of their involvement in the study. I ensured that, throughout the research process, the participants were not inconvenienced in any way. Convenient times for the BMGIM sessions were negotiated with all participants.

## 1.10.3 Principle of Justice

Enshrinement of the principle of justice was ensured by respecting the participants' right to privacy (Creswell 2009:91). I did not request from the participant more information than what was needed for the study. The anonymity of the participant was protected by ensuring that the participant could not be linked with the information or findings during dissemination. All collected data was treated as confidential therefore all digital recordings and transcripts were safely stored.

The participant was treated with respect and courtesy at all times. Participants had access to the researchers contact details should they have required any clarification or information. As a gesture of respect for the time and energy invested by the participants into the study the researcher will ensure that the research findings are disseminated.



# 1.11 ORGANISATION OF THE STUDY

This study is documented as follows:

Chapter 1: Overview of the study

Chapter 2: Systematic review: Design and methods

Chapter 3: Systematic review: Findings and discussion

Chapter 4: Research design and methods of the empirical study

Chapter 5: Quantitative domain: Findings and discussion

Chapter 6: Qualitative domain: Findings

Chapter 7: Qualitative domain: Discussion of findings

Chapter 8: Conclusions, recommendations and limitations

# 1.12 CONCLUSION

Nursing practice comprises a unique and diverse body of knowledge and skills. This knowledge is paired with the art of caring. In nursing, it is through knowledge and expertise that effective care is delivered (Barker 2013:4). This study will generate scientific knowledge about the effects of the BMGIM in supportive cancer care. This music intervention may prove to be a useful therapeutic tool in the endeavour to provide holistic nursing care to cancer patients, thus uplifting the degree of excellence in nursing practice in South Africa and beyond.





# **CHAPTER: 2**

# SYSTEMATIC REVIEW: DESIGN AND METHODS

# 2.1 INTRODUCTION

This chapter presents a systematic mixed studies review on the BMGIM intervention in cancer care. Health care decisions have many socioeconomic ramifications, and need to be based on the best available research evidence. Evidence-based practice implies that prevailing health care decisions and practices are based on knowledge that has been acquired through sound research. This research base should not comprise too few studies. The lower the number of studies in a body of research, the higher the risk that particular study limitations, methodological weaknesses or conflicting findings will lead to injudicious applications of findings (Centre of review and dissemination [CRD] 2009:v). A systematic review is required to identify, evaluate and summarise the findings of previous research studies, and to help assess the quality of these studies. In this way, systematic reviews facilitate a clearer representation of the topic of interest. Health care decisions and practices can then be influenced by the comprehensive interpretations and understanding that a systematic review offers (CRD 2009:v).

A systematic review follows a scientific process to locate and synthesize research that is pertinent to a particular research question. This is done through the methodical implementation of organised, transparent and replicable procedures at each step of the systematic review process (Littell, Corcoran & Pillai 2008:1). A systematic review not only synthesizes relevant research but also involves the appraisal and documentation of the methodological qualities of the studies. The same principles and expectations of rigor that undergird primary research should also underpin every systematic review. Thus, a systematic review stands to provide comprehensive insight into the evidence and findings that relevant studies on a particular topic provide (Littell et al. 2008:4).

The aim of my study was to implement the BMGIM in selected cancer interim homes in Gauteng, and to evaluate its effects (complementary to those of the existing care regime) on the physical, psychological and spiritual wellbeing of participating patients. In order to identify existing research and best practices to support and inform the implementation of the BMGIM

Chapter 2 Systematic review: Design and methods

in cancer care contexts, a systematic review was conducted. This review formed Phase 1 of this study and thus informed the implementation of the BMGIM, which was Phase 2. Phase 1 of this study was guided by the study's first objective, namely:

To conduct a systematic review to identify methods that have been used to implement the BMGIM in other health care settings, and evaluate the reported effectiveness of the BMGIM in cancer care contexts.

Because the systematic review included studies with quantitative, qualitative and mixed methodologies, a Systematic Mixed Studies Review (SMSR) has been conducted.

# 2.2 SYSTEMATIC MIXED STUDIES REVIEW

Systematic mixed studies reviews involve the assimilation of quantitative, qualitative and mixed-methods studies (Pluye & Hong 2014:30). A synthesis of the findings of studies with diverse research designs may contribute to a more comprehensive understanding of a topic than a synthesis of the findings of either quantitative or qualitative studies alone (Pluye, Gagnon, Griffiths & Johnson-Lafleur. 2009:530; Pluye & Hong 2014:36). Furthermore, a rich, detailed and practical understanding of complex interventions can only be gained through a systematic mixed studies review (Pluye et al. 2009:532). This is considered to be an important development for evidence based health care as the wider range of evidence presented in a systematic mixed studies review will allow for better utilisation and greater applicability of that intervention (Joanna Briggs Institute [JBI] 2014:6).

A systematic mixed studies review was considered most appropriate as a foundation for this study as BMGIM therapy is explorative and descriptive in nature, yet its effect can also be quantitatively measured. Whilst quantitative studies yield the empirical data that facilitate measurement of the intervention's effectiveness, qualitative studies give a voice to research participants (Pluye & Hong 2014:31). The latter is particularly appropriate in the context of a BMGIM study as patients are actively participating in the therapy and are addressing their health needs during each BMGIM session. It is therefore important to consider the human aspects of patients' experiences and opinions along with statistical evidence.

A systematic review involves an intricate process of locating relevant studies, assessing their credibility, and integrating them with the findings of previous studies. Prior to commencement



of any systematic review, a detailed plan or protocol should be developed which stipulates the question, objectives, concepts and methods underpinning the review (Littell et al. 2008:1).

The writing of the systematic mixed studies review for this study proceeded according to a series of standard steps. These included writing a review question, defining inclusion criteria, strategizing and undertaking an extensive search of multiple information sources, identifying potentially relevant studies, selecting relevant studies, appraising the quality of included studies, and synthesizing the findings of these studies (Pluye & Hong 2014:36). These steps will be discussed in detail in this chapter.

# 2.3 THE SYSTEMATIC REVIEW PROCESS

I developed a systematic review protocol to guide the process of the systematic review. The review team comprised of two reviewers who were involved in devising the search strategy, assessing the quality of articles found, and extracting data from relevant articles. I was the first reviewer; the second was an information specialist who is qualified and experienced in searching for and reviewing academic materials. The supervisor and co-supervisor of the study were on the advisory team for the systematic review. The advisory team also included experts in systematic reviews and the BMGIM, who were consulted at various points during the systematic review process. The development of the systematic review protocol and the systematic review process was guided by relevant literature (CRD 2009; JBI 2011; Littell et al. 2008; Pluye & Hong 2014).

The title of the systematic review was, 'Bonny Method of Guided Imagery and Music (BMGIM) in caring for oncology patients: A Systematic Mixed Studies Review'. The objective, Participants, Intervention, Comparison and Outcome (PICO) / Participants, Phenomena of Interest and Context (PICo) formulation, review question, inclusion criteria, data extraction, quality assessment and data synthesis processes which were specified in the systematic review protocol will be defined and described in the following sections. The application of the specified process will also be discussed.



# 2.4 OBJECTIVE OF THE SYSTEMATIC REVIEW

The objective was to conduct a systematic review to compare the effectiveness of the BMGIM to that of other care methods with respect to the physical, psychological and spiritual wellbeing of oncology patients.

# 2.5 REVIEW QUESTION

A systematic review should be guided by clearly set questions, the answers to which will provide meaningful solutions as to whether the best evidence is available in order guide decision making (CRD 2009:6). In a systematic review, the PICO and PICo guide the development of the review question. PICO is a mnemonic for Participants, Intervention, Comparison and Outcome (CRD 2009:8). The following PICO was formulated for the systematic review:

Participants: Adult oncology patients, male and female

Intervention: Bonny Method of Guided Imagery and Music (BMGIM)

Comparison: Methods of care other than the BMGIM

Outcome: Physical wellbeing

Psychological wellbeing

Spiritual wellbeing

Because this systematic review includes both quantitative and qualitative studies, it was necessary to formulate a PICo as well. PICo is a mnemonic for Participants, Phenomena of Interest and Context (JBI 2011:22) and is used to guide the formulation of a qualitative review question. The following PICo was formulated for this review:

Participants: Adult cancer patients, male and female

Phenomena of Interest: Experiences of patients undergoing BMGIM

Context: Oncology care

Based on the PICO/PICo formulated above, the following review questions emerged for the systematic review:

- 1. What are the effects of the BMGIM, compared to those of other cancer care methods, on the physical, psychological, and spiritual wellbeing of adult oncology patients?
- 2. What are the experiences of adult cancer patients receiving BMGIM?

Following the formulation of these questions, the search strategy was developed.



# 2.6 INCLUSION CRITERIA

The search strategy for a systematic review requires the formulation of specific inclusion criteria that will guide decisions regarding whether studies should be included in or excluded from the systematic review (Littell et al. 2008:35). These criteria are specified in the systematic review protocol. Study design, population, interventions, comparisons and outcome measures of published studies are just some of the aspects considered during the specification of inclusion criteria (Littell et al. 2008:35). In addition to guiding the search for relevant articles, inclusion criteria also prevent reviewers from selecting articles based on their own personal preferences or convenience, thus protecting against selection bias. Furthermore, the formulation of clear inclusion criteria allow for replication of the systematic review process (Littell et al. 2008:35).

The inclusion criteria for this review specified the population, intervention and comparison, outcomes measures, timeframe, language and study designs of the articles which could be included for review. These aspects are considered in more detail below.

# 2.6.1 Participants

According to Littell et al. (2008:36), participants are the individuals, families, organisations, communities or social groups who received a particular intervention treatment, or who were the sources of data collected in the primary studies included in the systematic review. The CRD (2009:8) further emphasise that the included population should be comparable with the population to which the systematic review findings will be applied. In the current systematic review, studies on participants who met the following criteria were included in the systematic review:

- diagnosed with cancer;
- aged 18 years or older (i.e. adult, male and female);
- implementation of the BMGIM intervention took place in any health care setting (e.g. hospitals, clinics, rehabilitation centres, hospice care, outpatient care).

Following these criteria, six reports qualified for data extraction for the purposes of the systematic review. Though participants could have been male or female, it transpired that all selected reports had only female participants. With regards to health care setting, the reports



selected for inclusion in this review documented interventions that took place in the private practice rooms of a therapist or in the home of the participant.

#### 2.6.2 Intervention and comparison

According to Littell et al. (2008:37), the intervention of interest should be specified in the inclusion criteria for a systematic review. The comparison is the conditions or treatments that are compared to the treatment or intervention of interest (Littell et al. 2008:38). Reviewers use the descriptions of the intervention and comparison to guide the search for and selection of articles for the systematic review. To ensure that the reviewers had an understanding of the concepts involved, the intervention and comparison were defined and described in the systematic review protocol.

In this systematic review the intervention under review was the Bonny Method of Guided Imagery and Music (BMGIM) which, as already mentioned in Chapter 1, is "a music-assisted transformational therapy that offers participants an opportunity to integrate the mental, emotional, physical, and spiritual aspects of themselves. It is characterized by the use of specially sequenced western classical music designed to stimulate and sustain a dynamic unfolding of imagery experiences. Sessions in this one-to-one modality are conducted by facilitators who are formally trained in The BMGIM,' (Association of Music and Imagery 2008:1). To qualify for inclusion in this systematic review, articles had to document the implementation of the BMGIM according to the standard procedure described in Chapter 1 of this dissertation.

Since this systematic review could have included quantitative, qualitative or mixed method studies, it was important to define the concept "comparison group" as studies with a quantitative methodology may have had a comparison group to which findings were compared. A comparison group is defined by Littell et al. (2008:174) as 'a group that is compared with a treatment group and receives either another treatment or no treatment'. For the purposes of this review, studies that had comparison groups whereby standard care, music interventions or music therapy were offered to (oncology) patients were included. Furthermore, interventions that did not involve music (i.e. non-music interventions) as well as wait list control groups were also considered as valid comparison groups and could have been included in the systematic review. The following definitions of "standard care", "wait list control group", "music

intervention" and "music therapy" guided the decisions of whether particular studies should be included in or excluded from the systematic review.

Standard care is also referred to as "usual care" (Kinser & Robins 2013:2). Harlapur and Shimbo (2013:2021) state that, 'the definition of usual care has not been standardised, it can include [any] routine care received by patients for prevention and treatment of diseases'. Studies that had a comparison group which received standard care could also have been included in this systematic review.

A wait list control group is a control group, the members of which recieve the intervention concerned but only in the second phase of the study, i.e. only after the treatment or intervention group has received the full course of the intervention (Brown, Wyman, Guo, Pêna 2006:260). It was decided that studies in which a wait list control group was used could have been included in this systematic review.

*Music interventions* refer to interventions which involve the practice of music listening and can only be implemented by health care professionals as stated by Dileo 1999 (cited in Bradt et al. 2011:6). In the literature, music interventions are sometimes referred to as music medicine. The inclusion criteria for this systematic review state that studies with a comparison group that received a music intervention or music medicine, could have been included in this review.

*Music therapy* refers to music interventions administered by professional music therapists. Music therapy involves activities such as listening to music, playing an instument, and singing or composing of music within a therapeutic process (Dileo 2007, cited in Bradt et al. 2011:6). Studies with a comparison group that received music therapy could have been included in this systematic review.

Lastly, of course the inclusion criteria for this systematic review allowed for the inclusion of studies focused on the BMGIM intervention. These studies may or may not have included comparison groups as defined above.

Although these inclusion criteria were established with respect to "intervention and comparison" for this systematic review, of the final six reports included in the final extraction



all six reports documented standard BMGIM as an intervention. Only one report had a wait list control group as a comparison group. None of the other reports included a comparison group.

#### 2.6.3 Outcomes

"Outcome" is defined by Melnyk and Morrison-Beedy (2012:461) as 'the effect that you wish to study; the consequences or result'. In quantitative studies the outcome or dependant variable is measured. The dependant variable is 'the variable that changes as the independent variable is manipulated by the researcher. It is the variable of most interest in intervention studies and is measured to assess the impact of the treatment' (Melnyk and Morrison-Beedy 2012:456). For the purposes of this research, studies that included any of the outcomes of physical, psychological or spiritual wellbeing were included in the systematic review. Definitions and descriptions of these outcomes were specified in the systematic review protocol to ensure clear understanding.

The preamble to the WHO constitution (2015:1) defines health as 'a state of complete physical, mental and social wellbeing and not merely an absence of disease or infirmity'. Physical health is also defined as 'a state of physical wellbeing in which an individual is mechanically fit to perform their daily activities and duties without any problem' (Cheshire East Council 2015). Studies in which the physical wellbeing of the participants were measured or explored could have been included in this systematic review.

Psychological wellbeing is a component of mental health (Edwards 2006:358). Kneisel and Trigoff (2013:4) consider mental health to be present when a person's behavior, interpersonal relationships with others, and intrapersonal relationships within the self give an indication of psychological, emotional and social health. The WHO (2015:p.n.p) defines mental health as 'a state of wellbeing in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'. Studies that measured or explored the psychological wellbeing of their participants could have been included in this systematic review.

Ellison (1983:331) defines spiritual wellbeing as, 'having a vertical and horizontal component. The vertical dimension refers to a person's sense of wellbeing in relation to God, and the horizontal dimension refers to a sense of life purpose and life satisfaction'. Studies which

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measured or explored the spiritual wellbeing of their participants could have been included in this systematic review.

Whilst searching for, and including or excluding articles based on the inclusion criteria with respect to outcome measures, the reviewers used the descriptions of the outcome measures defined above to guide the process. Studies that had an outcome measure of physical, psychological or spiritual wellbeing could have been included in the systematic review.

Of the final six reports that qualified for inclusion in the systematic review, only one report measured the physical wellbeing of participants (based on cortisol levels), whilst four reports measured quality of life. Quality of life includes aspects of psychological wellbeing. All six reports measured and/or explored the psychological wellbeing of participants by measuring mood, anxiety or depression levels or exploring their experiences. Four reports explored the spiritual wellbeing of their participants. The time at which outcomes were measured was documented, and will be reported in Chapter 3.

#### 2.6.4 Time frame

The importance of setting clear boundaries by defining a time frame for the systematic review is emphasised by Littell et al. (2008:45). Only articles published or written between 2002 and 2014 were included in the current systematic review. Articles within this timeframe were considered to be the most recent. However, seemingly relevant articles which fell outside of the stated timeframe were also considered in order to prevent the exclusion of pertinent articles from the review. For instance, in the current systematic review, two of the six reports included in the final data extraction were published outside the stated timeframe. Burns' dissertation (1999) and the article which emerged from it (Burns 2001) have been included in the search results as this study represents the first documented research on the effects of the BMGIM on cancer patients. Both reviewers deliberated the inclusion of these two reports and came to the conclusion that they should be included in the final data extraction.

### 2.6.5 Languages

The CRD (2009:12) emphasises the importance of preventing language bias in a systematic review by including studies written in any language. Studies undertaken in all languages were considered for inclusion in the final systematic review. This was done to prevent the exclusion



of relevant studies based on language. In the systematic review, only one potentially relevant article, written in a foreign language, was found. However, this article was excluded after the reviewers read the abstract which was available in English. All six of the final reports which qualified for data extraction were written in English.

## 2.6.6 Research design

The research design is 'the overall plan for answering the study question(s) or testing the hypothesis' (Melnyk and Morrison-Beedy 2012:462). The systematic review protocol specifies acceptable research designs for articles being considered for inclusion in the review. BMGIM therapy is explorative and descriptive in nature, yet its effect can also be quantitatively measured. Therefore, studies with diverse designs were considered for inclusion in this systematic review, e.g.:

Quantitative studies: Randomised controlled trials, Quasi experimental,

Descriptive, etc.

All studies that described or analysed the BMGIM Qualitative studies:

intervention.

Of the six reports that finally qualified for inclusion in this systematic review, one report documented a multiple method research methodology, two were quantitative in nature, and three employed qualitative research methodologies.

### 2.6.7 Publication type

Articles published in peer reviewed journals may emanate from empirical studies. However, not all empirical studies are published in peer reviewed journals. Studies may also be published as theses, informal reports, book chapters, or conference papers. To avoid publication bias, systematic reviews should aim to include all relevant studies, regardless of their publication type (CRD 2009:12).

In this systematic review, databases, search engines, journals and websites were included in the search strategy. Local and international experts in the BMGIM were consulted to ensure that the search was thorough. The academic specialist of the University of Pretoria's academic information services unit was consulted to assist in the search for studies.



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The following databases were scoured for relevant material: the Cochrane library, PUBMED, Mosby's Nursing consult, CINAHL, Clinical key, Health & Wellness Resource Centre, PsychINFO, MEDLINE (OVID & ProQuest), Science direct, EBSCO, Scopus, and ProQuest. The Google Scholar search engine was also utilized in the process. Literature searches were also conducted in the Nordic Journal of Music Therapy and the Journal of Music Therapy. Websites included in the search were: the Aalborg University website, ClinicalTrials.gov Voices.com and the Melbourne Conservatory of Music. The clinical trial website www.ClinicalTrials.gov was searched to identify relevant unpublished and on-going clinical trials. Voices.com and the Melbourne Conservatory of Music website were searched for relevant published and unpublished studies. The database of Aalborg University was useful in identifying relevant dissertations.

Searches were conducted using the following keywords: "Bonny", "Bonny method of guided imagery and music", "Bonny method", and "BMGIM".

In addition to searching electronic databases, published and unpublished studies were found by scanning the reference lists of relevant studies and through manual searches conducted in key journals. Manual searches in key journals of 2010 proved especially helpful, as special editions dedicated to the BMGIM were published during this year to commemorate the passing of Professor Helen L. Bonny, the founder of the BMGIM (Bruscia & Grocke 2002:xxv).

Local and international experts in the BMGIM were contacted to confirm the comprehensiveness of the search and to identify any additional unpublished studies.

#### 2.7 STUDY SELECTION

The inclusion criteria which guided the selection of relevant articles for the systematic review are described above (see section 2.6). The application of these criteria in the current systematic review has also been discussed. During literature searches a large number of potentially relevant articles may emerge. The specified inclusion criteria will then be used by the reviewers to make decisions on whether to include each article in the systematic review (CRD 2009:23). In this systematic review the study selection process was conducted in two stages as described by the CRD (2009:23):

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**Stage 1:** The titles and abstracts of the searched studies were reviewed for relevance. This process was guided by the established inclusion criteria. Studies which did not meet the inclusion criteria were excluded and a reason for their exclusion was recorded.

**Stage 2:** The full articles about studies that met the inclusion criteria were then retrieved. Studies for which it was difficult to make a decision regarding inclusion based on only the title or abstracts were also retrieved at this stage.

The number of articles found in the search, the number of articles proceeding from stage 1 to stage 2 of the study selection process, and the reasons for excluding articles were clearly documented throughout. The study search and study selection were conducted by two reviewers to ensure that studies were not accidently omitted. All decisions taken by both reviewers were documented. A third reviewer could have been consulted if a disagreement arose between the first two reviewers. The study search and study selection process were piloted by comparing the search findings of two different databases. Throughout the systematic review process, the search findings of both reviewers were compatible and it was not necessary to consult a third reviewer.

The study selection process of this systematic review is summarized using the PRISMA 2009 flow diagram (see Figure 2.1). Both reviewers had regular meetings to discuss their search findings and to compare their selections of relevant studies. A total of 10 141 studies were identified during the first stage of study selection. Of these, 9914 were excluded during the screening of study titles. After the exclusion of duplicates, the abstracts of 145 studies were screened for relevance. Abstracts were read and studies were deemed relevant if they met the inclusion criteria. Studies were not included if the study participants were younger than 18 years of age, if participants did not have a diagnosis of cancer, if the intervention in the study was not the BMGIM, if the outcome measured was not a health-related outcome, if the study was withdrawn, if the year of publication was not within the stated timeframe, or if the study was a review.

As stated in the inclusion criteria, the timeframe of the studies considered had to range between 2002 and 2014 for them to be included. However, the dissertation by Burns (1999) and the article which emerged from this study (Burns 2001) were included as they document the first study in which the effects of the BMGIM on cancer patients were investigated. This study takes



the lead in BMGIM research with regards to cancer care. Both reviewers therefore considered this study as relevant and included it in the search results.

Following the exclusion of irrelevant publications, 29 studies proceeded to stage 2, where their full texts were retrieved and assessed for eligibility. Upon the review of the 29 full text publications, 23 of them were excluded according to the inclusion criteria. The full text of these studies had to be read as their exclusion could not be based solely on their titles and abstracts. Thus, six reports were found to meet the inclusion criteria.

These six reports were found to be eligible for data extraction and quality assessment. A seventh study (by McKinney and Clark) which was found to be eligible for inclusion was identified through its citation in other published articles (Bonde 2005a:19; Bonde 2007:133; Grocke 2010:9; Stark 2012:20). However, it turned out that this study was never published. Where this study was cited, information had been requested directly from its authors. One of the authors confirmed that the findings of the study are unpublished. Six reports therefore proceeded to data extraction.

# 2.8 DATA EXTRACTION

Following the study selection process, six reports proceeded to data extraction. Data extraction is the process by which all necessary information on the characteristics and findings of a study are identified from the report of the study (CRD 2009:28).

Based on the objectives and research questions underpinning the systematic review, a researcher first identifies the type of information to extract from each study report. A data extraction form is used to guide reviewers during data extraction, and the information extracted from the eligible reports is documented on this form (CRD 2009:28).



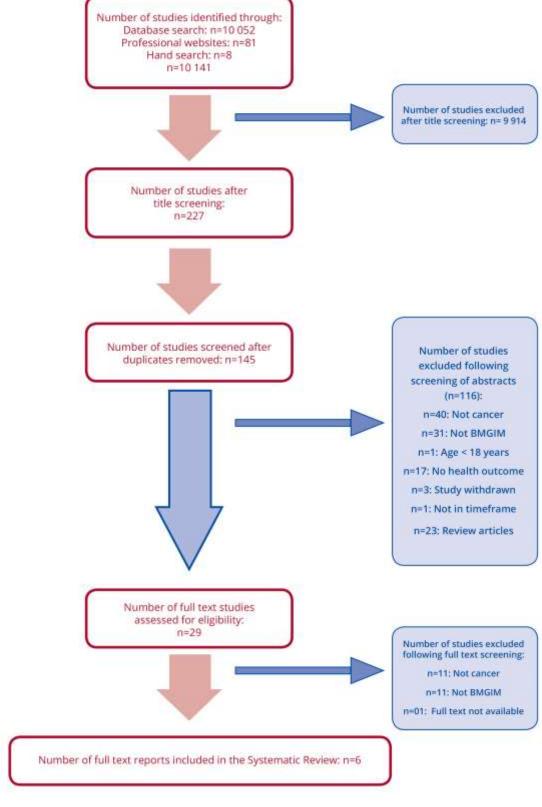


Fig 2.1 PRISMA 2009 Flow Diagram

# Chapter 2 Systematic review: Design and methods

For the purposes of this systematic review I developed a data extraction form as a spreadsheet in Microsoft Excel. The form was designed based on the review questions and the stated objectives of the systematic review. My study supervisor reviewed the data extraction form to ensure completeness. I then piloted the data extraction form using the 23 full text studies found during the search process to ensure completeness and to reduce data extraction errors. Following the pilot, additional columns for bias, validity, reliability and trustworthiness were added. This addition was found to be helpful in assessing the quality of each record (discussed further in section 2.9). The findings of the data extraction will be discussed in Chapter 3.

# 2.9 QUALITY ASSESSMENT

The extraction of information from publications serves as an indication of available knowledge on a particular subject. However, the standard of this "knowledge" and the quality of each study needs to be assessed to ensure that the information generated is of sufficient calibre to be used to guide health care decisions and practice (CRD 2009:33).

The Critical Appraisal Skills Programme (CASP) quality assessment tools were used to assess the quality of the studies. These tools were recommended by an expert in the field of systematic reviews. The CASP Randomised Controlled Trial and qualitative research checklists (Critical Appraisal Skills Programme 2014) were used to assess the methodological quality of the quantitative and qualitative studies, respectively. An evaluation tool for mixed method studies was used to assess the methodological quality of the mixed method study (University of South Australia 2014). The quality assessment of the studies included in the final systematic review will be discussed concurrently with the data extraction findings in Chapter 3.

## 2.10 DATA SYNTHESIS

'Data synthesis involves the collation, combination and summary of the findings of individual studies included in the systematic review' (CRD 2009: 45). According to the CRD (2009:45), this can be accomplished using statistical techniques such as meta-analysis, or through a narrative approach. The research question underpinning a particular systematic review along with the type of studies which are likely to be available guide the selection of an appropriate data synthesis method (CRD 2009:45).

In this systematic review, data synthesis was achieved using a narrative approach. The convergent qualitative synthesis design was used to synthesize the findings of the included studies. This involves the transformation of relevant qualitative, quantitative and mixed method study results into qualitative findings such as themes, concepts and patterns (Pluye & Hong 2014:38).

Within the framework of convergent qualitative synthesis design, a technique of thematic qualitative synthesis was used to integrate the findings of the six reports which qualified for data extraction and synthesis. Thematic qualitative synthesis allowed the reviewers to describe, organise and interpret the findings of these studies. This synthesis technique involves a rigorous process of discussion between reviewers and going back and forth between textual data and themes (Pluye & Hong 2014:39).

In the current systematic review, I (the first reviewer) tabulated all quantitative findings based on the variables intended to be measured. Three of the six reports selected for data extraction and synthesis contained quantitative findings.

Five of the six qualified reports contained qualitative research findings. These findings were read several times and the reviewers created themes, categories and subcategories for each record. A qualitative data analysis program, Atlas.ti was used to facilitate this process. The themes, categories and sub categories were then compared and new themes, categories and sub categories common to all reports were created. This process involved the reviewers going back and forth between the data presented in the reports and the created themes. Discussions were held between the reviewers to reach consensus on the synthesised data.

The resulting data synthesis will be presented using a narrative approach. A narrative description of each study and its findings are presented in Chapter 3.

## 2.11 DOCUMENTATION OF SEARCH

The process followed to identify and select relevant articles for any systematic review must be documented in detail so that the process could be re-run by the reviewers or by other researchers. All electronic source searches, manual literature searches, contacts with experts and decisions taken by the reviewers should be documented (CRD 2009:21). To allow

# Chapter 2 Systematic review: Design and methods

reviewers and readers to understand the thorough process followed during this systematic review, all details on the search strategy, results of searches and findings were documented – both in a journal and electronically. During the searches the name of the database/search engine, journal or website searched, the date of the search, the keywords used, and the number of reports retrieved were recorded. All relevant studies were saved electronically in appropriate folders. Atlas.ti was used to electronically capture the relevant studies and the ensuing critiques thereof. The systematic review findings will be discussed in Chapter 3.

#### **2.12 BIAS**

Bias is any influence which results in the deviation of study results from the true value (Melnyk & Morrison-Beedy 2012:454). This implies that bias can lead to the exaggeration or underestimation of the results of a study, ultimately leading to incorrect conclusions. Bias can arise in any empirical study. Thus, it is particularly important that during a systematic review the necessary precautions be put in place to minimise all potential errors and bias (Littell et al. 2008:1). The precautionary measures in this regard that were put in place during the planning of this systematic review are discussed below.

The risk of bias was reduced by developing a systematic review protocol before commencing with the review. Specifying the criteria within the protocol in advance prevents the introduction of bias into the systematic review (CDR 2009:6). The systematic review protocol defined and described the review objective, the formulation of the PICO/PICo, the review question, the search strategy, the method of data extraction, the quality assessment approach, and the data synthesis processes which were to be followed by both reviewers. Furthermore, the inclusion criteria used to guide the search and selection of relevant articles were clearly defined and described in the systematic review protocol. This prevented reviewers from selecting articles based on their own personal preferences or convenience, thus reducing selection bias risk (Littell et al. 2008:35).

To reduce the risk of language bias, studies published in all languages were considered for inclusion in the systematic review.

'Publication bias refers to the concern that published studies do not represent all the high-quality studies in a field of inquiry' (Littell et al. 2008:19). Littell et al. (2008:19) further



explain that it is likely that studies with positive, statistically significant results will be published more readily then studies with negative or null results, thus leading to studies with positive results being more available than others. In the case of this systematic review, publication bias was avoided as a variety of sources were included in the search strategy. The risk of publication bias was reduced as articles were sourced from electronic databases, by visually scanning reference lists of relevant studies, by manually searching key journals and conference proceedings, through contacting authors and experts, by searching for studies which had been cited in articles included in the review, and by scouring relevant internet resources.

### 2.13 CONCLUSION

This chapter has documented the methodology that was adopted in the preparation of the systematic review for this study. The unique methodology of systematic mixed studies review and its appropriateness and application to this study have been discussed. The systematic review process has been documented and presented in such a way as to allow for the process to be understood and repeated.

The synthesized findings of the published studies included in the review will be presented and discussed in Chapter 3.

# **CHAPTER 3**

# SYSTEMATIC REVIEW: FINDINGS AND DISCUSSION

### 3.1 INTRODUCTION

In Chapter 2, the design and methods for the systematic review was described. Because the review included quantitative, qualitative and mixed method research studies, a systematic mixed studies review (SMSR) was conducted. Through a rigorous process of screening titles and reading abstracts, articles were included in or excluded from the systematic review based on the inclusion criteria specified in the review protocol. Through the systematic review process, six records were selected for data extraction. Chapter 2 outlined the processes of data extraction, quality assessment and data synthesis. The outcomes of each of these processes will be discussed in this chapter.

# 3.2 DATA EXTRACTION AND QUALITY ASSESSMENT

As required in systematic reviews, two reviewers independently studied the full texts of the six selected reports. At this point, it is important to highlight that these six reports actually emerged from just three studies. The dissertation by Burns (1999) was the basis of an article written in 2001. Likewise, the dissertation by Bonde (2005a) was the source of two peer-reviewed articles (Bonde 2005b & Bonde 2007). The third study reviewed was only published as an article by Cadrin (2005-2006).

Once the six full text reports had been scrutinized by the reviewers, relevant data was extracted (see Table 3.1), and the methodological quality of each study was assessed. Descriptions and discussions for each report are presented below.



	Table 3.1 Data extraction of study characteristics and findings.							
TITLE OF REPORT	JOURNAL	YEAR PUBLISHED & LOCATION	AUTHOR	NUMBER OF PARTICIPANTS	SEX	MEAN AGE	DIAGNOSIS	MEDICAL TREATMENT
The effects of BMGIM on quality of life & cortisol levels of cancer patients	Dissertation	1999 Midwestern city, USA	Burns, DS	8 participants: 4=experimental group 4=control group	All female	48 SD: 6.56	7=Breast cancer 1=Ovarian cancer	Not receiving chemo- or radiotherapy during BMGIM sessions
The effect of BMGIM on mood and life quality of cancer patients	Jnl of music therapy	2001 Midwestern city, USA	Burns, DS	8 participants: 4=experimental group 4=control group	All female	48 SD: 6.56	7=Breast cancer 1=Ovarian cancer	Not receiving chemo- or radiotherapy during BMGIM sessions
Dying well: The BMGIM at the end of life	Jnl of the association of imagery & music	2005-2006	Cadrin, L	1 participant	Female	47	Breast cancer, subsequent skeletal & lung metastasis Palliative care	Last day of radiotherapy corresponded with first day of BMGIM session
The BMGIM with cancer survivors. A psychosocial study with focus on the influence of BMGIM on mood and quality of life.	Dissertation	2005 Denmark	Bonde, LO	6 participants	All female	49 SD: 8.5	4=Breast cancer 2=Abdominal cancer	Not receiving chemo- or radiotherapy during BMGIM sessions (time passed ranged from 7 -21 wks)
"Finding a new place", metaphor and narrative in one cancer survivors BMGIM therapy	Nordic Jnl of music therapy	2005 Denmark	Bonde LO	1 participant	Female	41	Abdominal cancer	Not receiving chemo- or radiotherapy during BMGIM sessions
Imagery, metaphor and perceived outcome in six cancer survivors BMGIM therapy	Chapter, Qualitative inquiries in music therapy	2007 Denmark	Bonde, LO	6 participants	All female	51	4=Breast cancer 2=Abdominal cancer	Not receiving chemo- or radiotherapy during BMGIM sessions



TITLE OF REPORT	RESEARCH DESIGN	SUMMARY OF INTERVENTION: EXPERIMENTAL GROUP	SUMMARY OF INTERVENTION: CONTROL GROUP (if applicable)	INCLUSION CRITERIA	AIM
The effects of BMGIM on quality of life & cortisol levels of cancer patients	Small sample, pre-test post-test follow up design  Each experimental subject interpreted as a case study	BMGIM was the intervention. 10 weekly sessions. 1.5 to 2 hours in duration.  Sessions done at therapists' practice	Wait list control group. No intervention	<ul> <li>Age 30 – 65 years old</li> <li>Completion/absence of ongoing chemo- / radiation therapy</li> <li>Abstinence from recreational drugs &amp; smoking</li> <li>Limited alcohol intake</li> <li>No prednisone therapy</li> <li>No history of acute psychiatric illness</li> <li>Intact mental/cognitive function</li> <li>Had cancer linked to endocrine/immune system</li> </ul>	Explore the effectiveness of BMGIM with cancer patients
The effect of BMGIM on mood and life quality of cancer patients	Small sample, pre-test post-test follow up design	BMGIM was the intervention. 10 weekly sessions. 1.5 to 2 hours in duration.  Sessions done at therapists' practice	Wait list control group. No intervention	<ul> <li>Age 30 – 65 years old</li> <li>Completion/absence of ongoing chemo- / radiation therapy</li> <li>Abstinence from recreational drugs &amp; smoking</li> <li>Limited alcohol intake</li> <li>No prednisone therapy</li> <li>No history of acute psychiatric illness</li> <li>Intact mental/cognitive function</li> <li>Had cancer linked to endocrine/immune system</li> </ul>	Explore the effectiveness of BMGIM with cancer patients



Dying well: The BMGIM at the end of life	Qualitative, case study	BMGIM was the intervention. 10 BMGIM sessions were conducted at various intervals over a period of 8 months. The duration of the sessions is not specified. Sessions done in participants home	None	None mentioned	The efficacy of BMGIM in addressing psychosocial, spiritual & existential issues through a specific case study
The BMGIM with cancer survivors. A psychosocial study with focus on the influence of BMGIM on mood and quality of life.	Multiple method – Different research strategies used to analyse different types of data collected Quantitative: Small sample, clinical trial, pretest, posttest, follow up design Qualitative: Grounded theory research	BMGIM was the intervention. 10 BMGIM sessions, in most cases once every two weeks though intervals did vary. Sessions were 2 hours in duration. Sessions done at therapists' practice	None	<ul> <li>Age 30 – 65 years old</li> <li>Completion/absence of ongoing chemo- / radiation therapy</li> <li>Abstinence from recreational drugs</li> <li>Limited smoking &amp; alcohol intake</li> <li>No prednisone therapy</li> <li>No history of acute psychiatric illness</li> <li>Availability for 26 wks of study</li> </ul>	Explore the effect of 10 BMGIM sessions on mood and quality of life of 6 participants(selfreport scales)  To explore participants experiences & effect on mood & QoL (interview)  To identify specific imagery related to cancer (transcripts & notes)
"Finding a new place", metaphor and narrative in one cancer survivors BMGIM therapy	Grounded theory	BMGIM was the intervention. 10 BMGIM sessions. Sessions were 2 hours in duration. Sessions done at therapists' practice	None	<ul> <li>Age 30 – 65 years old</li> <li>Completion/absence of ongoing chemo- / radiation therapy</li> <li>Abstinence from recreational drugs</li> <li>Limited smoking &amp; alcohol intake</li> <li>No prednisone therapy</li> </ul>	To explore the experience of BMGIM and the development of imagery during 10 BMGIM sessions

				<ul> <li>No history of acute psychiatric illness</li> <li>Availability for 26 wks of study</li> </ul>	
Imagery, metaphor and perceived outcome in six cancer survivors BMGIM therapy	Grounded theory	BMGIM was the intervention. 10 BMGIM sessions, in most cases once every two weeks though intervals did vary. Sessions were 2 hours in duration.  Sessions done at therapists' practice	None	<ul> <li>Age 30 – 65 years old</li> <li>Completion/absence of ongoing chemo- / radiation therapy</li> <li>Abstinence from recreational drugs</li> <li>Limited smoking &amp; alcohol intake</li> <li>No prednisone therapy</li> <li>No history of acute psychiatric illness</li> <li>Availability for 26 wks of study</li> </ul>	Explore participants self perceived outcomes of BMGIM process  Nature & development of imagery, metaphor & narrative in music listening periods of BMGIM  Influence of BMGIM on the participants recovery process



TITLE OF REPORT	VARIABLE MEASURED / PHENOMENON EXPLORED	DATA COLLECTION METHODS	TIME OF DATA COLLECTION	DATA ANALYSIS METHODS	FINDINGS
The effects of BMGIM on quality of life & cortisol levels of cancer	Mood  Quality of life	Profile of mood states (POMS)  Quality of life-cancer (QoL-CA)	All self-report scales and cortisol levels – 1 week before commencement, 1 week after and 6 weeks after	Chi square analysis (ps ≥0.05)  All self-report scales: Levene's test of equality of equal variance	No difference between control and experimental group  Equal variances met  Mood: Significantly lower total mood disturbance scores in experimental group at post-test and
patients	Affective response to imagery	Affective response imagery stimuli (ARIS)	completion  Self-report scales completed after every session	ANCOVA	follow up.  QoL: No significant difference between two groups between pre & post-test. Significant difference between pre-test and follow up scores.  Significant correlation between POMS and ARIS
	Case studies with weekly self-report measures included	Plasma cortisol kits	8 to 10am		Cortisol: No significant difference between pre-test – and post-test and pre-test and follow up scores(between groups)
The effect of BMGIM on mood and	Mood	Profile of mood states (POMS)	All self-report scales and cortisol levels – 1 week	Chi square analysis (ps ≥0.05)	No difference between control and experimental group
life quality of cancer patients	QoL	Quality of life-cancer (QoL-CA)	before commencement, 1 week after and 6 weeks after completion	Data analysis methods not discussed	Better mood at post-test and follow up. Improvement in tension, fatigue & confusion at post-test & follow up. Improvement in depression & anger at follow up. Better QoL at post-test and follow up



Dying well: The BMGIM at the end of life	Efficacy of BMGIM during palliative care	Session transcripts, poems and songs of the participant	During the sessions	Not mentioned	One of the participants' realisations in the early BMGIM sessions was the state of negativity she was in. As she progressed through the BMGIM sessions she found meaning and ways to co-exist with her illness. She gained an increased sense of control and strength as she addressed feelings of shame of having cancer. Through BMGIM the participant was able to reconcile her differences with family members.
The BMGIM with cancer survivors. A	Anxiety & depression	Hospital anxiety & depression scale (HADS) – (12 completed)	All self report scales completed 1 week before	All self report scales: Descriptive statistics	Scores of each participant and means of subscales of all 3 tools were displayed
psychosocial study with focus on the influence of BMGIM on	Quality of Life	European organisation of research & treatment of cancer (EORTC-E30) – (12 completed)	commencement, on completion of 10 sessions and at follow up (6 weeks later)	Inferential non-parametric statistics – to test for differences between scores	Significant decrease in anxiety scores from pre-test to follow. No significant decrease in anxiety at post-test or in depression at post-test and follow-up.
mood and quality of life.	Quality of Life	Antonovsky sense of coherence scale (SOC) – (3 completed)	HADS and EORTC-E30 completed after every session	Two tailed Wilcoxon matched pairs test – to test for possible significant differences between pretest & posttest	No significant changes in QoL scores of EORTC-E30  According to SOC scores, significant improvement in overall QoL scores at post-test and follow up.
	Helpfulness of BMGIM	Four additional specific questions – (12 completed)	creary session	and Pretest & followup scores  Cohen's d calculation – effect size	Significant improvement in manageability scores at post-test and comprehensibility at post-test and follow up.
	Qualitative: effect on mood and QoL	Semi structured individual interviews (6 completed)	Individual interview: 2-4 weeks after followup	Qualitative: Grounded theory principles –open & axial coding	5 Core categories (from interview) -New perspectives on past, present or future, - Enhanced coping, -Improved mood and quality of life, -Enhanced hope



Two case studies – development of imagery	Handwritten transcripts of music & imagery experience (57) Session notes (60) Audio recording of music listening (53)  Mandala (optional)  All quantitative and qualitative data	During the sessions  Immediately after sessions  During the sessions  During the sessions  As specified above	Grounded theory principles & Event structure analysis method –correlation between music & imagery & Grounded theory & narrative hermeneutic investigation – occurrence of metaphors  Ricoeur's theories of metaphor and narrative	-Improved understanding of self. An additional two core categories identified (shared by five of the six participants)  6 Core categories (from notes & audio) -music listening periods with complete narratives -music listening periods composed of narrative sequences -music listening periods dominated by bodily reactions -no music listening period: verbal sessions -music listening periods with no or very little imagery -mixed music listening periods composed of two or more categories.  Two in-depth case studies reported. Images & metaphors described and discussed and narratives
	Two music pieces of each participant analysed & described		RepGrid computer program – identify properties of contrasting experiences based on type of music  Phenomenological description, heuristic music analysis, intensity profiles Grocke's Structural Model of Music Analysis (SMMA)	linked to the participants' real life experiences & effect on mood & QoL. Coping strategies identified.  More supportive music was used in initial sessions in order to get used to and to allow for mutual trust to develop. More challenging music was gradually used as appropriate. The grounded theory analysis resulted in the development of a grounded theory on the influence of music on imagery in BMGIM.



"Finding a new place", metaphor and narrative in one cancer survivors BMGIM	Effect on mood & QoL  Experience of BMGIM  Development of imagery	Semi structured individual interviews	Individual interview: 2-4 weeks after followup	Ricoeur's theories of metaphor and narrative	Two in-depth case studies reported. Images & metaphors described and discussed and narratives linked to the participants' real life experiences & effect on mood & QoL. Coping strategies identified.  Findings congruent with dissertation report.
therapy		Handwritten transcripts of music & imagery experience	During the sessions		
		Session notes	Immediately after sessions		
		Audio recording of music listening	During the sessions		
Imagery, metaphor and perceived outcome in	Self perceived outcome  Nature & development of imagery, metaphor & narrative	Semi structured individual interviews (6 completed)	Individual interview: 2-4 weeks after followup	Grounded theory principles	7 Core categories (from interview) -New perspectives on past, present or future, -Enhanced coping, -Improved mood and quality of life, -Enhanced hope
six cancer survivors BMGIM therapy		Handwritten transcripts of music & imagery experience (57)	During the sessions		-Improved understanding of self. Additional core categories identified: -Love of music -Coming to terms with life and death
		Session notes (60)	Immediately after sessions		One additional core category identified (shared by three participants)
		Audio recording of music listening	During the sessions		6 Core categories (from notes & audio) -music listening periods with complete narratives -music listening periods composed of narrative sequences -music listening periods dominated by bodily reactions



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	<ul> <li>-no music listening period: verbal sessions</li> <li>-music listening periods with no or very little imagery</li> <li>-mixed music listening periods composed of two or more categories.</li> <li>A grounded theory proposal for the developmental steps in the therapeutic BMGIM process</li> <li>A grounded theory proposal of image configuration types found in the therapeutic</li> </ul>
	BMGIM process are presented  Findings congruent with dissertation report.



# 3.2.1 Burns (1999) and Burns (2001)

In her dissertation, 'The effect of BMGIM on quality of life and cortisol levels of cancer patients', Burns (1999) documented her study on the effects of the BMGIM on the mood, quality of life and cortisol levels of cancer patients. The aim of the study was to explore the effectiveness of the BMGIM in the treatment of cancer patients and, to this end, seven null hypotheses were stated. The study was based on a small sample of eight individuals and had three steps, namely a pre-test, a post-test and a follow-up. In addition, each participant who received the intervention treatment was considered as a case study. The study sample comprised eight participants who were recruited from oncology offices in and around a large Midwestern city and who met a specified set of inclusion criteria. Each of the eight participants was randomly assigned to either an experimental group or a control group. All participants were cancer outpatients, and were female. Seven of the participants had breast cancer and one had ovarian cancer. None of the participants were receiving any radiation or chemotherapy during the study. The experimental and control groups were found to be statistically comparable (Burns 1999:44). Participation in the study was voluntary. Ethical clearance from relevant institutions was not documented, but the participant consent form was included as an appendix (Burns 1999:109).

The intervention implemented in the study was the BMGIM. Each participant in the experimental group underwent a BMGIM session once per week for 10 weeks, and each session included the four standard phases of BMGIM treatment. Each session was 1.5–2 hours long. The control group did not receive the BMGIM treatment at all. Burns (1999:38) gives sufficient detail regarding the nature of the intervention. The dissertation contains minimal discussion about the control group in the methodology section. It does appear, however, that in all respects apart from the administration (or non-administration) of the BMGIM, the experimental and control groups were treated equally.

The four participants in the control group did not undergo BMGIM treatment. The four participants in the experimental group received ten weekly BMGIM sessions, all of which took place in a therapist's office. The therapist was a board certified music therapist with an endorsement in the BMGIM (Burns 1999:38). All eight participants completed the Profile of Mood States (POMS), the Quality of Life - Cancer Scale (QoL-CA) and the Affective Response to Imagery Stimuli (ARIS) self-report measures one week prior to commencement of the



intervention (pre-test), one week after completion of the series of 10 BMGIM sessions (post-test), and at follow-up which was at six weeks post-intervention. Members of the experimental group also completed the self-report measures after each session. It is not clear whether members of the control group also completed the self-report measures weekly for the ten week duration of the study. Plasma cortisol levels were tested by drawing a blood sample from each participant one week prior to commencement of the intervention, one week after completion of the series of 10 BMGIM sessions, and at follow-up which was at six weeks post-intervention. Blood samples were collected between 08:00 and 10:00 by a licenced medical technician (Burns 1999:39).

The data collection methods employed were consistent with the study design, and measured what the study aimed to investigate, namely mood, quality of life and plasma cortisol levels. When compared to the control group, the experimental group scored significantly lower with respect to total mood disturbance during the post-test and follow-up periods. The experimental group also yielded significantly lower post-test Tension/Anxiety, Fatigue/Inertia, and Confusion/Bewilderment subscores in the POMS than the control group. Furthermore, the experimental group also yielded significantly lower Depression/Dejection and Anger/Hostility subscores in the POMS during the follow-up period than the control group (Burns 1999:49).

At follow-up, a significant improvement in quality of life was found in the experimental group when compared with the control group. Significant improvements in the experimental group's physical wellbeing scores were also found. There was no significant difference between the two groups with respect to their post-test QoL-CA scores (Burns 1999:47).

A statistically significant correlation was found between the six POMS factors and the ARIS factors of emotional responsiveness, vividness and meaningfulness of imagery (Burns 1999:55). No statistical difference (between the two groups) was found in plasma cortisol levels during either the post-test or follow-up periods (Burns 1999:46).

The data analysis methods employed in the study appear to be appropriate, and the small sample size was properly taken into consideration during the analysis by discussing each participant of the experimental group as a case study (Burns 1999:80). The results of the weekly self-reports were included and discussed as part of these four case studies.



Methodologically, the adopted research design appears to have been appropriate for the purposes of the study. The researcher used a pre-test, post-test, follow-up design to assess the effects of the BMGIM over a period of time. However, the author did not give a rationale for the small sample size. Neither is there a statistical explanation for what determined the sample size.

The allocation of participants to the experimental and control groups was randomised. However, the randomisation method was not stated or discussed. The author also did not discuss blinding of the participants or study personnel in order to reduce bias. The validity and reliability of the data collection tools was discussed; however, the measures taken to ensure validity and reliability in the study itself were not discussed. Thus, it does appear that the risk of bias in the study was high.

The author presented case studies of the four participants who underwent the BMGIM intervention as an addendum to the dissertation (Burns 1999: 80). The weekly self-report results were presented and discussed within the case studies. The significance of the case studies to the aim of the study was not discussed in the dissertation.

Following the completion of the dissertation discussed above, an article (Burns 2001) was published. The information reported in the article was mostly congruent with that presented in the dissertation. However, in the article, Burns only stated two hypotheses for the study and only presented the findings with respect to mood and quality of life (Burns 2001:56). This could reveal a publication bias as, essentially, only the positive findings of the original study were published. Informed consent on the part of study participants was documented in the article. Findings of the study were discussed, but the data analysis methods were not well-represented in the article. Burns (2001:58) did not discuss the findings of the study in same way as they were discussed in the dissertation. In the article, the results were presented but their statistical significance was not discussed.

Burns (2001:59) reported better mood scores (compared to those at pre-test) for the experimental group than for the control group (at post-test and follow-up). A reduction in negative emotional states and an increase in Vigour/Activity scores were reported post-test. Anger/Hostility and Tension/Anxiety sub-scores were also reported to show improvement at



follow-up. However, a slight increase in confusion and depression was reported in the article, which was not congruent with the findings reported in the dissertation, where Confusion/Depression scores were reported to have decreased post-test (Burns 1999:62).

### 3.2.2 Cadrin (2005-2006)

In an article written by Cadrin (2005-2006), titled 'Dying well - The BMGIM at the end of life', a case study of a 47-year-old palliative care cancer patient was presented. The participant, a community-based patient, underwent 12 intervention therapy sessions of which 10 were standard BMGIM sessions, and two were driven by poetry that she had written. A professional music therapist, who is a Fellow of the Association of Music and Imagery (FAMI), conducted the sessions. The 12 sessions spanned over the last eight months of the participant's life. The intervals between the sessions depended on the health and availability of the participant (sometimes she was away on vacation) (Cadrin 2005-2006:6).

The participant had a diagnosis of breast cancer with subsequent skeletal and lung metastasis. The first BMGIM session with the music therapist was concurrent with her final radiation treatment. In her therapy sessions, the participant addressed the feelings of oppression which she had experienced in terms of her health, finances, relationships, emotions and choices. She also addressed deep anger which she felt towards her mother (Cadrin 2005-2006:7). Whilst the goal of the therapy and the goals for each session were well-documented in the article, the author failed to indicate the aims and objectives of the study as a whole.

Data was extracted from transcripts of the therapeutic sessions (Cadrin 2005-2006:6). Data analysis methods were not stated or discussed in the article. Based on the summaries of the 12 therapy sessions, the effects of the BMGIM (as experienced by the participant) were discussed. One of the patient's realizations in her early BMGIM sessions was the state of negativity that she was in. As the weeks went by, however, she found meaning in her life experiences and ways to co-exist with her illness. She gained an increased sense of control and strength as she addressed her feelings of shame at having cancer. With the help of the BMGIM, the participant was able to reconcile with her estranged family members (Cadrin 2005-2006).

Whilst assessing the methodological quality of this article, it was noted that ethical clearance from relevant institutions, and informed consent from the participant were not documented.



The author provided a detailed literature review on the challenges experienced by terminally ill patients, as well as background to hospice care, and the BMGIM itself. Reference was made to several theories and models which formed the theoretical basis of the study.

Whilst the report captured the "voice" of the participant and documented her experiences, it lacked some of the basic ingredients of scientific research, e.g. the statement of a research problem, and statements regarding the aims and objectives of the study. Sampling methods, data analysis methods, and measures of trustworthiness were not discussed in the article at all. We also found that there was no clear statement in the article of the findings of the study. Furthermore, no themes, categories, sub-categories or patterns were identified or discussed. We therefore concluded that whilst Cadrin (2005-2006) presented a relevant theoretical foundation for the case study, along with in-depth, descriptive data with respect to the participant's experiences during each BMGIM session, the article lacked a sound methodological foundation.

#### 3.2.3 Bonde (2005a), Bonde (2005b), and Bonde (2007)

The study by Bonde (2005a), entitled 'The BMGIM with cancer survivors, a psychosocial study with the focus on the influence of BMGIM on mood and quality of life' had six participants, all of whom were cancer survivors. The study aimed to investigate the influence of 10 individual BMGIM sessions on the mood and quality of life of cancer survivors. A multiple methods methodology was utilised to address seven research questions (Bonde 2005a:117).

The author presented a thorough review of the applicable literature (Bonde 2005a:5), and theoretically grounded the study using several relevant theories (Bonde 2005a:37). Through the literature review and theoretical contextualization, the researcher clearly outlined his approach to the study and its participants. In addition, a motivation was given for the choice of multiple methods research as a methodology (Bonde 2005a:119).

The study took place in Denmark. Participants were recruited through information leaflets that were made available at a local university hospital and a counselling clinic. Six volunteers met the specified inclusion criteria and qualified to participate in the study. All of the participants were female. Four of the participants were diagnosed with breast cancer, and two with abdominal cancer. Participants were not receiving radiation or chemotherapy during the study.



All six participants underwent the intervention therapy, i.e. BMGIM therapy, which involved the standard four phases of the method. There was no control group (Bonde 2005a:128).

The BMGIM sessions were scheduled once every fortnight for each participant. In practice, the intervals between sessions may have varied due to participants' illness or other forms of unavailability. Sessions were usually 2 hours long and took place at the therapist's private practice rooms. The intervention was conducted by the author of the article, who is a professional music therapist and a Fellow of the Association of Music and Imagery (FAMI) (Bonde 2005a:130).

This multiple methods study included both quantitative and qualitative data collection methods and analyses. A small sample of participants was evaluated. A simple research design, comprising a clinical trial, a pre-test, a post-test, and a follow-up, guided the investigation. The data collection instruments selected for the study included the Hospital Anxiety and Depression Scale (HADS), the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30), and Antonovskey's Sense of Coherence Scale (SOC). In addition, four standard questions on the experience of the imagery, the music, and the BMGIM therapy as a whole were developed and used as an additional data collection instrument.

Participants completed the HADS and the EORTC QLQ-C30 after every session. All of the other questionnaires were completed one week prior to commencement of the intervention, upon completion of the 10 BMGIM sessions, and at follow-up (6 weeks later). The reliability and validity of all data collection instruments were discussed in the dissertation. Descriptive statistics, inferential non-parametric statistics and two-tailed Wilcoxon matched pairs tests were used to analyse the collected quantitative data. A Cohen's d calculation was used to determine the effect sizes for selected variables (Bonde 2005a:132).

With regards to the qualitative domain of the study, the methodology was well-grounded in sound research theory. Qualitative data collected included handwritten transcripts and notes for every session, audio recordings of the music-listening periods, and photos of the participants' mandalas. In addition, a semi-structured individual interview was conducted with each



participant 2-4 weeks after follow-up. Grounded theory analysis was used to analyse the qualitative data.

The quantitative investigation was reviewed and appraised. The two-tailed Wilcoxon matched pairs test was used to compare pre-test, post-test, and follow-up HADS scores. A significant reduction in anxiety scores was found at follow-up, but not post-test. There were no significant changes in the depression scores, either post-test or at follow-up. However, five of the six participants had low pre-test depression scores, which could have accounted for this. A Cohen's d test was used to analyse the effect size with respect to different variables at the post-test and follow-up stages. The effect size is 'the impact made by the independent variable on the dependent variable' (Kellar & Kelvin 2013:457). It was found that there was a large effect on anxiety scores post-test, and an even larger effect on them at follow-up. The effect size on depression scores post-test and at follow-up was found to be small and medium to large, respectively (Bonde 2005a:146).

Statistical analysis of the EORTC QLQ-C30 (which measured quality of life) found no statistically significant effect (of the BMGIM) on either the functional or symptom subscales. The two tailed Wilcoxon matched pairs test found no significant effect when comparing pretest to post-test and follow-up scores of the EORTC QLQ-C30. The Cohen's d test showed a small to medium, and a small effect on post-test and follow-up scores, respectively (Bonde 2005:153).

With respect to Antonovskey's SOC Scale, the two tailed Wilcoxon matched pairs test revealed a significantly higher score for quality of life at post-test and follow-up then at pre-test. Significantly higher scores in manageability were found at post-test than at pre-test and significantly higher scores were found in comprehensibility at post-test and follow-up then at pre-test. Meaningfulness sub scores from pre-test to post-test and follow-up did not undergo any significant changes. The Cohen's d test revealed a medium and a small to medium effect on post-test and follow-up scores, respectively (Bonde 2005a:158).

With respect to the qualitative domain of the study, the semi structured individual interviews were transcribed and analysed according to the principles of grounded theory research. Through a process of open and axial coding, identifying sub-categories, and labelling new core



categories, a central phenomenon in each participant's experience of the BMGIM was identified.

The five core categories which emerged from the axial coding process, and which represented the experiences of all six participants were: new perspectives on the past, present or future, enhanced coping ability, improved mood and quality of life, increased hope, and improved understanding of the self. Two more categories, namely love of music and coming to terms with life and death were found to represent the experiences of five of the participants were also identified. Three of the participants experienced an "opening up" in their own spirituality following BMGIM treatment, and two were inspired to write poetry. The interviews provided in-depth information about the participants' experiences of the BMGIM sessions as well as the effects of the BMGIM on different psychological domains (Bonde 2005a:169).

Session transcripts and therapist's notes from every session, as well as audio recordings of the music listening periods were analysed to identify imagery specifically related to cancer. The principles of grounded theory research guided the process of open and axial coding. The complete music listening periods were grouped into six core categories: music listening periods with complete narratives, music listening periods composed of narrative sequences, music listening periods dominated by bodily reactions, no music listening period (verbal sessions), music listening periods with no or very little imagery, and mixed music listening periods comprising two or more categories. Within these categories, 18 sub-categories were identified. By following this process, the researcher concluded that the participants' imagery included, but was not dominated by, imagery related to cancer (Bonde 2005a:180).

Two in-depth case studies were presented in the dissertation. Quantitative and qualitative data collection methods were used in each case study in order to facilitate the formation of a deeper understanding in several areas. These included the development of participants' music-assisted imagery across 10 sessions, participants' experiences of the imagery and the process, participants' reported effects of the BMGIM on mood and quality of life, and the influence of BMGIM on participants' rehabilitation processes. The researcher used Ricoeur's theories of metaphor and narrative to report on the three levels of imagery experienced by the participants (Bonde 2005a:189).



Following data analysis, a grounded theory of the developmental steps of the therapeutic BMGIM process and of image configuration types in the music listening periods was developed. The researcher asserts that the sample size of six participants was sufficient for the development of the grounded theory, as the collected data was rich and diverse enough for grounded theory analysis (Bonde 2005a:122).

Finally, the researcher investigated the relationship between music and imagery, and the role of music in the music listening periods. Audio recordings of the music listening periods, as well as the therapist's session notes were analysed for this part of the study. The four quadrants of Heuristic music analysis was used to analyse the interrelationship of music and imagery. Using the Heuristic music analysis approach, the researcher presented a phenomenological description of the music played to the participants, and the imagery potential of certain music programmes (Bonde 2005a:246).

The researcher then used the RepGrid qualitative research program to order the information with respect to the type of music programme played, the mood elicited, the supportive or challenging character of the music, and the timing of music types within the therapy sessions. The researcher found that in the initial sessions, more supportive music was used in order to acclimatize participants to the therapy, and to allow for mutual trust to develop. More challenging music was gradually used as deemed appropriate by the therapist. This analysis resulted in the development of a grounded theory on the influence of music on imagery in the BMGIM (Bonde 2005a:303).

The research methodology employed was congruent with the aim of the study, and the data collection and data analysis methods were congruent with the research methodology. The research findings were interpreted in a manner that was well-aligned with the study design. By clearly stating his background and openly describing the theoretical foundation of the study, the researcher "bracketed" the beliefs and opinions he had on the study. This means that he declared his preconceived beliefs and opinions upfront to prevent them from influencing his interpretation of the findings of the study. Methodological and theoretical triangulation of the data were used to ensure trustworthiness of the qualitative findings.



No attrition was reported. All six participants completed all scheduled BMGIM sessions and all questionnaires. There were no "gaps" with respect to any of the data collection methods employed. Drawing a mandala was not a compulsory activity in the BMGIM sessions. Therefore, not all participants produced the same number of mandalas for analysis (Bonde 2005a:166).

Ethical clearance from relevant institutions was not documented. Informed consent was obtained from the participants, however, and the participant consent form did appear in the appendices of the dissertation (Bonde 2005a:419).

Attention will now be shifted to the two articles (Bonde 2005b & Bonde 2007) which emerged from the dissertation discussed above (i.e. Bonde 2005a). In the first article (i.e. Bonde 2005b), Bonde reported on one of the two case studies from the dissertation. The article is entitled, "Finding a New Place..." - Metaphor and narrative in one cancer survivor's BMGIM therapy'. The researcher began the article with a literature review and a theoretical background on Ricoeur's theories of metaphor and narrative. The case study was then presented in a format which ensured that the voice of the participant was adequately represented. The metaphors and images that emerged during the therapy, as well as the participant's interpretations thereof were analysed using the three levels of Ricoeur's theory of metaphor and narrative. The research findings and discussions reported in the article were in line with those presented in the dissertation (Bonde 2005a:191).

The research design in Bonde (2005b) was found to be appropriate in addressing the stated research questions. The sampling, data collection and analysis methods were also very clearly described, and were appropriate for answering these questions. The data analysis was found to be rigorous. The analysis method was well-described and its application to the data was documented in detail (Bonde 2005b:146). Because an established theoretical framework guided the data analysis process, the findings of the study were very clearly stated. The theoretical framework was in line with Bonde's philosophical perspective and the research methodology.

The second article which emerged from the dissertation by Bonde (2005a) was entitled, 'Imagery, metaphor, and perceived outcome in six cancer survivors' BMGIM therapy' (Bonde 2007). In this article, Bonde reported on the core categories that emerged through the analysis



of the semi-structured individual interviews, session transcripts, therapist's notes, and audio recordings. The core categories presented in the article were congruent with those reported in the dissertation (see Bonde 2005a:169). As in the first article (Bonde 2005a:167), Bonde (2007:139) provided descriptions of the grounded theory research process followed to identify the categories and sub-categories in the music listening periods, as well as the grounded theory which emerged from the analysis of the qualitative data collected.

The development of a grounded theory despite the small sample of just six participants is justified by the richness of the data collected, the in-depth data collected with respect to the two case studies, and the use of selective coding during the data analysis. The researcher develops the grounded theory to determine how the BMGIM process worked for the six participants as a group. Grounded theories were proposed for the developmental steps in the therapeutic BMGIM process, as well as the image configuration types that emerged from the therapeutic BMGIM process (Bonde 2007:151).

The researcher found that the participants' imagery during the music listening periods was not dominated by cancer-related issues, but rather by issues related to a transition period in life. Furthermore, core images and metaphors identified by the participants were related to the identified core life issues in the participants' lives at that time. The research findings and discussions reported in the article were in line with those presented in the dissertation (see Bonde 2005a:169).

Although informed consent was not addressed (in Bonde 2007), the article was found to have good methodological quality, as the methodology was appropriate to the purpose of the study. The literature review and the theoretical framework supported the data collection and analysis methods, and the findings were clearly documented.



#### 3.3 **DATA SYNTHESIS FINDINGS**

Data synthesis involves "the collation, combination and summary of the findings of individual studies included in the systematic review" (CRD 2009:45). In this review, the data was synthesized through a narrative approach, and the convergent qualitative synthesis design (see section 2.10) was used to synthesize the findings of the studies included in the review.

The outcomes of the data synthesis process are discussed below. The discussion begins with a comparison of the characteristics of the reviewed studies. This is followed by a comparison and synthesis of the findings of these studies.

#### Comparison of study characteristics 3.3.1

The six reports included in the final data extraction of the systematic review have been discussed in detail in section 3.2. In comparing the three studies from which the six reports emerged, it was found that all the reports documented the implementation of the standard BMGIM intervention. All three of the studies implemented a total of 10 BMGIM sessions per participant. Burns (1999, 2001) implemented sessions once per week for 10 weeks, Bonde (2005a, 2005b, 2007) implemented sessions once per fortnight, and Cadrin (2005-2006) scheduled the 10 BMGIM over a period of eight months. In Bonde (2005a, 2005b, 2007) and Cadrin (2005-2006), the intervals between the individual BMGIM sessions varied depending on the health and availability of the participants.

The duration of the BMGIM sessions ranged from 1.5–2 hours in the study by Burns (1999, 2001) to 2 hours in Bonde's study (Bonde 2005a, 2005b, 2007). Cadrin (2005-2006) did not specify the length of the BMGIM sessions conducted.

In the studies by both Burns (1999, 2001) and Bonde (2005a, 2005b, 2007), the BMGIM sessions took place in therapists' private practice rooms, whilst in Cadrin's study (2005-2006), the sessions took place in the participant's home. In all the studies, BMGIM sessions were conducted by professional music therapists who were certified to administer BMGIM therapy.

Participants in all studies were female, with a mean age range of 47–51 years. Burns (1999, 2001) had a sample size of eight participants of which only four participants (the experimental group) received the BMGIM intervention. Bonde (2005a, 2005b, 2007) had a sample size of 6 participants and Cadrin (2005-2006) wrote a case study on only one participant. The diagnoses



of the participants included breast, ovarian and abdominal cancers. Participants were not receiving chemo- or radiotherapy during any of the studies reviewed. In Cadrin (2005-2006) the participant's final radiotherapy session coincided with her first BMGIM session. Thereafter, she did not receive any further chemo- or radiotherapy during the course of her BMGIM therapy.

The study designs varied between the three studies. Burns (1999, 2001) conducted a quantitative study based on a small sample, following a "pre-test, post-test, follow-up" design. Due to the small sample size, each participant in the experimental group was presented as an individual case study. The report by Cadrin (2005-2006) took the form of an individual case study. Bonde (2005a) conducted a multiple-method study on a small sample, following a "clinical trial, pre-test, post-test, follow-up" design and grounded theory design. Likewise, the two articles which emerged from this study (i.e. Bonde 2005a) were constructed according to a grounded theory framework (see Bonde 2005b, 2007). Only Burns (1999, 2001) randomly assigned participants to either an experimental or a control group. The control group was a wait list group, the members of which did not receive the BMGIM intervention. The inclusion criteria for participant selection were clearly stated in all reports except the one by Cadrin (2005-2006). In Burns (1999, 2001) and Bonde (2005a, 2005b, 2007) the inclusion criteria were fairly similar.

The variables being measured in the study by Burns (1999, 2001) and the quantitative domain of the study by Bonde (2005a) were fairly comparable. Both researchers sought to explore the effects of the BMGIM on mood and quality of life. However, the self-report scales used for data collection were different. Burns (1999, 2001) used the Profile of Mood States (POMS), whereas Bonde (2005a) used the Hospital Anxiety and Depression Scale (HADS) to measure the effect of BMGIM on the mood of the participants.

Burns (1999, 2001) measured quality of life using the Quality of life-cancer (QoL-CA) scale, whereas Bonde (2005a) made use of the European Organisation of Research & Treatment of Cancer (EORTC-E30) scale and the Antonovsky Sense of Coherence(SOC) scale. In addition to measuring the effect of the BMGIM on mood and quality of life, Burns (1999, 2001) also measured the participants' affective response to the imagery in the BMGIM sessions using the



Affective Response Imagery Stimuli (ARIS) scale. Bonde (2005a) used four specific questions to measure the participants' perceptions of the helpfulness of the BMGIM sessions.

Burns (1999) also aimed to study the effect of BMGIM of the cortisol levels of participants. This was measured by drawing blood samples from participants pre-test, post-test and at follow-up. This measurement was not performed by Bonde (2005a).

The timing of data collection by Burns (1999, 2001) and Bonde (2005a) was similar. Both researchers administered the self-report scales one week prior to commencement of the BMGIM sessions, on completion of the BMGIM sessions, and 6 weeks post-treatment at a follow-up meeting. The self-report scales were completed after every BMGIM session in both studies.

Bonde (2005a, 2005b, 2007) used semi-structured individual interviews to explore the effects of the BMGIM on participants' mood and quality of life. The interviews were conducted once for each participant, two to four weeks after follow-up. Other qualitative data collected by Bonde during the BMGIM sessions included handwritten transcripts of music and imagery experiences, the therapist's session notes, audio recordings of the music listening phase of the BMGIM sessions, and the participants' mandalas. As the study by Burns (1999) was purely quantitative, these methodologies were absent. In Cadrin (2005-2006) the music therapists' session transcripts written during the BMGIM sessions were used.

Data analysis methods varied amongst the reports. Burns (1999) used an Analysis of Covariance (ANCOVA) to determine whether there were statistically significant differences between the experimental and control groups at pre-test and post-test, and at pre-test and follow-up. Bonde (2005a) used inferential non-parametric statistics to test for differences between pre-test and post-test, and pre-test and follow-up scores, and the two-tailed Wilcoxon matched pairs test to test for possible significant differences between pre-test and post-test, and pre-test and follow-up scores. Bonde (2005a) made use of grounded theory principles to analyse qualitative data. Cadrin (2005-2006) did not specify any data analysis methods.



### Comparison of quantitative and qualitative findings

This systematic review includes studies with quantitative, qualitative and mixed-method research designs, thematic qualitative synthesis (as described in section 2.10) is applied to the findings of these studies in order to integrate the results of the qualitative studies and the qualitative domain of the mixed-method study. Through this process, appropriate themes, categories and sub-categories emerged (Pluye & Hong 2014:39). The findings of the quantitative study and quantitative domain of the mixed-method study were then considered according to these created themes.

In order to compare and combine the qualitative data collected in the three studies, the qualitative data presented in Cadrin (2005-2006) and Bonde (2005a) were thoroughly scrutinized. As each of the four participants who received BMGIM therapy in the study by Burns (1999) were also discussed as individual case studies, the data presented in these case studies was also read and analysed. Through the use of Atlas.ti the data presented in Cadrin (2005-2006), Burns (1999) and Bonde (2005a) was coded, and tables summarizing the themes, categories and sub-categories for each report were formulated.

Through re-reading and comparing the themes, categories and sub-categories of the three studies, a table containing the themes, categories and sub-categories common to all reports was created (see Table 3.2).

The four themes common to Burns (1999), Bonde (2005a), and Cadrin (2005-2006) were: selfrealisation, change in mood, change in quality of life, and perception of music. The findings from the quantitative study by Burns (1999) and the quantitative domain of the mixed method study by Bonde (2005a) were thus incorporated into these themes. The categories and subcategories which emerged from these four major themes are discussed in sections 3.4–3.7.



Table 3.2 Themes, categories and sub-categories common in all included studies.

THEME	CATEGORY	SUB-CATEGORY		
Self-realisation	Awareness of unresolved	Anger		
	feelings	Grief		
		Aloneness		
		Emotional insight		
	Awareness of inner faith	Not alone		
		Reassurance		
	Coexistence with an illness	Acceptance of assistance		
		New perspective on life and death		
		Cognitive insight		
Change in mood	Inner strength	Act of forgiveness		
		Overcome doubt and fear		
		Transpersonal experience		
	Positive memories	Positive feelings		
Change in quality of life	Experience of wellbeing	Functional/physical wellbeing		
		Emotional wellbeing		
		Spiritual wellbeing		
Perception of music	Therapeutic effect of music	Creative expression		
		Experience of music		
		Recommendations		

# 3.4 SELF-REALIZATION

Within the theme of self-realisation three categories emerged, namely awareness of unresolved feelings, awareness of inner faith, and coexistence with an illness. These are discussed in further detail below.

#### 3.4.1 Awareness of unresolved feelings

Findings by Burns (1999), Bonde (2005a) and Cadrin (2005-2006) indicated that through the BMGIM, participants became aware of unresolved feelings. These included feelings of anger, grief and loneliness, which were established as sub-categories. A fourth sub-category, namely emotional insight, represents the insight which followed the participants' emotional awareness of their unresolved feelings.



#### 3.4.1.1 Anger

During the course of the BMGIM sessions in the study by Cadrin (2005-2006:13), the participant revealed her unresolved anger towards the medical profession following her father's death. She also expressed her unresolved anger towards her mother and family, whom she felt did not understand her or the limitations that she faced due to her illness. During various BMGIM sessions, her anger and inability to forgive were represented by imagery of "chains around her feet" (Cadrin 2005-2006:13) and "ropes around her heart", respectively (Cadrin 2005-2006:12).

In the study by Burns (1999:86), participant B realised her unresolved feelings of anger and hurt related to the death of her father two years prior to the study.

#### 3.4.1.2 Grief

"There is definitely a time to go to the Wailing Wall. I don't know if I've really grieved over my illness. I've been more ashamed of having cancer and trying to get rid of it". This was said by the cancer patient considered by Cadrin (2005-2006:15), and highlights her unresolved feelings of grief. Through the BMGIM sessions, the patient became aware of this grief, as well as additional long-standing grief and sadness emanating from a childhood incident.

The unresolved feeling of grief was also encountered in the study by Burns (1999:85) where participant B realised through the BMGIM that she was still grieving the loss of her mother who had suffered from pancreatic cancer and died one and a half years prior. She acknowledged that she had not allowed herself to grieve the loss of her mother and realised the need to experience that grief. As stated by Burns (1999:85), "She had not allowed herself to grieve while she was packing her mother's personal belongings and selling her mother's house. She stated that the image of the rock screaming was symbolic of the desire to experience her grief".

Participant T in the study by Burns (1999:93) also expressed feelings of unresolved grief: "T identified feelings of grief surrounding the emotional and physical losses resulting from her cancer experience. She felt that things had happened so quickly and she had not the opportunity to grieve. T also felt that if she gave herself an opportunity to grieve her losses, she could start looking forward to the new things happening in her life".



Unresolved grief was also identified by participant S in Burns (1999:97): "She also realised that she had not had an opportunity to grieve over her cancer experience and her husband's illness due to the amount of time she spent taking care of other people".

#### 3.4.1.3 Aloneness

The following excerpt illustrates the state of aloneness experienced by the patient in the study by Cadrin (2005-2006:8): "In the tunnel I get defeated. I crouch down. I don't know what to do. I know there is light but I can't find it. There is no one there for me. I'm trapped, all alone not knowing what to do. It's a hopelessness – it's black – I'm even black". The tunnel she refers to is an image of a black hole in her heart. Following the BMGIM session in which this occurred, she realised the state of negativity she was in, and her unacknowledged feelings of aloneness and hopelessness. Once she had realised and acknowledged these feelings, she was able to understand and work through the causes of these feelings in subsequent BMGIM sessions.

In the study by Burns (1999:86), participant B acknowledged feelings of loneliness due to the loss of both her parents. From her imagery, it would appear that her mother had been a source of comfort and security to her, and that the participant was experiencing loneliness due to her passing (Burns 1999:83). The following is an excerpt from one of the session records: "She then described lying down, and someone placing a fresh pillow under her head, which comforted her. B identified this person as her mother. She began to cry and described her mother telling her that she would never be alone".

# 3.4.1.4 Emotional insight

During the third BMGIM session, Cadrin's patient realised that not showing her anger and resentment towards her mother and family was squeezing or suffocating her heart (Cadrin 2005-2006:11). This was represented by an image of her heart encased in a cement wall. The imagery which followed was of Jesus Christ and a heavenly presence supporting her in offering forgiveness and gratitude to her mother. This was followed by a change in the imagery of her heart: "It [her heart] has some life - before it was so dark. It's still enclosed in the cement but maybe the walls aren't as dark, as grim. It's changed. I was always able to see the heart though it wasn't a nice shaped heart. It was being squeezed by these ropes. Now it's freer, it has a beat, a movement to it". Following this session, she experienced emotional insight into her feelings



of anger and resentment and her need to forgive. She also realised that she needed to talk to, and make peace with her mother. This revelation occured again in session 5 (Cadrin 2005-2006:13) where the patient realised the need to "undo the shackles' that weren't allowing her to receive from others or forgive them, ...".

In the study by Burns (1999:83), through the course of her BMGIM sessions, participant B realised the loneliness and powerlessness that she was experiencing. Similarly, with the aid of the BMGIM, participant S (Burns 1999:97) gained emotional insight regarding her reticence in experiencing or expressing her feelings of fear, sadness and guilt. She identified the need to find ways of experiencing and expressing her feelings constructively without dwelling on them. The BMGIM helped participant R to realise that whilst she was in touch with her feelings, she did not always express them (Burns 1999:104).

In Bonde's study (2005a:171), participants had the following emotional insights: "ESMA said: Living with cancer may overwhelm you with strong emotions, sorrow, despair and anxiety – will you live or will you die? – it just tumbles you down. – When I listen to the GIM CDs my mind becomes clearer, I feel empowered somehow, the music makes me calm and relaxed and enables me to face problems when I leave my 'cave'...", and "INLA said: I have improved my contact with different things – and I have found the courage not to repress the unpleasant aspects of my life. This is an indication of strength".

The BMGIM sessions allowed participants to become aware of their emotions, to gain insight into these emotions, and even to identify possible causes of their unresolved feelings.

#### 3.4.2 Awareness of inner faith

Under this category, two sub-categories emerged, namely "not alone" and "reassurance".

#### 3.4.2.1 *Not alone*

In her religious imagery, Cadrin's patient (2005-2006:12) found that her faith provided her with support. During the imagery phase of the BMGIM, voices encouraged her to forgive and reassured her that she was not alone: "The heart, still encased in the cement, moved to the centreline and stood beside her. It had developed arms, enabling her to hold its hand. At this point, Ellen realized that Jesus Christ was present and had taken the other hand of the heart.



She was stunned at His presence saying, 'I can't believe somebody would be there for me'". Images of Jesus Christ and angels emerged again in subsequent sessions as allies along a difficult path (Cadrin 2005-2006:13): "In her imagery there were chains bound around her feet. These were subsequently removed during Bach 'Concerto for 2 Violins' by angels who reinforced the need for her to let go of her unresolved anger and unwillingness to forgive, assuring her that they would assist with this". In another session, the following was recorded: "During the final piece of music Ellen was also reminded by Jesus Christ to deal with her feelings of grief, pain, despair, and despondency by leaning on him" (Cadrin 2005-2006:15). Throughout that BMGIM session, the image of angels represented her support system and constantly reassured her. In her final session, angels assisted her in cutting the ropes around her ankles. These ropes represented her past experiences (Cadrin 2006-2006).

#### 3.4.2.2 Reassurance

The patient in Cadrin's study experienced reassurance through imagery of a dark, lean, well-spoken man named Horus who spoke to her: "He says, 'it used to be a bad one, but don't think it will cause damage in the future.' What about the others? I ask. They look ominous. He says, 'We don't anticipate problems with the others. We can never be completely sure, but they seem to be tame. Even with the one giving us problems it is always unpredictable. That's the way life is. You can come here any time - it's a pretty safe place ..." (Cadrin 2005-2006:9). In this imagery, "Horus" reassured Ellen by acknowledging the unpredictability of her circumstances but at the same time providing a sense of safety. The patient described the eyes of Horus to be filled with compassion and gentleness.

In the study by Burns, participant B had an image of an angel who offered her reassurance: "The client then identified seeing an angel, who told her that everything would be alright" (Burns 1999:83). Participant T in Burns' study also experienced a sense of reassurance following BMGIM treatment (Burns 1999:90). She shared during a postlude that it was her faith that kept her emotionally strong. She also acknowledged her spiritual beliefs as coping strategies. Also in Burns' study, participant S shared during the prelude her concern as her husband had become ill. During the music travel the following experience was documented: "She described spending a great amount of time in the boat on the cove with redwood trees on the shore. She stated that it felt like a spiritual place. S also identified having an image of an angel singing a lullaby to her. She expressed that this was comforting. She ended the music



listening by floating on the water, feeling relaxed" (Burns 1999:99). This imagery illustrates the comfort and reassurance that participant S experienced through the imagery of an angel during BMGIM sessions.

#### 3.4.3 Coexistence with an illness

In light of her mortality, Cadrin's patient experienced an integration of her feelings of sadness with a sense of safety, and thus an increased ability to coexist with her terminal illness. This was illustrated by the following statement by the patient: "There is a sadness to leaving but I am also moving forward anticipating the next place – the next part of the journey ..." (Cadrin 2005-2006:9).

The category of "coexistence with an illness" will be further discussed under the following sub-categories: acceptance of assistance, new perspective on life and death, and cognitive insight.

#### 3.4.3.1 Acceptance of assistance

In the study by Cadrin (2005-2006:16) the acceptance by the patient of assistance from family members played a pivotal role in allowing her to coexist with her terminal illness. However, the patient struggled to accept assistance. The first step in overcoming this was the patient's realisation of her resistance to others. During her BMGIM therapy, this resistance was represented by imagery of a hostile mountain that did not allow anyone near it. Through the BMGIM process, she realised the need to accept her own illness and to accept support and assistance from family members. Throughout her BMGIM sessions, images of Jesus Christ and angels always supported and encouraged her. This imagery also helped her realise the need to ask for help and to allow others to help her.

In contrast, participant B in Burns' study experienced the realisation of being disempowered by expecting others to resolve her problems instead of being more assertive in her situation: "She was aware that at multiple times during the imagery she expected others to rescue her, and did not assert changing the situation herself" (Burns 1999:83). In another case study by Burns, participant S (through the BMGIM sessions) acknowledged her busy lifestyle and the time she took caring for others, and realised her need for time to care for herself. In one of her sessions, participant S illustrated remarkable self-care when she reported approaching a family



member to share the responsibility of caring for her mother in law: "She described a conversation she had with her sister-in-law establishing ground rules for who was going to take care of mother-in-law. She said this felt better to her, and felt like she had more control over her own life" (Burns 1999:100).

An example of accepting assistance was presented in the study by Bonde (2005a:171): "PIJØ said: It has been very hard for me to ask other people for help. I can do that now .... And I believe in the future". Here, PIJØ verbalised the new ability to approach others for help. She also showed her optimism towards the future, which relates to the category of coexistence with an illness.

#### 3.4.3.2 New perspective on life and death

Through her imagery, Cadrin's patient realised the unpredictability of cancer and the significance of the cycle of life and death. This was symbolized by her imagery of volcanoes which represented cancerous tumours. The patient is quoted as saying, "Even though people have lost their lives, they're not afraid of them [the volcanoes]. They respect them and have learnt from them. We grow great food because of them. We appreciate them" (Cadrin, 2005-2006:9). The patient also revealed a new perspective on life and death through her imagery of floating in the air, being with her sadness and experiencing a sense of freedom. In a later session, she acknowledged the uncertainty of the future and her being comfortable with that uncertainty. In that particular session she saw images and faces of actual people who had supported her throughout her illness (Cadrin 2005-2006:19). She continued to say: "Support – I couldn't have made it without that support ... I just know that they're there and that they've become good friends. We're not in this world alone. Now I stand up and walk into these faces, not really knowing what tomorrow will bring, but that's okay. I'm just walking into the horizon, not sure where I am going – just walking. It's okay not to be sure – I've dealt with uncertainty a long time. I know where my strength and courage come from. This only makes me trust in God and his faithfulness and wisdom. I can walk into the horizon with the sureness that all is well". After the same session she also developed a new perspective on life when she realised the need to "live moment by moment" (Cadrin 2005-2006:20).

Through her imagery of two ice skaters with contrasting personalities, participant T in the study by Burns (1999:92) developed a new perspective on life. The two ice skaters represented her



inner conflict between empathy and assertiveness. At the end of the session, participant T identified her need to find a balance between them. Also in the Burns study (1999:98), participant S changed her perspective on life by realising her need to use music to relax.

In the study by Bonde (2005a:169), participants communicated the following with regards to new perspectives: "ANHO said: Somehow I understand myself in a new way - I trust myself more, including my attitudes, beliefs and what makes sense to me", "INLA said: I have got access to qualities of myself that I didn't know about. Unknown sources", "WIFU said: I have built a new world within me. I have two worlds now", "SAAA said: Music therapy has contributed to a change in focus related to future goals of my life (....) New perspective", "PIJØ said: [Images of new places and rooms] represent new sides of myself. It is like acknowledging new aspects of myself all the time, knowing them better, with greater security".

Participants in the study by Bonde (2005a:171) also experienced an improved understanding of self. This was illustrated through the following quotes by the participants themselves: "ESMA said: 'Performing well' has been an important theme in my life. Now it doesn't matter much anymore. I have learnt that patience is important. Hot-tempered action does not solve any problem", "ANHO said: 'Duty first' has been my recipe. Now it is easier for me to forget my 'duties'. I can allow myself to say 'this is how it is. I am not a magician'", "SAAA said: GIM has made it easier for me to focus on what I want to accomplish – one day", "PIJØ said: Before, I expected myself to 'be strong'. Now I am much better to live here-and-now – and not worry so much".

# 3.4.3.3 Cognitive insight

Through the progress made in the BMGIM sessions, the patient participating in Cadrin's study (Cadrin 2005-2006:13) gained insight into her emotions and made a conscious decision to "change her patterns and act differently". She acknowledged her habits of self-rejection and rejection of others as factors contributing to her aloneness. She began to express her emotions and experiences to one of her sisters and allowed her mother and family members to support and care for her. In subsequent imagery, she began to picture family members in more supportive roles: "Ellen expressed a need to have someone join her that would offer some understanding while on this climb. Of significance, four of her family members appeared. Not only did she have a meaningful time with them during the remaining music program, but her



family also allowed her to reach the top of the mountain first, moving at her slower pace" (Cadrin 2005-2006:15).

During the study by Burns (1999:86), participant B realised her need to be more involved and assertive in solving her problems. She also realised the need to change her negative thought patterns to more positive ones. Also in the Burns study (Burns 1999:101), participant S realised, through her experience of being quiet and calm during the BMGIM sessions, that whilst she had the responsibility to continue caring for her family, it was also necessary for her to take time to care for herself and to practice relaxation techniques. This realisation also aligned well with the category of coexistence with an illness.

In the study by Bonde, one of the participants developed cognitive insight into her life situation. This is illustrated by the following excerpt from an interview transcript: "SAAA said: Music therapy has been good for me – it has helped me to be more aware of what is missing, and what I could do about it" (Bonde 2005a:170).

# 3.5 CHANGE IN MOOD

As this systematic review is a mixed-studies review, the quantitative findings by Burns (1999, 2001) and by Bonde (2005a) were also included in the data synthesis. The findings documented in Burns (1999:49) and in Burns (2001:58) revealed an improved mood and a decrease in total mood disturbance between the experimental and control groups at both post-test and follow-up using the POMS. The POMS employed included the sub-scales of Tension/Anxiety, Fatigue/Inertia, Depression/Dejection, Anger/Hostility, and Confusion/Bewilderment.

In the study conducted by Bonde (2005a:146), the HADS was used to measure the effect of the BMGIM on participants' mood. A significant decrease was found in anxiety scores from pretest to post-test. However, there was no significant decrease in anxiety scores at follow-up when compared to pre-test scores. Bonde (2005a) also did not find a significant decrease in depression scores post-test or at follow-up.

Within the theme of 'change in mood', two categories emerged, namely 'inner strength' and 'positive memories'.



#### 3.5.1 Inner strength

Several participants across the various studies experienced an increase in inner strength during the treatment. This sense of increased strength in turn elevated the participants' mood due to numerous reasons. The category of 'inner strength' can be divided into three sub-categories, namely 'act of forgiveness', 'overcoming doubt and fear', and 'transpersonal experience'.

# 3.5.1.1 Act of forgiveness

During her BMGIM therapy period, the act of forgiveness enabled Cadrin's patient to feel carefree and happy. Forgiveness also allowed her to accept support from family members. This, in turn, gave her encouragement to continue exploring the emotions and deeper issues related to her illness (Cadrin 2005-2006:12). She experienced hopefulness and a sense of being loved in one of the sessions: "There is hope and although things look the same, they're not. I get a strong sense of forgiveness and to keep working on that I am loved, a created being. I was a child with trauma. I am taking the walls down – they were thick walls. I've chipped at them every day... The wall is coming down" (Cadrin 2005-2006:20). In subsequent sessions, the image of this wall was replaced by a flowing river which separated her from her family. Her response to this was that everything was "still a work in progress" and that "the forgiveness [was] coming" (Cadrin 2005-2006:21). Through the act of forgiveness, the patient overcame some form of inner conflict.

In the study by Bonde (2005a:170), one of the participants realised how the BMGIM helped her to overcome conflict and therefore gave her a sense of inner strength: "INLA said: I got access to [my own] strength – and to beauty and harmony. Not only harmony, but also caring and gentleness. Conflicts too, but also an end to conflicts. (...) Now and then I miss my 'Islands of joy' on the couch...".

#### 3.5.1.2 Overcoming doubt and fear

In one of her BMGIM sessions, Cadrin's patient had an image of a man shrouded in black. This black figure represented death and evil, and brought about feelings of doubt and fear. However, she stood up to this figure: "I'm getting stronger and you can't push me around or make me afraid. I won't live my life like that anymore. You have no control over me. Find someone else to manipulate and torture .... Even through my many losses in these 5 years I am finding some purpose, something good is coming out of it. This is a dark period of my life but it does not



mean that it will control me" (Cadrin 2005-2006:16). This new attitude towards life empowered the patient and increased her confidence, resulting in an overall improvement in her mood.

In the study by Burns, participant R (during a prelude) identified existing feelings of uncertainty or doubt with regards to her decision of whether or not to resign from her job, and feelings of uncertainty with regards to her health. She also expressed her fear of disappointing or letting people down at work if she decided to resign. These emotions placed her under a great deal of stress. During the music travel phase of one of her BMGIM sessions, she had imagery of herself and her husband enjoying each other's company whilst riding horses, which she described as feeling wonderful and free (Burns 1999:105).

In Bonde's study, one of the participants overcame doubt and fear by recognising her own inner strength: "PIJØ said: For me it has been a way to find inner strength - I dare risk something, even if I am extremely vulnerable. I found courage [to examine the relationship with my partner] and it gave results" (Bonde 2005a:170).

#### 3.5.1.3 Transpersonal experience

In a profound experience of transpersonal imagery, Cadrin's patient envisaged her own dying process. In a dark valley she was surrounded and protected by 10–12 angels who lighted the way. She described the following imagery with regards to climbing out of the valley: "I'm ready to start climbing now. I needed to have a break. The angels are climbing, too. It is hard work. I feel tired and it is slow going. They lift me up and grab hold of my elbows, helping me, as I feel weak. Encouragement is felt in their presence – it pulls you on. I have bouts of extreme fatigue. Then I move through it and feel better or quite a bit better ... I'm just about at the top and my walk seems freer and my breath fuller. I've reached the top - it's so beautiful as I didn't realize how high up it is and how far I have climbed. Now I get to relax and breathe in the beauty, the air and the victory..." (Cadrin 2005-2006:19). At the end of this session, Cadrin (2005-2006:19) highlighted the patient's transcendent awareness of God, her inner strength and a sense that all was well.

A transpersonal event, described as overwhelming, was also experienced by participant T in the study by Burns: "... She saw a priest, and he laid his hands on her head. She described the



priest praying for her, and felt the experience as being almost overwhelming. She expressed increased calm and peaceful feelings" (Burns 1999:91).

#### 3.5.2 Positive memories

Study participants' positive memories led to positive feelings which, in turn led to a change in mood.

Participant B in Burns' study, through the guided imagery process, recollected memories of her previous trips abroad. These images brought about feelings of beauty and warmth, and contributed to a more positive overall mood (Burns 1999:85). Participant T in the same study, also had an image of a town she had visited during a vacation. This image was described as still and quiet, and left her feeling calm (Burns 1999:91). Yet another of Burns' participants (participant R) experienced positive feelings of relaxation following imagery of a previous trip to Arizona. She described memories of watching the sunrise and of watching water flowing over creeks. She also expressed that she found it helpful to focus on pleasant thoughts (Burns 1999:107).

# 3.6 CHANGE IN QUALITY OF LIFE

In their research, both Burns (1999, 2001) and Bonde (2005a) measured the effects of the BMGIM on cancer patients' quality of life. Burns (1999:47; 2001:58) found a significant improvement in the quality of life in follow-up scores using the QoL-CA scale yet, interestingly, post-test scores did not reveal a significant improvement in quality of life.

In the study by Bonde (2005a:153) the EORTC-E30 scores did not indicate a significant improvement in quality of life, either post-test or at follow-up. However, the SOC scores showed a significant improvement in quality of life both post-test and at follow-up (Bonde 2005a:158).

In analysing the qualitative findings of the reviewed studies, during the process of coding, the theme of 'change in quality of life' was evident in the descriptive data presented. Within this theme, only one category emerged, namely 'experience of wellbeing'.



#### 3.6.1 Experience of wellbeing

Findings documented by Burns (1999), Bonde (2005a), and Cadrin (2005-2006) indicated that participants in the BMGIM process had experienced an overall sense of wellbeing linked to the therapy. This included functional/physical wellbeing, emotional wellbeing and spiritual wellbeing, which became designated sub-categories of the 'experience of wellbeing' category.

#### 3.6.1.1 Functional/physical wellbeing

Throughout her article, Cadrin (2005-2006) documents the deteriorating physical health of her patient. As a result of the emotional and cognitive insight attained through her BMGIM sessions, she allowed her family to support her. This, in turn, gave her encouragement to continue living with the functional abilities she still had.

In the study by Burns (1999:91), participant T experienced a reduction in pain (related to reconstructive surgery) during one of her BMGIM sessions. Participant S in the same study also experienced increased physical wellbeing through the relaxation that her body underwent following her imagery of nature scenes, the ocean, rain and bright blue skies. These images indicated her need to rest and recover from her illness (Burns 1999:98). Participant R, also in Burns' study, indicated that as a result of the relaxation she had experienced during her BMGIM sessions, she had decided to incorporate music into her daily routine for relaxation whilst exercising and whilst journal writing (Burns 1999:108).

A participant in Bonde (2005a:170) experienced an improvement in her functional wellbeing as a result of BMGIM therapy: "ESMA said: I have been stabilized in my... fight for staying at an acceptable [functional] level. I don't want to go down again and 'swim in the mud'; I want to 'stay on the road'".

#### 3.6.1.2 Emotional wellbeing

Through the act of forgiving, and by sharing her experiences with her family, Cadrin's patient experienced carefree and happy feelings which contributed to a renewed sense of emotional wellbeing (Cadrin 2005-2006:12). As her therapy progressed, she spent more time with her family. In one of the sessions, she used the words "blessed" and "wonderful" to describe her time spent with them. These words suggest an improvement in her emotional wellbeing and therefore her quality of life. The participant also reported that through her series of BMGIM



sessions, she had experienced a decrease in her anger towards her family (Cadrin 2005-2006:21).

In Burns' study, participant T expressed feelings of peace following her first image of a church. During the same session, she had an image of dancing with her husband which left her feeling happy. It is important to note that participant T saw images of the church in several of her BMGIM sessions, and that such imagery was usually accompanied by feelings of peacefulness (Burns 1999:91).

In the study by Bonde (2005a:170) several of the participants verbalised their experiences of emotional wellbeing, as follows: "WIFU said: The best about GIM is the tool it has given me - It enabled a new way of coping, of finding solutions to problems, of making myself emotionally stable again", "WIFU said: My psyche has been stabilised; I am not dependent on my surroundings anymore. I have made contact to a very strong inner state of happiness. I am not sure what it is that is so good, but the feeling is very clear. And it always comes with Haydn's Cello Concerto (laughs) (...) I have found strength within myself. I have experienced imagery of a very special personal kind, which no one can take from me, and I can use them wherever I may go", "SAAA said: I have done many things in an attempt to feel better, but music therapy is what has given me the greatest number of images, and the serenity necessary to experience more meaning ....".

#### 3.6.1.3 Spiritual wellbeing

Through her BMGIM sessions, Cadrin's patient (2005-2006:18) realised that her faith in God gave her inner strength and the courage to make a difference in her life by releasing her feelings of anger and through forgiveness.

Participant T in Burns' study reported that she sensed a strong connection to God during her BMGIM sessions (Burns 1999:91).

In the study by Bonde, one of the participants (through the BMGIM treatment) attributed her inner strength to a faith in herself: "ANHO said: Now it is easier for me to have faith in myself, to believe that what I sense is OK", whilst another of Bonde's participants found inner strength in the images she created: "WIFU said: I have found my inner strength. I have found images,



which are mine and cannot be taken away from me. I can use them wherever I may go" (Bonde 2005a:170).

#### 3.7 PERCEPTION OF MUSIC

Within the theme of 'perception of music', one category emerged, namely 'therapeutic effect of music'.

#### 3.7.1 Therapeutic effect of music

Findings by Burns (1999), Bonde (2005a), and Cadrin (2005-2006) indicated that through the BMGIM, participants experienced the therapeutic effect of music. The therapeutic effect of music can be divided into several sub-categories, namely 'creative expression', 'experience of music' and 'recommendations'. These are discussed below.

## 3.7.1.1 Creative expression

The BMGIM was found to inspire creative expression in the form of poetry writing. In the study by Cadrin (2005-2006:10) the participant wrote four poems which played an integral role in her therapeutic process.

In Bonde's study, two participants described how the BMGIM allowed them to express themselves creatively. Participant SAAA wrote a whole collection of poems and participant ESMA expressed herself through lyrics (Bonde 2005a:176).

#### 3.7.1.2 Experience of music

The experience of music was expressed by several of the participants in the various studies.

Cadrin's patient found the music to be comforting (Cadrin 2005-2006:18).

Participant S in Burns' study described feeling free and quiet during the music: "She stated she did not mind all the things she did, but identified difficulty taking care of herself. She stated it was nice to be free and quiet during the music, that was a new experience for her" (Burns 1999:97). This indicates that the music allowed participant S time to experience freedom and quiet in her otherwise busy life. In one particular session, she actually smelt the ocean as the surf came in. This imagery gave her an emotional sense of quiet and calm, and also illustrated that music can be experienced in various sensory ways.



Participant R in Burns' study reported feeling happy most of the time during her first BMGIM session. However, she did describe feelings of fear and anxiety when the music was louder (Burns 1999:104). Overall, participant R found music to reduce her tension and increase her coping ability (Burns 1999:108).

In Bonde's study, participant 'ESMA' described her experience of music as follows: "Listening to music, I experienced moods and emotions that were new to me. The experience [of myself and my world] was different - more intense" (Bonde 2005a:169). Other participants in Bonde's study participants verbalised the following about their BMGIM experiences: "INLA said: Doors have been opened, and they couldn't have been opened anywhere else – it is the music, no (..) it is the combination of a beautiful space, light, flowers, tea, music (...) and an attentive person that attunes me", "INLA said: .... I really felt there was a dialogue between the music and myself", "SAAA said: It is true that music is an external stimulus, but it is much more an intrinsic experience, capable of changing my perspective on the future. (...) It was moving in a very pleasant way. (...) Music reminds me of healing, but the music made perhaps more playful", "ESMA said: When I listened to some of the music selections I experienced moods and emotions new to me. (...) Already when I was in hospital I felt that I needed some music, even if it was totally new to me, 'illiterate' as I am in music. It was something completely new entering my life. (...) I don't think, I could have experienced this sensation [drifting, soaring] without music" (Bonde 2005a:171). In the last quote, the participant described her experience of the music. She also expressed a need for music interventions while hospitalised. This need was also expressed by other participants and will be elaborated on under the sub-category of "Recommendations", below.

#### 3.7.1.3 Recommendations

In the study by Bonde, various participants recommended that music interventions should be introduced in hospitals or during medical treatment: "PIJØ said: I think I am quite good at catching moods, so the moods in the music reach me very precisely, I guess. (...) There is a sad lack of music and other healing influence in the hospital, and I think it is a disaster for the health system... I could have used it as 'medicine'", "WIFU said: I am very susceptible to the influence of music. I have used it before, without really knowing. An example: I would play a recording of Mozart's Clarinet Concerto [2nd movement] when I needed to cry. Now I can use



music in a much more conscious way. I am sure I will bring my music if/when I need chemotherapy" (Bonde 2005a:172).

#### 3.8 DISCUSSION

Through imagery experienced during BMGIM sessions, participants in the reviewed studies experienced emotional insight as they became aware of unresolved feelings of anger, grief, and loneliness. Imagery of angels, churches and religious figures like Jesus Christ offered reassurance to the participants, thus creating an awareness (on the participants' part) of inner faith. Through the imagery, the participants gained cognitive insight. Thus, the BMGIM brought about change within the participants. This change brought about improvements in mood and quality of life as participants implemented appropriate practical changes such as performing acts of forgiveness, allowing themselves space to grieve, and giving themselves space for relaxation. This process can be summarized as follows:

Emotional Insight + Cognitive insight → Change within → Action taken → Change in mood + Change in quality of Life

#### 3.9 LIMITATIONS

In all of the studies included in the systematic review, the documented BMGIM sessions were conducted during a period when participants were not receiving chemo- or radiotherapy for the cancer. Participants in the studies either had received chemo- or radiotherapy many months prior to the BMGIM sessions and were in a rehabilitation phase (Burns 1999, 2001; Bonde 2005a, 2005b, 2007), or they were in a palliative care phase (Cadrin 2005-2006). Our comprehensive literature search did not yield studies in which the BMGIM was implemented *whilst* participants were receiving chemo- or radiotherapy.

Two of the studies included in the systematic review employed quantitative research methods. However, both of those studies were based on small samples, i.e. eight (Burns 1999) and six (Bonde 2005a) participants.





The findings of this systematic review provide various in-depth insights into the experiences of cancer patients who have received BMGIM therapy in the past.

However, because the comprehensive search did not yield studies in which the BMGIM was implemented whilst participants were receiving chemo- or radiotherapy, the evidence-based practice of BMGIM during oncology patients' treatment phase could not be established. The second phase of this study thus proceeds within the framework of intervention research. A mixed-method research design is used to investigate the effects of the BMGIM intervention on the physical, psychological and spiritual wellbeing of oncology patients during the treatment phase.



# **CHAPTER 4**

# RESEARCH DESIGN AND METHODS OF THE EMPIRICAL STUDY

# 4.1 INTRODUCTION

Chapters 2 and 3 of this dissertation focused on Phase 1 of this study. The objective of this phase was to conduct a systematic mixed studies review (SMSR) to ascertain the effectiveness of the BMGIM in other health care settings, and to identify successful approaches of implementation with respect to the BMGIM. The methodology followed to conduct the SMSR was described in Chapter 2. The findings of the SMSR were discussed in Chapter 3.

The SMSR revealed that the BMGIM has been found to improve the mood and quality of life of cancer patients. However, few relevant studies on the topic were available. The SMSR thus led to the recommendation that additional robust studies be conducted in the field. Furthermore, the studies reviewed during the SMSR focused on the implementation of the BMGIM during a rehabilitation period. It was recommended that future studies investigate the effectiveness of the BMGIM during cancer treatment.

Thus, Phase 1, namely the SMSR, informed the rest of the study. The objectives of Phases 2 and 3 were as follows:

- Phase 2: To implement the BMGIM in selected cancer interim homes in order to introduce an existing music therapy method into a new setting.
- Phase 3: To evaluate cancer patients' experiences during BMGIM therapy, as well as to evaluate the effects of the BMGIM on patients' physical, psychological and spiritual wellbeing for the duration of their stay in the cancer interim home.

Phases 2 and 3 represent the empirical component of this study. Based on the recommendations generated by the SMSR, intervention research was chosen as the most appropriate research framework for Phases 2 and 3. This chapter comprises an in-depth discussion of intervention research and its application to this study.



# 4.2 INTERVENTION RESEARCH

Interventions are intentional change strategies (Fraser et al. 2009:5). Fraser and Galinsky (2010:459) define intervention research as, 'the systematic study of purposive change studies'. Melnyk and Morrison-Beedy (2012:1) concur with Fraser and Galinsky (2010:459) that intervention research is about bringing about change and making a difference in a caring environment. Bringing about change involves learning about treatments or strategies that are most effective in improving outcomes.

It is through empirical research that the effectiveness of an intervention can be systematically evaluated. According to Fraser et al. (2009:25), intervention research involves the development and testing of particular interventions. In other words, intervention research involves creative and evaluative processes. A detailed description of a new intervention and an evaluation of its effectiveness are usually the outcomes when this research framework is adopted (Fraser et al. 2009:4).

The creative and evaluative processes in intervention research are guided by five steps. In this study, the first three steps guided the implementation and evaluation of the intervention, i.e. the BMGIM; step four was not implemented, and step five was implemented to a small extent. The five steps of intervention research are described by Fraser et al. (2009) and their application in this research is described in section 4.3.

In this research, the creative process took place in Phase 2 of the study when I introduced the BMGIM intervention to cancer patients living in a cancer interim home or in their private homes during the course of chemo- or radiotherapy. The BMGIM was new to these cancer patients. The intervention was introduced with the intention of bringing about change and improving health outcomes. I thus needed to determine the effect of the intervention on various health outcomes. This represented the evaluative process which took place in Phase 3 of the study.

# 4.3 THE INTERVENTION RESEARCH PROCESS

The particular approach taken to intervention research is determined by the design and development of the intervention being implemented. Any intervention is purposively intended to alter behaviour, reduce risk and improve outcomes in a particular health care context. The



intervention design is undertaken with explicit practice principles, goals and activities in mind (Fraser et al. 2009:9). The scientific process of intervention research comprises five steps which guide the conceptualization, refinement, and confirmation of an intervention's core features. The five steps of intervention research are defined by Fraser et al. (2009:36) as follows:

- 1. Specify the problem and develop a program theory
- 2. Create and revise program material
- 3. Refine and confirm program components
- 4. Assess effectiveness in a variety of settings and circumstances
- 5. Disseminate findings and program material

These steps are described below, along with their application in the context of this study.

#### 4.3.1 Step one – Specify the problem and develop a program theory

The first step of intervention research involves the conceptualization and development of the core features of the intervention at hand. Whilst intervention research seeks to evaluate the effects of a particular intervention on health outcomes, it also seeks to understand the processes operating within the intervention to bring about change. Thus, the design and development of an intervention are underpinned by two types of conceptualization, namely problem theory and program theory (Fraser et al. 2009:47). In this study, the literature review and the SMSR provided an in-depth understanding of the health challenges experienced by cancer patients as well as the therapeutic processes that operate within the BMGIM. Thus, through the literature, both problem theory and program theory were developed.

# 4.3.1.1 Problem theory

The "problem theory" refers to a conceptualization of the biopsychosocial influences which produce a certain health problem. Within a problem theory, both risk and protective factors with respect to a particular health problem are specified (Fraser et al. 2009:50). Risk factors are those that contribute to the problem, whilst protective factors are those which are considered to disrupt its progression. The problem theory should also incorporate the prevalence and incidence of the particular health problem. In other words, the problem theory develops the understanding of the problem necessary to identify the most suitable intervention (Fraser et al. 2009:50).



In the context of this study, the literature review (Chapter 1) was conducted in order to understand the problem and its associated risk and protective factors. The problem theory was developed based on the findings of the review.

Cancer contributed to 8.2 million deaths worldwide in the year 2012, and the incidence of new cases of cancer are reported to have increased both globally and nationally in recent years (WHO 2013; Statistics South Africa 2007 2009). Statistics South Africa 2007 (2009) further elaborates on the prevalence of cancer in South Africa with reference to the types of cancer most commonly encountered in the country, as well as their correlation with gender. The increased incidences of cancer have led to a significant burden on the South African health care system.

The diagnosis and the treatment of cancer bring about change, as well as the initiation of new needs for patients and their respective support networks (Albreht et al. 2008). When someone is diagnosed with cancer, the possible curative treatment options could include radiotherapy, chemotherapy, surgery, psycho-oncology, or palliative care (in the case of untreatable cancer). Cancer treatment involves either hospitalization or outpatient visits. Hospital visits for the purposes of diagnosing or treating cancer are stressful for patients and their families due to the uncertainties and fears associated with cancer prognoses (Dougherty 2010). The findings of various research studies confirm the notion that physical, psychological, social and emotional distress are experienced by patients diagnosed with cancer (e.g. Esbenson et al. 2008:394; Rykov 2008:193; Alexopoulos et al. 2011:444). The physical, psychological, emotional and social dimensions of a patient's life all affect and are affected by the spiritual dimension. None of these dimensions exist in isolation (Ellison 1983).

Ideally, nursing should involve caring for the physical, psychological, social and spiritual needs of a patient. However, due to limited resources, it is usually the patient's urgent physical needs that take priority (Williams & Kristjanson 2008:1070). According to Williams and Irurita (2004:807), this shift has been enabled by developments in pharmacotherapy and technology. For example, in a study conducted by Mulder et al. (2008:101) it was found that the emotional distress caused by chemotherapy-induced hair loss is generally underestimated by physicians and nurses. The reason for this is a combination of health care professionals' underestimating or failing to identify these psychological challenges, along with patients' failure to



communicate them effectively to the relevant health care professionals. Such situations are likely to result in insufficient and inappropriate care.

The prevention and management of the adverse physical and psychological effects of cancer diagnosis, anticancer treatment, and post-treatment cancer care is described as "supportive cancer care" by the MASCC (2013:1). The WHO (2002:70) has identified psychosocial support as one of the principle methods of cancer treatment. The WHO (2002:80) also emphasises the need to provide basic emotional support to cancer patients, as well as to assess them for symptoms of anxiety and depression, and to refer them for appropriate treatment where necessary.

With a projected global increase in the incidence of cancer, the need for supportive cancer care strategies is also increasing. Thus it is relevant to consider implementing an intervention that aims to manage cancer patients' distress in a holistic way. Abrams (2001) has found that music has the potential to address people's physical, psychological, social and spiritual needs, thus promoting wellbeing.

The field of music therapy encompasses a number of practices and methods. One of these is the Bonny Method of Guided Imagery and Music (BMGIM), which is a receptive method of music therapy. BMGIM is a music-centred transformational therapy that facilitates self-awareness and the integration of the physical, psychological, social and spiritual dimensions of a being (Cadrin 2005-2006:5). This leads to the second conceptualisation required by Step one in intervention research, namely the program theory.

#### 4.3.1.2 Program theory

In intervention research, the intervention under scrutiny is meant to bring about a solution to a particular health problem. The problem theory developed above contributes an understanding of the incidence, prevalence, risk factors and protective factors with respect to cancer, as well as some of cancer's detrimental effects. The program theory, on the other hand, 'makes explicit how the [proposed] intervention is supposed to function' (Fraser et al. 2009:48), and evaluates the effects of that intervention on specific health outcomes. Through the use of a theory or model, the logic behind the intervention is described and intervention activities are matched with expected outcomes (Fraser et al. 2009:47).



In this study, the logic model was used to specify the intervention process. Figure 4.1 illustrates the process of BMGIM as an intervention to complement the care usually provided to cancer patients. The elements of the logic model include objectives, inputs, activities, and outputs; as well as intermediate and distal outcomes (Fraser et al. 2009:55). The focus of the BMGIM intervention was clarified through the formulation of program objectives. In this study, the program objectives were as follows:

- To conduct a systematic review to identify methods that have been used to implement the BMGIM in other health care settings, and evaluate the reported effectiveness of the BMGIM in cancer care contexts:
- To implement the BMGIM in selected cancer interim homes in order to introduce an existing music therapy method into a new setting;
- To evaluate cancer patients' experiences during BMGIM therapy, as well as to evaluate the effects of the BMGIM on patients' physical, psychological and spiritual wellbeing for the duration of their stay in the cancer interim home.

In order to meet the program objectives for this study, specific intervention actions had to be implemented. These actions were accomplished through program activities (Fraser et al. 2009:56). Program activities began with the identification of best practices with respect to the BMGIM (achieved by conducting a systematic review and consulting with experts in the BMGIM). Based on the findings of the systematic review and consultations with experts, program material was drafted to guide the implementation of the BMGIM in the selected study contexts. The next program activity was the negotiation of access to the relevant cancer care facilities (see section 4.3.3.1). Other program activities included collaboration between patients, centre managers, social workers and BMGIM qualified health care professionals (to identify the best ways of implementing BMGIM to complement the care already provided at the care facilities), implementation of the BMGIM, and evaluation of its effects on patients' wellbeing.

Commencement of the various program activities was dependent upon the availability of necessary resources. In the logic model, these resources are referred to as inputs (Fraser et al. 2009:55). In this particular study, inputs included the following: access to relevant health care facilities, health care professionals qualified to administer the BMGIM, equipment required to play recorded music, pastels, and A3 paper (on which to draw the mandala).



ODIECTIVES	INDLITE	A CTIMETED	OUTDUTE		INTERMEDIATE	1	DICTAL OUTCOMES
OBJECTIVES	INPUTS	ACTIVITIES	OUTPUTS		INTERMEDIATE		DISTAL OUTCOMES
To identify methods	Access to facilities	Identification of best	Number of facilities		OUCOMES		Enhanced supportive
and effectiveness of	Access to facilities	practices in BMGIM	included		Changes in the physical,		cancer care through the
BMGIM in other		practices in Dividivi	meidded		psychological and		delivery of holistic
health care settings	Health care	Development of	Number of patients		spiritual well-being		nursing care.
nearth care settings	professionals	practice guidelines	who received the		spiritual well being		nursing care.
	qualified in	practice gardennes	intervention	ř			
To implement	BMGIM	Negotiating access	intervention				
BMGIM in order to	Birioni	to facilities	Number of health				
introduce an existing		00 100111010	care professionals				
music method in a new	Equipment to play	Collaboration	qualified in BMGIM				
setting	recorded music	between patient,	who facilitated the				
		centre managers,	BMGIM sessions				
		social workers and					
To evaluate the effect	Pastels	health care	Number of BMGIM				
of BMGIM on the		professionals	sessions conducted				
physical,		qualified in BMGIM					
psychological and	A3 size paper		Hours spent during				
spiritual wellbeing and		Implement the	implementation of the				
the experience of		intervention of	BMGIM sessions				
BMGIM		BMGIM					
			Quality and				
		To evaluate its	completeness of the				
		effect on physical,	program activities.				
		psychological and					
		spiritual wellbeing					
		of the patients.					
						L	

Figure 4.1 Logic model for the BMGIM intervention.

The products of the various program activities are referred to as outputs (Fraser et al. 2009:55). In this study, the outputs were measured by calculating the number of facilities included in the study, the number of patients who received the intervention, the number of BMGIM qualified health care professionals who facilitated the sessions, the number of BMGIM sessions conducted, the time spent on the BMGIM sessions, and the quality and completeness of the various program activities.

Once the inputs and outputs have been defined, the remaining elements of the logic model are the intermediate outcomes and the distal outcomes of the intervention in question (Fraser et al. 2009:56). The problem theory for this study highlighted concerns regarding the holistic nursing care of cancer patients, as well as the physical, psychological and spiritual needs of cancer patients. Therefore, the intermediate outcomes measured included the physical wellbeing, psychological wellbeing, and spiritual wellbeing (of the patients). Distal outcomes are long term outcomes that will be achieved through the intermediate outcomes. In the context of this study, the distal outcome is enhanced supportive cancer care through the delivery of holistic nursing care.

Other key aspects of intervention research include specifying the intervention agent and determining the intervention level. In intervention research, the people who implement a particular intervention are referred to as intervention agents (Fraser & Galinsky 2010:463). In this study the BMGIM intervention was implemented by appropriately qualified music therapists. The intervention was implemented at an individual level, i.e. the BMGIM was administered to one participant at a time.

Thus, the problem of this study has been captured in a problem theory and an appropriate program theory has been developed through the use of a logic model. This represents the first step of the intervention research process and forms the foundation for the development of program material. This is discussed under the next heading.

#### 4.3.2 Step two - Create and revise program material

The second step of intervention research involves the creation and revision of relevant program material for the study at hand. Program materials (e.g. practice manuals) guide an intervention by providing details on how a program should be implemented. According to Fraser et al.



(2009:65) there are many kinds of practice manuals. However, the key characteristics of a good practice manual are a detailed description of the core activities related to a particular intervention, and a prescribed course of action. Sound practice manuals are usually developed over a course of pilot studies and critical reviews.

Program material for the current study was developed based on the findings of the systematic review and on the expert opinion of the BMGIM qualified music therapists involved in the study. The expert opinion of BMGIM qualified music therapists; Mrs K Swart (M.Mus. (Music Therapy) — SMU, Dallas TX USA, GIM Fellow-AMI) and Ms C Lotter (BA Hons (Psychology)-UNISA, M.Mus. (Music Therapy)-UP, GIM Fellow-AMI,MARI Practitioner) guided the development of the program material for this study. This type of program material could be described as practice guidelines which are explained as 'general decision making tools based on research evidence and expert practitioner consensus' (Fraser et al. 2009:65). Therefore, for the purposes of the current study, a practice guideline (Annexure D) was developed.

According to Fraser et al (2009:70) the development of program material involves 4 stages, namely:

- 1. Formulation of program manuals and materials
- 2. Revision through expert review, pilot testing and efficacy trials
- 3. Differentiation in the practice setting
- 4. Translation and adaptation

These four stages span across the five steps of intervention research. The four stages of program material development also can extend over several studies. Stages three and four involve refinement of the content of the program material for alternate settings and the continual development and revision of the program material. This is done in order to facilitate the implementation of the intervention in practice. As this PhD comprises a single study, refinements and revisions to the program material were made according to the findings of this study alone. Further refinements and revisions will be made according to the findings of planned future studies. Therefore, although stages three and four have been described in detail below, their application in the current study is minimal.



#### 4.3.2.1 Development of program material

For the purposes of this study, material was developed for the BMGIM-qualified health care professionals who were the intervention agents in this investigation. The program material introduced the intervention agents to the problem theory and program theory. Based on the findings of the systematic review, the BMGIM intervention was described, and the structure, frequency and duration of the BMGIM therapy sessions were specified. The planning of the structure, frequency and duration of the sessions was guided by the literature and intervention agents themselves.

Stage two of program material development comprises the revision/validation of material through expert review, pilot testing and efficacy trials. Because the intervention was to be implemented with cancer patients undergoing chemo- or radiotherapy, session planning needed to incorporate a level of flexibility to make allowance for the patient's condition at the scheduled session time, whilst following the findings of the systematic review. The program material was reviewed by experts in the BMGIM. Revisions to the material were made to ensure that it would guide the implementation of the intervention adequately during the study. Over time and based on the results of pilot studies and efficacy studies, program materials will be refined in an ongoing manner (Fraser et al. 2009:71).

Stage three of program material development requires diversification of the implementation setting with respect to a particular intervention. This involves the refinement of program material content for application in alternate settings. Revisions are based on the results of pilot testing and efficacy trials. Fraser et al. (2009:87) add that rigorously collected qualitative data can also contribute to the revision of program material, with the ultimate aim of expanding the implementation of the intervention in a variety of settings. Once an intervention has been shown to be effective through several trials, the program material may be translated into different languages, or the program activities adapted for different cultures. This represents the fourth stage of program material development.

Because stages three and four of program material development entail the refinement and revision of program material based on more than one investigation, these two stages were not completed during this study. Based on the recommendations of this study, subsequent studies have been planned. This will contribute to the continual revision of the program material.



Furthermore, I am in the process of training for a BMGIM qualification. This will also lead to the revision of current program material. BMGIM training involves three levels of training undertaken over a period of three years. I have completed levels one and two of the training and will proceed to level three in 2016. Thus, the program material will undergo continuous refinement over time.

The four stages of program material development are integrated with the five steps of intervention research, resulting in ongoing program material development throughout the intervention research process. In this study, stage one of program material development took place during steps one and two of the intervention research process. Step three of intervention research involves the refinement of all program components as the intervention is tested. Thus, the program material developed for this study can be refined based on the study's findings.

#### 4.3.3 Step three – Refine and confirm program components

Step three of intervention research involves the evaluation and refinement of the intervention through efficacy testing. The goals of this testing are to develop and refine an intervention in practice, and to collect preliminary evidence of change in the intermediate outcomes of the intervention. Fraser et al. (2009:116) explain that the method of efficacy testing is usually quasi-experimental in nature. However, feedback from participants on the program activities is extremely valuable. Both quantitative and qualitative findings are advantageous as the developers of an intervention seek to understand participants' responses to it, and to measure change in their health outcomes as a result of it.

The testing of an intervention may involve a variety of research methods ranging from metaanalysis and systematic reviews of randomised controlled trials to cross sectional studies. Cohorts and expert opinions form lower levels of evidentiary support. The soundness of the methods used to evaluate the effects of an intervention will determine the rigor of the evaluation (Fraser, et al. 2009:12). Melnyk and Morrison-Beedy (2012:1) explain that in order to change practice, influence policy and positively impact outcomes, the strongest evidence possible needs to be generated during testing.

Rigorous research methods such as intervention studies (also known as experimental research), investigate the cause and effect relationships between an intervention and an outcome, allowing



conclusions to be drawn about that intervention. The randomised controlled trial is considered the strongest approach to testing these relationships. Other intervention study methods include quasi-experimental intervention studies, pre-experimental intervention studies, and comparative effectiveness research (Melnyk & Morrison-Beedy 2012:40). However, Fraser et al. (2009:26) hasten to add that the added value of qualitative research methods should not be underestimated. The review of an intervention by patients and experts is integral to intervention research.

In this study, within the framework of intervention research, a prospective intervention study was conducted. Then, because the emic perspective of the participants was considered to be extremely informative, a simultaneous qualitative (phenomenological) approach was conducted as well. Thus, the research method for this study comprised both quantitative and qualitative domains. These will be discussed separately, below.

# 4.3.3.1 Quantitative domain

For evaluative purposes, a "prospective intervention study" was undertaken. Intervention studies test the impact of an intervention on an outcome. Three components need to be present to ensure rigor in an intervention study: an intervention, randomisation and a control group. Intervention studies are considered to represent some of the more robust research methods in the hierarchy of evidence for assessing the effectiveness of interventions (Melnyk & Morrison-Beedy 2012:40). However, in this particular study, randomisation was not possible as participants had to meet specific inclusion criteria. One of the inclusion criteria was that participants had to be receiving chemo- or radiotherapy for six weeks or longer which was not the case with all cancer patients as treatment plans differed between patients. For this reason, research designs of previous studies which included control and intervention groups were also not considered practical for this study.

Thus, a quasi-experimental study in the form of a "prospective intervention study" was conducted. Here, the participants themselves served as a control for the assessment of the intervention. Thus, two of the three components of a full intervention study were present (i.e. an intervention and a control). This will be further elaborated under the research process which will follow in the section below.



#### Context

The study was to be conducted in selected cancer interim homes in Gauteng Province. This setting was identified as most appropriate for the research for two main reasons. Firstly, before the commencement of the research, the BMGIM had not been implemented there. This allowed for a more uncomplicated assessment of the method's effect on patients. Secondly, this context allowed me uninterrupted access to a representative sample of the population I was interested in, namely cancer patients. At the time of the research, the homes accommodated 20 to 29 patients who were receiving treatment on an outpatient basis at nearby hospitals. It provided them with lodging, meals and transport to their treatment venue. Patients of the homes were self-caring which meant that their health was at a level which permitted them the independence to live in a cancer interim home or their private residences, and not be admitted to a hospital. In order to gain access to the identified setting, I consulted with the interim home's management. A brief proposal was submitted and written permission was granted by the home's supporting non-government organisation (NGO) before commencement of the study. Once permission was granted, I began identifying potential participants. These individuals were approached for their consent to participate in the study. My initial plan was to conduct the study in two different cancer interim homes in Gauteng Province. However, as the research progressed, I discovered that the patients of one of the identified homes did not usually reside at the facility for 6 weeks or longer. These patients did not qualify to participate in the study, so my focus shifted to the patients in the other home. This posed a challenge during data collection as the single cancer interim home could not supply sufficient patients to constitute a robust sample. Therefore, other organisations which offer services to cancer patients were also approached. These included Equra Health (a private health care organisation), and the private practices of various music therapists. Permission was granted by the management of Equra Health and the music therapists to recruit their cancer patients for this research.

This necessary change in the research design led to the group of participants eventually including patients who received chemotherapy or radiotherapy on an outpatient basis at a hospital and stayed at their private homes, i.e. not only at the cancer interim home. Information regarding the study was made available to cancer patients at cancer support groups. In addition, social workers at Equra Health informed cancer patients receiving chemo- or radiotherapy of the study. An information flyer (which included my contact details) was developed to facilitate this process (Annexure E). Patients interested in participating and who met the inclusion



criteria were thus recruited for the study. After informed consent was attained from a patient, the BMGIM intervention took place in the patient's private home or at the practice rooms of the relevant music therapists. In the case of patients living at the cancer interim home the BMGIM intervention took place in the cancer interim home.

#### Population

Babbie (2010:116) defines population as 'the group (usually of people) about whom we want to draw conclusions'. The population considered in this study was cancer patients living in a cancer interim home or private home during the course of the chemo- or radiotherapy which they were receiving on an outpatient basis at a nearby hospital or oncology unit.

#### Sampling method

One of the sampling methods used in this study was non-probability, purposive sampling. This involved purposefully selecting participants so that the research question and problem could be understood by the researcher (Creswell 2009:178). In other words, the researcher purposefully selects individuals who can purposefully enlighten an understanding of the research question and phenomenon under study (Creswell 2007:125). Purpose sampling was used in the context of the cancer interim home as I purposefully selected participants who met the inclusion criteria. The following inclusion criteria guided the purposeful selection of patients:

- 18 years or older
- A projected stay of 6 weeks or longer in a cancer interim home
- No history of an acute psychiatric condition

In addition, to recruit more patients, a snowball sampling method was used to identify and approach potential participants who met the inclusion criteria. This was done in the context of cancer support groups where music therapists and I provided information to cancer patients about this study. Once participants began coming forward, I asked them to inform other patients about the study. With the cooperation of counsellors, social workers, nurses, music therapists and occupational therapists, information about this study was also made available in the waiting rooms of hospitals where cancer patients receive chemotherapy and radiotherapy. The flyer listed the following inclusion criteria (which guided the selection of patients through snowball sampling):



- Participants should be aged 18 years or older,
- Participants should be scheduled to receive chemotherapy or radiotherapy for a duration of 6 weeks or longer,
- Participants should have no history of an acute psychiatric condition.

The statistical package *nQuery Advisor* was used to determine the optimal sample size. A sample size of 38 would have 85% power to detect a difference in means of 1.250, assuming a standard deviation of differences of 2.500, using a paired t-test with a 0.050 two-sided significance level.

#### Research process

The first step in the research process was to obtain permission from the research ethics committee at the Faculty of Health Sciences (University of Pretoria) to conduct the study. Likewise, permission was acquired from the research ethics committee of the organisation that managed the cancer interim homes, as well as from the management of Equra health. Once I had all necessary permissions, I began collaborating with centre managers, social workers, nurses and music therapists to identify the best ways of implementing the BMGIM in the cancer interim home and the private homes of participating outpatient patients. The goal of the study was to complement the existing care regimes in both of these different contexts using the BMGIM. Thus, this intervention necessitated the involvement of other health care providers in the planning of BMGIM implementation process. This collaboration ensured that the implementation of the BMGIM and the associated study did not interfere with chemo- or radiotherapy treatments. Planning of the intervention was done in consultation with the participating patients in order to identify the most suitable day and time for the BMGIM intervention. This planning was continuous throughout the patients' involvement in the study.

Cancer patients who met the inclusion criteria for the study were approached and given information on the study and on the BMGIM. I communicated this information verbally, as well as through a Participant Information and Informed Consent Document. Patients who chose to participate signed this document. Participants then completed a demographic questionnaire, as well as the Symptom Distress Scale (SDS), Psychological General Well Being Index (PGWBI) and Spiritual Index of Well Being (SIWB) questionnaires.



During the first week of outpatient treatment, the participants received the standard care that was provided in the cancer interim home or oncology unit, and the BMGIM was not implemented. This first week of standard care stabilized the sample with regards to the variables that may have had an influence on the physical, psychological and spiritual wellbeing of the participant. At the end of the first week, the participants again completed SDS, PGWBI and SIWB questionnaires. These responses indicated the patients' levels of physical, psychological and spiritual wellbeing after one week of standard care. The BMGIM was then implemented once per week for the next five weeks. The SDS, PGWBI and SIWB questionnaires were again completed by the participants during the fourth and sixth weeks of the research process, respectively. These batch of responses indicated the patients' levels of physical, psychological and spiritual wellbeing during the period of BMGIM therapy. In this way the research process of a prospective intervention study allowed participants who received the intervention to serve as a control as well as the data collected during BMGIM could be compared to the data collected before commencing with BMGIM.

#### Data collection

Step three of intervention research involves the testing and refinement of a particular intervention through efficacy testing. Efficacy is defined as 'the strength of causal linkages between program processes and outcomes when an intervention is implemented in a highly controlled setting' (Fraser et al. 2009:183). Although this study took place in a real life setting, the setting remained controlled, as described above. The intervention took place in a practice environment but remained under my control and was not incorporated into the structure of the organisation (i.e. the cancer interim home or the outpatient oncology units). In this study, the BMGIM intervention was tested for efficacy using questionnaires. These were administered to the participants at particular points over a six-week period.

The questionnaires completed by the participants included a demographic questionnaire (Annexure F) which was completed by participants who had signed the consent document. The demographic questionnaire collected demographic data such as age, race, gender, type and stage of cancer, type of treatment, working status and level of support. The remaining forms, i.e. the SDS (Annexure G), PGWBI (Annexure H) and SIWB (Annexure I) questionnaires, evaluated the effects of the BMGIM intervention on the physical, psychological and spiritual wellbeing of the participants, respectively.



The SDS which was developed in 1978 by McCorkle and Young comprised 13 items and measured the constructs of nausea (2 items), appetite, insomnia, pain (2 items), fatigue, bowel, concentration, appearance, outlook and cough (McCorkle, Cooley & Shea 2000:8). The scale has been used in the assessment of the wellbeing of patients dealing with many kinds of conditions, including a various types of cancers, myocardial infarction, Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS). The SDS has a well-established validity and reliability with respect to cancer patients, with reported Cronbach alpha values of between 0.70 and 0.89 in various studies (McCorkle et al. 2000:8) and is reported to take 5 to 10 minutes to complete.

The PGWBI developed by Dupuy in the 1970's consisted of 22 items and measured the dimensions of positive wellbeing, self-control, vitality, anxiety, depressed mood and general health (Chassany, Dimenas, Dubois, Wu & Dupuy 2004:9). The PGWBI was reported to be reliable and valid (Lundgren-Nilsson, Jonsdottir, Ahlborg jr, & Tennant 2013:8) and has since been used in the assessment of patients with a range of medical conditions, including cancer (Chassany et al. 2004:9). This assessment is reported to take 10 minutes to complete (Chassany et al. 2004:11).

The SIWB developed by Daaleman and Frey (2004:499) comprised 12 items which facilitated measurement of the constructs of self-efficacy and life scheme. It is purported to be valid and reliable (Frey, Daaleman & Peyton 2005:572) and has been successfully implemented in adult and geriatric populations (Monod, Brennan, Rochat, Martin, Rochat & Bula 2011:1353). Cronbach alpha scores of 0.85 to 0.91 have been reported when the SIWB was used (Monod et al 2011: 1353) demonstrating a high internal consistency.

All of the above instruments were available for use and I obtained specific permission from the authors who developed them to use their instruments in this study (Annexure M). Data collection took place over a period of ten months. A pilot study of the actual implementation of the intervention was conducted at the beginning. Information thus obtained was used to refine the research process. Due to a small sample size the findings of the pilot study were incorporated into the final findings of the study.

I administered the feedback questionnaires to the participants during the first, second, fourth and sixth weeks of the study. This longitudinal process of data collection allowed for the evaluation of the intervention through the comparison of data collected over a period of time. This evaluation was essential in terms of the intermediate outcome of the study, i.e. to determine whether there was any change to the physical, psychological and spiritual wellbeing of the participants as a result of the BMGIM intervention. The findings (presented in Chapters 5) can be used to the refinement of both the intervention and the program material, which will be further tested in future studies.

## Data analysis

Descriptive data used to determine means, medians and modes with respect to the group of participants was extracted from the abovementioned demographic questionnaire. This data together with the data extracted from the first SDS, PGWBI and SIWB formed the baseline dataset. Thereafter, data was collected by repeated administration of the instruments after one week of standard care and during the third and fifth weeks of BMGIM implementation. Changes in quantitative measurements between the baseline survey and the other two periodic data collection times was analysed using the Wilcoxon signed-rank test on the PGWBI and SIWB variables. The Fisher's exact test was used to analyse the SDS variables. Analysis of all data was undertaken as was advised by a statistician. The statistical software employed throughout the study was STATA 13.

The findings of the quantitative domain of this study will be discussed in Chapter 5.

#### Measures to ensure Validity and Reliability

Internal validity is a measure of the confidence with which a researcher can conclude that any changes in dependant variables are reflecting responses to independent variables rather than control variables (Welman, Kruger & Mitchell 2005:107). Creswell (2009:51) describes control variables as variables which can have an impact on dependant variables and therefore need to be "controlled" in order to determine the significance of changes in dependant variables.

In this study, internal validity was ensured by allowing participants to be exposed to only one week of standard care. This stabilized the sample with regards to variables which could have had an influence on the physical, psychological and spiritual wellbeing of each participant. The



demographic questionnaire enabled me to retain "control" over the control variables. Statistical methods were used to infer the effect of BMGIM therapy on patients' physical, psychological and spiritual wellbeing. Internal validity was also ensured through the BMGIM program material itself, which ensured correct and consistent implementation of the intervention. The use of both quantitative and qualitative data collection methods further contributed to the internal validity of the dataset, as more than one method was used to answer the research question.

External validity refers to the ability to generalise results generated by a particular study to other persons, settings or times (Polit & Beck 2012:237). This study was conducted in a cancer interim home as well as amongst cancer patients who lived in their private homes during the course of their medical treatment. Participants varied in terms of sex, age, race and cancer type. Because the study took place in more than one context and was based on a varied sample, external validity was ensured. External validity is threatened when a researcher incorrectly interprets a particular dataset and applies these wrong interpretations to the target population or other settings (Creswell 2009:162). In this study, I confirmed my findings through discussions with the participants during unstructured interviews in order to ensure that the correct conclusions were being drawn from the data collected.

'Reliability is the consistent and stable measurement of data as well as replicability' (Welman et al 2005:9). To ensure consistency of data collection, reliable and valid instruments were used. The times for administration of the instruments were clearly stated so that there was consistency in administration. Instructions on completion of the instrument were stated on each instrument.

Thus far the quantitative domain of this study has been discussed. However, the emic perspective of the participants was considered to be extremely insightful therefore a simultaneous qualitative approach, phenomenology, was conducted as well. The qualitative domain of this study will now be discussed.

## 4.3.3.2 Qualitative domain

The BMGIM is explorative and descriptive in nature. Whilst the quantitative domain of any intervention study yields the empirical data necessary to evaluate the effectiveness of the



intervention, the qualitative domain reveals the voices of the participants (Pluye & Hong 2014). The latter was particularly important in the context of this study as participants actively partook in the therapy, and in addressing their health needs during the BMGIM sessions. It was therefore essential to consider the human aspects of their experiences, and to evaluate the statistical evidence for the BMGIM's effectiveness alongside their opinions.

The qualitative domain of this study was grounded in phenomenology. Phenomenology is characterised by an understanding of real life experiences, which classifies it as both a philosophy and a research approach (Creswell 2009:13).

Edmund Husserl was the founder of modern phenomenology. Husserl studied mathematics and philosophy and wanted to let things reveal themselves. He named his philosophy 'phenomenology' which is the study of phenomena or the study of that which shows itself in acts of knowledge (Dahlberg, Dahlberg & Nyström 2008:24). Husserl was concerned that research designs within the positivist paradigm would separate science from the everyday world and that this would result in a dehumanisation of society. He further asserted that a science which was too removed from the everyday world would lose its importance for everyday people (Dahlberg et al. 2008:31). His solution to what he called a "dehumanised science" was to reinstate the everyday human world as the foundation of science. He argued that objectivity would still be maintained as phenomenology takes into consideration the relationships between scientists and research participants (Dahlberg et al. 2008:31).

Phenomenology belongs to the interpretivist paradigm, according to which the research and the researcher should be immersed in the world of the phenomena being studied. The interpretivist paradigm asserts that this immersion allows the researcher to make a creative contribution to the patterns of meaning in the real world. In phenomenology, in order to gain meaning in the world, the researcher aims to approach the world as it is experienced. In doing so, the researcher goes to the phenomenon itself. A phenomenon is understood as a part of the world as it is experienced by a subject. Phenomenology is thus "the science of phenomena, and consequently the science of the world and its inhabitants, the 'things of experience' understood as the world of experience" (Dahlberg et al. 2008:33). Creswell (2009:13) concurs that in phenomenological research, what is studied is the essence of human

experiences about a phenomenon as described by the participants. In this study, it was the participants' experiences of their BMGIM sessions that were studied.

The phenomenological approach aims to understand and interpret the meaning which participants give to their experiences of a particular phenomenon (De Vos, Strydom, Fouché & Delport 2011:316). In order to gain information from participants on their perceptions, experiences and understandings of the phenomenon, the researcher has to enter into their "life world", and engage with them (De Vos et al. 2011:316). In this study, I (the researcher) entered into settings such as the cancer interim home and the private homes of cancer patients who were receiving medical treatment for cancer. Through conversations and interactions with the participants in these settings, I gained insight into their real life circumstances. Additional qualitative data was collected through the session summary forms completed in every BMGIM session, a photograph of the participants' mandala as well as the in-depth individual interviews with the participants.

Data collection was followed by data analysis. In phenomenological research, significant statements are analysed, units of meaning are generated and an essence description is developed (Creswell 2009:184). Through the process of qualitative data analysis, the essence of the meaning of the BMGIM to the participants was discerned.

## Context

The context of the qualitative domain was the same as the context described for the quantitative domain, above.

### **Population**

The population for the qualitative domain was the same as that for the quantitative domain.

## Sampling method

The sampling method for the qualitative domain was the same as that for the quantitative domain.



## Research process

This study sought to explore patients' experiences of the BMGIM. The qualitative domain of the investigation took place within the same context and amongst the same population defined for the quantitative domain. The qualitative and quantitative research domains took place concurrently. Thus, patients who met the inclusion criteria and consented to participate in the study were involved in the collection of both quantitative and qualitative data.

As already stated, the implementation and evaluation of the intervention took place over a period of six weeks for each participant. During the six-week interval, participants received BMGIM therapy once a week for five weeks. During this period, session summary forms, the mandala and unstructured individual interview transcripts were collected as qualitative data.

### Data collection

Each participant was involved in a maximum of five BMGIM sessions. During each session, the music therapist completed a session summary form (Annexure J). These forms contained the therapist's notes on the therapeutic conversation and music travel of each participant during each session. Though five sessions were planned for each participant, participants did not always feel well enough to engage in a BMGIM session. Therefore, the number of session summary forms for each participant depended on the number of sessions they managed to complete.

The drawing of a mandala is part of the therapeutic process of the BMGIM session. As a mandala is symbolic of the music travel and the experience of the BMGIM session, it is considered to belong to the participant. Therefore, a photograph of each mandala was taken for the purpose of data collection, and participants kept the originals. The number of mandalas per participant depended on the number of sessions completed by each individual.

Finally, unstructured individual interviews were conducted with each participant upon completion of their last BMGIM session. During the interview, the following open-ended question was asked:

"What was your experience of the BMGIM sessions?"

In phenomenology it is not always possible to decide in advance on methods in detail (Dahlberg 2008:177). In the current study, a broad question was asked. The question was followed by



probing questions in order to elicit more necessary information. I employed an open, bridled attitude during the interviews. The open-ended question allowed for an openness and willingness to listen and understand the real life experiences of the participants. The interviews were conducted within the week after each patient's fifth and final BMGIM session and before they were discharged from the cancer interim home. Each interview was a maximum of one hour in duration and was digitally recorded. Throughout the research process I kept personal notes in order to reflect on personal experiences and thoughts that arose as the study progressed. Data collection for this study took place over ten months.

## Data analysis

"Phenomenology is the science of phenomena, and consequently the science of the world and its inhabitants, the 'things of experience' understood as the world of experience' (Dahlberg et al. 2008:33). Phenomenology seeks to describe the world as it is experienced by humans. Furthermore, through phenomenology, the meaning of the world to humans, the meaning of humans to the world, how humans relate to this world, and how humans relate to each other are all described. This is described as reflective lifeworld research (Dahlberg et al. 2008:36). Lifeworld research analysis as described by Dahlberg et al. (2008:232) was used to probe the qualitative data collected during this study, with the aim of understanding and finding meaning in the participants' experiences of the BMGIM sessions.

As mentioned in the previous sub-section, the data collected for the qualitative domain of this study included session summary forms, photographs of mandalas and the transcripts of unstructured interviews. According to Dahlberg et al. (2008:234), collected data should be available in text format in order for analysis to proceed. In this study, the session summary forms were completed electronically by the music therapists. Thus, these forms were immediately available in MS Word document format. The photographs of the mandalas were saved electronically as Joint Photographic Experts Group (JPEG) files and could be viewed on an electronic device or printed.

The in-depth, individual interviews were audio-recorded digitally and then transcribed verbatim. As recommended by Dahlberg et al. (2008:234), the audio recordings were very carefully listened to during the process of transcription and non-verbal information such as periods of silence, sighs or laughter were included in the transcripts. Furthermore, both the



session summary forms and the interview transcripts were prepared with an empty column on the side, and using double line spacing to allow for comments to be recorded during the analysis process.

In phenomenological research, the process of lifeworld analysis is described as a spiral whereby the researcher moves between the whole, the parts and the whole of the collected data. This implies that when analysing the collected data for meaning, a researcher would need to understand each part in terms of the whole and the whole would also need to be understood in terms of its parts (Dahlberg et al. 2008:236). Dahlberg et al. (2008:237) further explain that the art of understanding a phenomenon lies in realising the whole in terms of the detail and the detail in terms of the whole. In this study, in order to understand the phenomenon (i.e. the BMGIM intervention), I extracted meaning from the parts of the data collected, yet held the meaning of these different parts in the context of the whole by always referring back to the context in which each participant experienced the phenomenon.

The lifeworld analysis spiral is also described as open at the beginning and open at the end, allowing for an open attitude to the analysis of the data (Dahlberg et al. 2008:236). An open attitude is crucial if phenomena in the world are to be seen in a new way. The researcher who displays an attitude of openness is willing to listen, see and understand and also displays humility and respect towards the phenomenon. An open attitude requires the researcher to be sensitive and flexible. In this study, I ("the researcher") entered the "real world" settings in which the study took place with an attitude of learning about the participants' experiences of the phenomenon (i.e. the BMGIM). Each participant was considered an authority on the real life experience of cancer and the experience of the BMGIM. I spent time in the settings and listened and observed as the phenomenon unfolded. The "real world" nature of the study settings meant that I had to be flexible and sensitive to the participants, who often experienced the adverse effects of their medical cancer treatments.

One of the initial steps to understanding qualitative data is to get a sense of the whole by reading the whole body of data several times. The text is read with an open attitude in order to allow the realization of something new and to increase the likelihood of seeing something in a new way, thus preparing the researcher for a new understanding (Dahlberg et al. 2008:238). For the purposes of this study, I read the collected data (i.e. the session summary forms and interview



transcripts) several times in order to gain a sense of the whole text. After the initial reading I began coding the data into parts in order to extract meaning. Finally, a new understanding of the phenomenon was attained through describing the meaning of the parts (Dahlberg et al. 2008:239). The new understanding of the phenomenon is presented in Chapters 6 and 7.

#### Measures to ensure Trustworthiness

Trustworthiness of a study refers to the credibility, transferability, dependability and confirmability of its findings.

Credibility is the equivalent of internal validity and is a measure of whether a researcher is measuring what is claimed to be measured (Babbie 2010:416). In other words, credibility refers to the measures taken by the researcher to ensure the accuracy of their findings (Creswell 2009:190). In this study, I worked towards ensuring credibility by using thick descriptions to convey my findings. I described the context, the participants, the research process and the findings in as much detail as possible, hopefully facilitating a richer and more realistic perspective on my data. The prolonged time (10 months) spent "in the field" increased my understanding of the participants experiences of the BMGIM intervention, thus promoting more accurate and credible findings. The fact that most participants were exposed to more than one BMGIM session also promoted the accuracy and credibility of my findings.

*Transferability* refers to the generalisability of specific research findings to other settings (De Vos et al. 2003:352). In this study I described the context, the participants and the research process in substantial detail – thus making the method repeatable and transferable. The theoretical intervention research framework which was used to guide the research process also ensured transferability as this framework itself can be applied in any context.

Dependability implies the degree to which research findings are a true reflection of reality (Babbie 2010:417). Qualitative data collected during the unstructured interviews was transcribed verbatim. I re-checked the transcripts thoroughly to ensure that no mistakes were made during transcription. I then analysed the transcripts using the process of coding. I kept a list of my codes and their descriptions close at hand so that codes were always assigned keeping their meanings in mind. To confirm that the coding was done correctly a co-coder was employed to cross-check the codes.



Confirmability is a consideration of whether the findings of a particular study are confirmed by another (De Vos 2003:352). In order to ensure that the data collected during this study were interpreted correctly and that the interpretations were a correct reflection of what was found during data collection, an audit was done by a co-coder to confirm the research findings. My personal records of my experiences and thoughts during the research process also added to the confirmability of the findings as 'self-reflection creates an open and honest narrative' (Creswell 2009:192).

#### Ethical considerations

Ethical guidelines were followed to ensure that participants in the study were not harmed in any way. The ethical principles of beneficence, respect for human dignity and justice were followed throughout the study.

According to the principle of beneficence, I ensured that no harm was done to the participants (Creswell 2009:89). To ensure that the BMGIM was therapeutic, I worked in collaboration with professional music therapists and underwent further training in the BMGIM myself. The BMGIM sessions could have brought about the release of emotions or experiences associated the patients' suffering, which would have been addressed in the postlude of each session. Professional BMGIM-qualified music therapists facilitated the sessions. These professionals have the relevant training and experience necessary to manage the difficult emotions that could arise during the process of BMGIM therapy. However, should the need have arisen, participants would have been referred to a psychologist for further therapy.

To ensure that patients were not coerced to participate in the study (Creswell 2009:89), potential participants were reassured that their participation was voluntary and that they could withdraw their participation at any time during the study. Cancer patients were given information about the study verbally and in writing. The Participant Information and Informed Consent document (Annexure C) was used for this purpose and ensured that an informed decision was taken by each participant. Non-participation or withdrawal of participation did not influence the care of the patient in any way. I, as researcher also reserved the right to withdraw any participant from the study if it was deemed to be in their best interest. Potential participants were not offered any incentive for participation in the study.



Only valid and reliable data collection instruments were used in this study. Permission to use these instruments was obtained from the relevant authors/developers.

Adherence to the principle of respect for human dignity was ensured by supplying potential participants with comprehensive information, and by allowing them to make informed decisions regarding their participation in the study (Creswell 2009:89).

Potential participants were well-informed regarding the extent of their involvement in the study. Throughout the research process, I ensured that the participants were not inconvenienced in any way, e.g. convenient times for the BMGIM sessions were negotiated with the patients.

Enshrinement of the principle of justice was ensured by respecting the participants' right to privacy (Creswell 2009:91). I did not request more information from the participants than what was necessary for the study. The anonymity of the participants was protected by ensuring that the identities of participants could not be linked with the information or findings disseminated after the study. All collected data was treated as confidential, so all digital recordings and transcripts relating to the study were, and will continue to be safely stored.

Participants were treated with respect and courtesy at all times. Participants had access to my contact details for any clarification or additional information. As a gesture of respect for the time and energy invested in the study by the participants, I will ensure that the research findings are disseminated through a dissertation, conference presentations and journal articles.

The first three steps of intervention research have been described in detail, and their execution in the context of this study has been explained. The last two steps of the intervention research process were only minimally adhered to in this study. Nevertheless, these two steps are described below, as is the degree to which they were applied in this study.

# 4.3.4 Step four – Assessing BMGIM effectiveness in a variety of settings and circumstances

Step four of intervention research involves testing an intervention in a practice setting where the researcher has limited control. In other words, the effectiveness of the intervention is assessed in terms of whether it results in desired outcomes when implemented under routine



(i.e. uncontrolled) practice conditions (Fraser et al. 2009:183). This is the key component of any effectiveness trial with respect to a particular intervention. According to Fraser et al. (2009:119), interventions which produce a desired effect in the efficacy trial of step three (see section 4.3.3) are then introduced in real-life practice settings for which they were initially intended. The effectiveness of the intervention is then reassessed in step four, in which the researcher is no longer in direct control of the circumstances surrounding the implementation of that intervention (Fraser et al. 2009:119).

This study focused on testing the efficacy of the BMGIM in complementing care regimes provided in selected cancer interim homes and oncology centres. Thus, the effectiveness of the intervention in other settings was not tested in this study. However, based on the findings of the efficacy trial, recommendations will be made for the implementation of the BMGIM in less controlled practice settings, which will take place in future studies.

## 4.3.5 Step five – Disseminate findings and program materials

Thus, steps three and four of intervention research seek to prove the efficacy and effectiveness of a given intervention. A proven intervention must then reach the population it is intended for. Thus, the fifth and final step of intervention research involves the dissemination of findings and program material.

Although the process of developing and testing an intervention is labour intensive, it is not enough to bring about change in practice. To bring about change and make a difference to health outcomes, proven programs must diffuse into routine practice. Dissemination of findings is one way of achieving this diffusion (Fraser et al. 2009:43). This usually involves the publication of study findings in academic journals, and can even involve the publication of program materials (Fraser & Galinsky 2010:464). The systematic review and efficacy trial for this study are in the process of being published.

However, the publication of study findings is still not sufficient to bring about change, and more needs to be done to translate this knowledge into practice. The best available research evidence is required to support health care decisions. Evidence-based practice implies that health care decisions and practices are based on knowledge, which is acquired through sound research (Fraser et al. 2009:134). The findings of this study and future studies will generate a strong body of evidence through the use of experimental studies that are recommended in the



intervention research framework. Ultimately, findings from the efficacy and effectiveness trials will guide the implementation evidence-based BMGIM practice in the context of supportive cancer care.

## 4.4 CONCLUSION

This chapter has been devoted to unpacking the research design, and describing the methods followed with respect to the empirical component of this research study.

The research design for this project was developed according to the "intervention research" framework. This chapter introduced and described the process of intervention research. The five steps of this process were described, and their application in the context of this study was comprehensively explained.

The evaluation of the BMGIM intervention involved both quantitative and qualitative research methods. The context, population, sampling method, research process, data collection and data analysis with respect to these methods have been described in this chapter. The findings of the quantitative and qualitative domains of this study will be presented and discussed in Chapters 5 and 6, respectively.



## **CHAPTER 5**

# QUANTITATIVE DOMAIN: FINDINGS AND DISCUSSION

## 5.1 INTRODUCTION

Chapter 4 includes a description and discussion of the research design and methods used in this dissertation, all of which fall within the framework of intervention research. Within this framework, both quantitative and qualitative methods were used to answer the research question and to meet the third objective of the study, namely:

To evaluate cancer patients' experiences during BMGIM therapy, as well as to evaluate the effects of the BMGIM on patients' physical, psychological and spiritual wellbeing for the duration of their stay in the cancer interim home.

The findings of the quantitative domain form the contents of this chapter.

## 5.2 DESCRIPTION OF THE PARTICIPANTS

As described in Chapter 4, the quantitative domain of the study involved data collection through the use of questionnaires (demographic, SDS, PGWBI and SIWB), completed voluntarily by patients after signing an informed consent document. The demographic questionnaire gathered information from each participant on their age, sex, race, income, number of children, type and stage of cancer, method of medical treatment, and levels of support. Information from the completed questionnaires of all 24 participants was captured on an excel spread-sheet, then entered into a statistical analysis program (STATA 13). The statistical analysis involved generation of summary sheets containing frequency tables, and information from these frequency tables forms the basis for the following description of the participants of this study.

Of the sample of 24 participants in this study, 87.5% were female and 12.5% were male. This female-biased gender distribution reflects the admission statistics of the cancer interim home. In 2015, the full complement of patients staying at the facility comprised 65% females and 35% males. An underlying reason for this may be that in general, more females than males have been found to care for their ill family members (Holland et al. 2015:561). Thus, male cancer patients are often looked after at home by wives or daughters, whilst female patients are

more likely to make use of institutional facilities such as the cancer interim home. Figure 5.1 illustrates the proportions of male and female participants in this study.

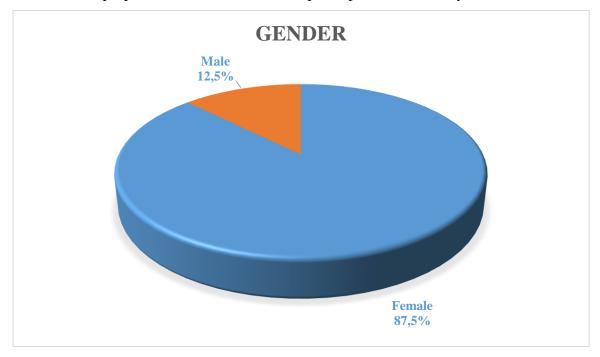


Figure 5.1 Pie chart showing the distribution of gender in the sample of participants.

The average ages of male and female participants in this study were 59 years and 55 years respectively, resulting in an overall average age of 56 years for the sample. Thus, on average the male participants in this study were slightly older than the female participants (see Figure 5.2).

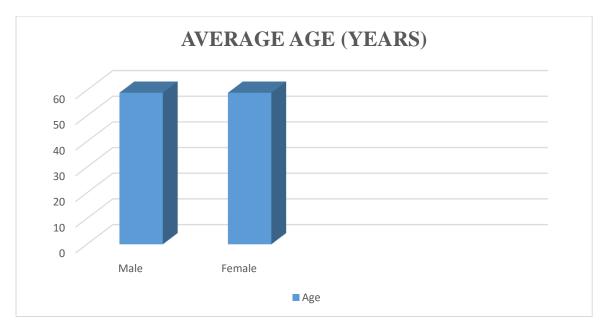


Figure 5.2 Bar graph showing the average age of male and female participants.



The demographic questionnaire included a question on the race, where participants could choose from a nominal scale with four options: Black, White, Indian and Coloured. Completed questionnaires indicate that exactly half or our participants were Black and the other half were white (see Figure 5.3).

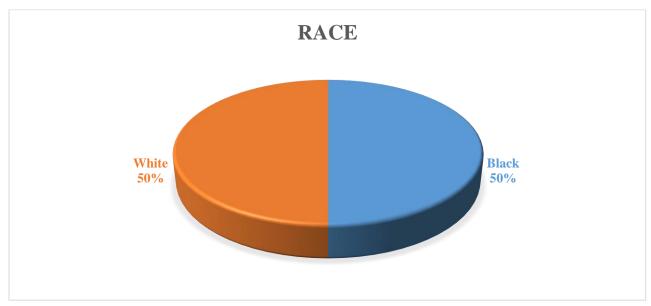


Figure 5.3 Pie chart showing the racial distribution among participants.

It was important to query mental health conditions in the demographic questionnaire, as BMGIM is contraindicated in certain of these. In the sample of participants in this study, 95.8% had no mental health conditions, whilst the remaining 4.2% of the sample did have a diagnosed condition (see Figure 5.4).

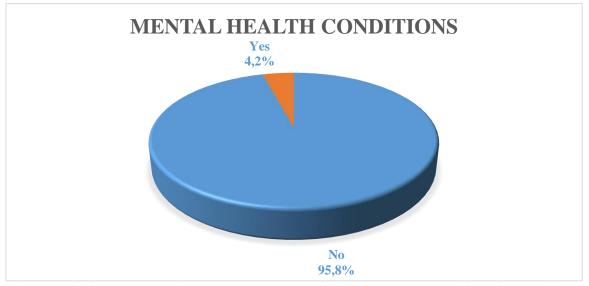


Figure 5.4 Pie chart showing the prevalence of mental health conditions in participants.



Regarding the types of cancer diagnosed in the participants of this study, breast cancer was found to be the most prominent (41.7% of participants), and was only present in females. This is in line with a report published by the South African National Cancer Registry (NCR) (2010:1) which indicates that in 2010 breast cancer was the most common form of cancer in South African females, with a prevalence of 20.62% as compared to a prevalence of only 0.50% in males. Cervical cancer and colorectal cancer were the second most common forms of cancer amongst the female participants of this study, both with a prevalence of 12.5% of the total sample (and both present in females only). The aforementioned NCR report (2010:2) also found cervical cancer to be the second most prevalent type of cancer amongst South African females, whilst colorectal cancer was the sixth most prevalent form in females (3.8 %). Vulva cancer was diagnosed in this study in 8.34% of participants. The prominence of breast, cervical and colorectal cancer in the female participants reflects the global study of Torre et al. (2015:90), who found that breast, colorectal, lung, cervical and stomach cancers were the most common types of cancer worldwide in females in 2012.

The NCR report (2010:1) found prostate cancer to be the second most prevalent type of cancer in South African males in 2010, with a prevalence of 17.5%. This was not comparable with the 4.2 % of the total sample who were diagnosed with prostate and bladder cancer in this study, probably because male participants only made up 12.5% of the sample. Other types of cancers such as brain cancer, peritoneal cancer, melanoma and squamous sarcoma were not gender-specific and were of lower prevalence, diagnosed collectively in 20.8% of the participants. According to NCR report (2010:1) the prevalence of these types of cancers was also found in smaller proportions in South Africa in 2010. Figure 5.5 illustrates the prevalence of the types of cancers diagnosed in participants of this study.

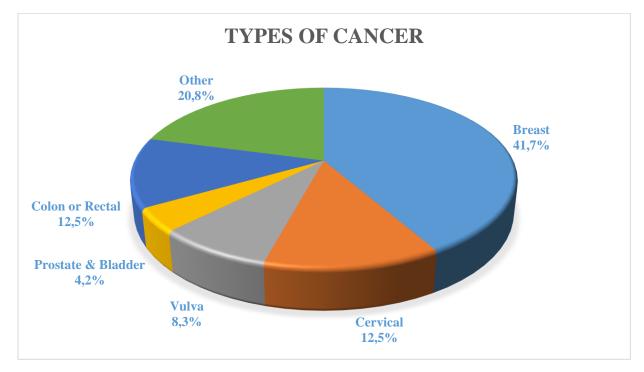


Figure 5.5 Pie chart showing the types of cancer diagnosed in participants.

Participants were also asked to specify the stage of their cancer. Stage I cancer was present in 4.2% of the sample, stage II in 12.5%, stage III in 29.2%, and stage IV in 12.5%. One participant (4.2% of the total sample) identified their stage of cancer as terminal. Stages III and IV have been identified as the most symptomatic, meaning that many patients have reported major symptom presenting during these phases of cancer (Olver 2011:64). This could explain the high attrition which occurred in the current study – 29.2% of the sample had stage III cancer and 12.5% had stage IV cancer. Note that not all participants provided information about their cancer stage. As explained in Chapter 7 (Section 7.2.1), participants often did not feel well enough to either participate in a BMGIM session or complete the questionnaires. In addition, 37.5% of participants did not know the stage of their cancer. Figure 5.6 illustrates the distribution of cancer stage among participants.

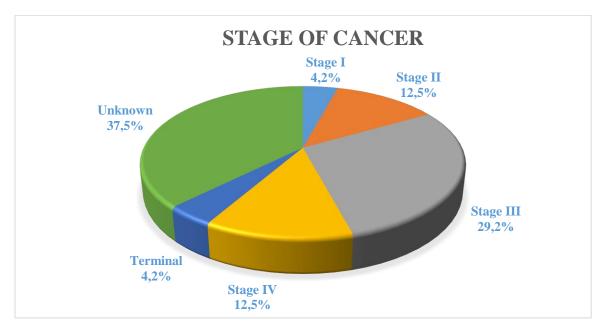


Figure 5.6 Pie chart showing the distribution of cancer stage among participants.

All participants of this study were receiving medical cancer treatment at a hospital on an outpatient basis. Completed demographic questionnaires indicate that 29.2% of the sample received their medical treatment at provincial academic hospitals, whilst 70.8% were treated at private hospitals. This is illustrated in Figure 5.7.

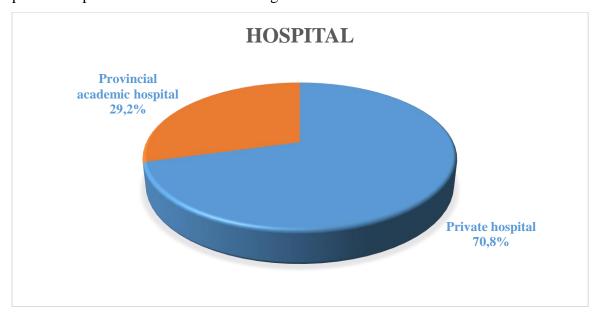


Figure 5.7 Pie chart showing the types of hospital attended by participants.

Various types of treatment were administered to participants at the hospitals they attended, primarily radiotherapy (54.2% of participants) and chemotherapy (16.7% of participants). Some participants (9.2%) received both of these treatments. Figure 5.8 illustrates the

proportions of participants receiving the different treatments. According to the WHO (2014:2), country profile data on the types of cancer treatments used in South Africa were not available, preventing any comparison of the present results with national trends. The average ages of participants receiving radiotherapy, chemotherapy, and both treatments, were 54 years, 59 years, and 55 years, respectively. This means that participants who received chemotherapy were older on average than participants who received radiotherapy or both types of treatment.

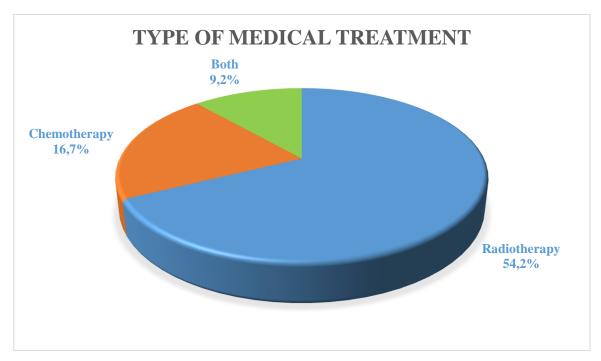


Figure 5.8 Pie chart showing the types of medical treatment received by participants.

During the course of their medical treatment, most participants of this study (79.2%) stayed at a cancer interim home, whilst the remaining 20.8% stayed in their private homes. These results probably do not reflect a general pattern for cancer patients; instead they are due to the study being centred on the cancer interim home, where most participants were sourced. As the study progressed, a minority of participants were added who were not lodged at the interim home. Figure 5.9 illustrates the place of lodging of the participants.

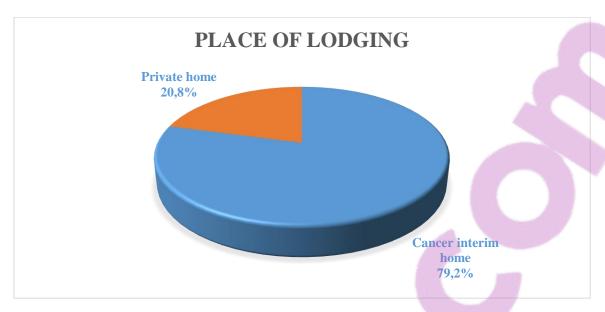


Figure 5.9 Pie chart representing the lodgings of the participants.

The lodgings of the participants also influenced where the BMGIM sessions were conducted. Three venues were used for these sessions – the cancer interim home, the consultation room of the music therapist, and the private home of the participant. All of the participants who stayed at the cancer interim home (79.2%) also received their BMGIM sessions there. Of the 20.8% of participants who stayed in their private homes, 12.5% received BMGIM sessions at the consultation room of the music therapist, whilst only 8.3 % received their sessions at their own private homes.

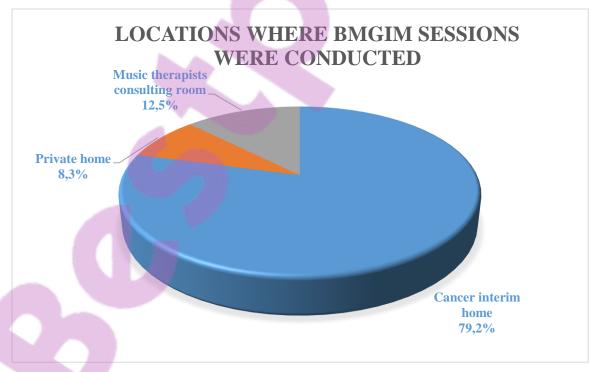


Figure 5.10 Pie chart showing the locations at which BMGIM sessions were conducted.

Figure 5.11 illustrates the proportion of participants with and without a steady income over the course of this study. The majority (62.5%) were not earning a steady income, while the remaining 37.5% did have some means of regular income generation. It is important to note that many of the participants were of the retiring age, which is the main reason why such a high proportion had no steady income.



Figure 5.11 Pie chart showing the proportion of participants with and without a steady income.

Of the participants who earned a steady income, 12.5% were employed in the private sector and 25% were employed in the public sector (see Figure 5.12).



Figure 5.12 Pie chart showing the distribution of employers for participants earning a steady income.

In the demographic questionnaire, participants were also asked to rate the level of support they received from family, employer, church and friends. A Likert scale ranging from 1 to 10 was used for these questions, with 1 and 10 representing lowest and highest support, respectively. All but one of the participants (i.e., 95.8%) rated family support as high (between 9 and 10), whilst the remaining individual (4.2 % of the sample) rated family support as low. Employer support was rated high (between 8 and 10) by 29.2% of the participants, low by one individual (4.2% of the sample), and "not applicable" by 66.7% of participants. Church support was rated high (between 8 and 10) by 54.2% of participants, medium (between 4 and 7) by 33.3% of participants, and 12.5 % of participants marked this question as "not applicable". Support from friends was rated high (between 8 and 10) by 91.7% of participants, whilst one individual (4.2%) rated friend support as medium, and another individual marked this question as "not applicable". Figure 5.13 illustrates these results.

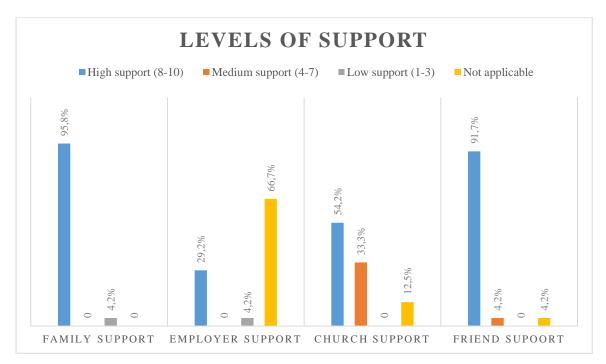


Figure 5.13 Bar graph showing levels of support provided to participants via four avenues.

All participants in this study had children – one child in 12.5% of the sample, two children in 29.2%, three in 25%, four in 12.5%, five in 16.7%, and six in 4.2% of the sample. These data are shown graphically in Figure 5.14.



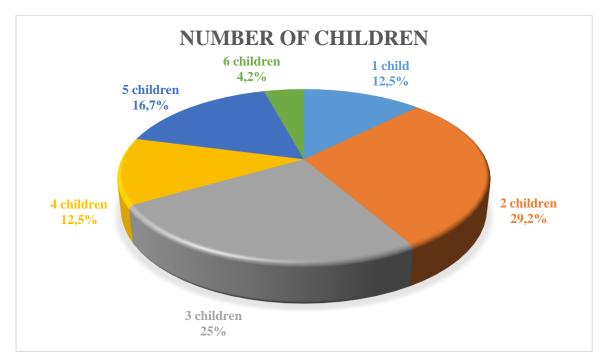


Figure 5.14 Pie chart showing how many children participants have had.

In addition to the data presented above from the demographic questionnaire, this study also sought to assess the effect of the BMGIM intervention on the physical, psychological and spiritual wellbeing of participants. Specific data were collected and analysed to this end, and findings are presented in the following section.

## 5.3 FINDINGS OF THE STUDY

Participants completed the Symptom Distress Scale (SDS), Psychological General Well Being Index (PGWBI), and Spiritual Index of Well Being (SIWB) at specific intervals during the six weeks of their involvement in the study. The questionnaires were completed shortly after informed consent was signed, at week 2, week 4 and week 6. Participants did not receive BMGIM during the first week. This first week of standard care stabilized the sample with regards to the variables that may have had an influence on the physical, psychological and spiritual wellbeing of the participant. The intervention of BMGIM only commenced once a week until the end of the six week research period.

As with the demographics data, information from the completed questionnaires of all 24 participants was captured on an excel spread-sheet, then checked for correctness and entered into the statistical analysis package STATA 13. Through inferential statistics, the effect of



BMGIM on the physical, psychological and spiritual wellbeing of the participants was analysed. The findings are presented below.

# 5.3.1 Effect of BMGIM on psychological wellbeing: Psychological General Well Being Index (PGWBI)

The PGWBI consisted of 22 questions designed to measure six psychological dimensions: positive wellbeing, self-control, vitality, anxiety, depressed mood, and general health (Chassany et al. 2004:9). Table 5.1 presents the dimensions investigated by each question of the PGWBI.

Table 5.1 Psychological dimensions investigated via the PGWBI questionnaire.

QUESTION	QUESTIONS OF PGWBI	DIMENSION	
NUMBER		INVESTIGATED	
1	How have you been feeling in general during the past week?	Positive wellbeing	
2	How often were you bothered by any illness, infirmity, aches	General health	
	or pains during the past week?		
3	Did you feel depressed during the past week?	Depressed mood	
4	Have you been in firm control of your behaviour, thoughts,	Self-control	
	emotions or feelings during the past week?		
5	Have you been bothered by nervousness or your "nerves"	Anxiety	
	during the past week?		
6	How much energy or vitality did you have or feel during the	Vitality	
	past week?		
7	I felt downhearted or low during the past week	Depressed mood	
8	Were you generally tense or did you feel any tension during	Anxiety	
	the past week?		
9	How happy, satisfied, or pleased have you been with your	Positive wellbeing	
	personal life during the past week?		
10	Did you feel healthy enough to carry out things you like to do	General health	
	or had to do during the past week?		
11	Have you felt low, discouraged, hopeless, or had so many	Depressed mood	
	problems that you wondered if anything was worthwhile		
	during the past week?		
12	I woke up feeling fresh and rested during the past week	Vitality	

13	Have you been concerned, worried, or had any fears about	General health
	your health during the past week?	
14	Have you had any reason to wonder if you were losing your	Self-control
	mind, your memory, or losing control over the way you act,	
	talk, think, feel during the past week?	
15	My daily life was full of things that were interesting to me	Positive wellbeing
	during the past week	
16	Did you feel active, vigorous, or dull, sluggish during the past	Vitality
	week?	
17	Have you been anxious, worried or upset during the past	Anxiety
	week?	
18	I was emotionally stable and sure of myself during the past	Self-control
	week	
19	Did you feel relaxed, at ease or agitated, on the edge or	Anxiety
	wound up during the past week?	
20	I felt cheerful, light-hearted during the past week	Positive wellbeing
21	I felt tired, worn out, used up, or exhausted during the past	Vitality
	week	
22	Have you been under or felt you were under any strain, stress,	Anxiety
	or pressure during the past week?	

The PGWBI was completed four times by participants – once each during weeks 1, 2, 4 and 6 of the research period. The four resulting batches of questionnaires were referred to as sessions 1, 2, 3, and 4, respectively. The collected data were analysed using STATA 13, and baseline averages for each of the 22 questions were calculated for each of the sessions. In any given session, the baseline average for a question was the average score for that question across all participants who completed the questionnaire. Comparison of the baseline averages between sessions were used to assess changes in the PGWBI between sessions 1 and 2, between sessions 1 and 3, and between sessions 1 and 4, thereby indicating effectiveness of the BMGIM intervention.

Changes in the PGWBI between sessions 1 and 2 will first be discussed. It is important to note that session 1 data were collected upon receiving consent from the participants on week 1, and session 2 data were collected on week 2 before the commencement of the first BMGIM session (i.e., after one week of standard care only). This means that observed differences in baseline



averages between sessions 1 and 2 cannot be linked to BMGIM interventions, but may be the result of standard care. However, subsequent implementation of the BMGIM intervention may be the cause of changes observed in baseline averages between session 1 and sessions 3 and 4.

Between sessions 1 and 2 there was an improvement in the scoring of question 2, which investigated the dimension of general health (see Table 5.1). This means that in session 2, more participants gave a more positive score for question 2 than they had given in session 1. Other questions for which improvements were observed between sessions 1 and 2 were as follows (see Table 5.1 for wording of the questions): question 3 (depressed mood), question 8 (anxiety), question 13 (general health; minimal improvement), question 14 (self-control), question 15 (positive wellbeing), question 16 (vitality; minimal improvement), question 17 (anxiety), question 19 (anxiety), question 20 (positive wellbeing), and question 22 (anxiety).

Further analysis of these results indicates that though many improvements were observed between sessions 1 and 2, none were statistically significant. However, it is interesting to note that of the 11 questions in which improvements occurred, 4 questions investigated anxiety, 2 questions investigated positive wellbeing, 2 questions investigated general heath, and 1 question each involved depressed mood, self-control and vitality.

The next batch of data (session 3) was collected during week 4, after participants had received two sessions of BMGIM intervention. Questions for which improvements were observed between sessions 1 and 3 were as follows (see Table 5.1 for wording of questions): question 5 (anxiety), question 8 (anxiety), question 9 (positive wellbeing; minimal improvement), question 11 (depressed mood), question 13 (general health), question 14 (self-control), question 15 (positive wellbeing), question 16 (vitality; minimal improvement), question 17 (anxiety), question 19 (anxiety), question 20 (positive wellbeing), and question 22 (anxiety).

This comparison of the PGWBI between sessions 1 and 3 revealed improved responses (on average) to 12 of the 22 questions in the questionnaire, though none of these improvements was statistically significant. Of the 12 improvements, 5 involved the dimension of anxiety, 3 involved positive wellbeing, and 1 each involved depressed mood, general health, self-control, and vitality.



The final batch of data (session 4) was collected during week 6, after participants had received five BMGIM sessions. Questions for which improvements were observed between sessions 1 and 4 were as follows (see Table 5.1 for wording of questions): question 2 (general health), question 3 (depressed mood; minimal improvement), question 8 (anxiety), question 10 (general health), question 13 (general health), question 15 (positive wellbeing), question 18 (self-control), question 19 (anxiety), and question 22 (anxiety).

The comparison of the PGWBI between sessions 1 and 4 revealed improved responses (on average) to 9 of the 22 questions. These results appear to be statistically significant (discussed in more detail later). Of the 9 improvements, 3 investigated the dimension of anxiety, 3 investigated general health, and 1 each investigated depressed mood, positive wellbeing, and self-control. Overall, the results from this comparison indicate a positive trend in the psychological dimensions mentioned above, over the duration of the study. Note, however, that these findings are to be interpreted with caution as session 4 questionnaires were completed by only 8 of the 24 participants who consented to participate in the study.

The collected data were analysed further by applying the Wilcoxon signed-rank test to determine whether the findings of the study were statistically significant. The probability value (p-value) returned by the Wilcoxon signed-rank test is not known a priori, but is computed from the collected data. It represents the probability that the findings are due to chance alone, given that the null hypothesis constructed for the test is true (Kellar & Kelvin 2013:79) Therefore in this context it represents the probability or chance of getting the observed results under the assumption that the intervention has no effect on the participants (Kellar & Kelvin 2013:79). The specific threshold level of the p-value at which it is considered to become statistically significant is known as the alpha level ( $\alpha$ -level) and is determined by the researcher before any statistical tests are conducted (Kellar & Kelvin 2013:80). In this study an  $\alpha$ -level of 0.05 was considered statistically significant. This means that the results are considered significant if they are likely to occur by chance alone less than 5% of the time (Kellar & Kelvin 2013:80).

The statistical analysis of PGWBI data is discussed below. Table 5.2 shows the six dimensions investigated via the PGWBI, and their corresponding probability values for observed improvement between session 1 and session 4.



Table 5.2 Probability values for observed improvement of PGWBI dimensions between sessions 1 and 4.

DIMENSION	PROBABILITY VALUE (p-value)
Anxiety	0.0042
Depressed mood	0.0015
Positive wellbeing	0.0027
Self-control	0.0022
General health	0.0099
Vitality	0.0017

Significance at  $\alpha$ -level of 0.05

The probability values listed in Table 5.2 indicate a significant improvement in the scores for all six psychological dimensions between sessions 1 and 4 (*p*-value less than 0.05 in all cases). However, these findings should be interpreted with caution as only 8 participants completed the PGWBI questionnaire during session 4, as compared to the 23 participants who completed session 1.

As 19 participants completed the PGWBI during session 3 the Wilcoxon signed-rank test was also used to generate probability values for the improvements observed in PGWBI dimensions between sessions 1 and 3. Nineteen of the 23 participants who completed the questionnaire in session 1, also completed the session 3 questionnaire. Table 5.3 shows the probability values for observed improvement in all six dimensions between session 1 and session 3.

Table 5.3 Probability values for observed improvement of PGWBI dimensions between sessions 1 and 3.

DIMENSION	PROBABILITY VALUE (p-value)
Anxiety	0.4555
Depressed mood	0.0700
Positive wellbeing	0.2034
Vitality	0.0604

Significance at  $\alpha$ -level of 0.05

Between session 1 and session 3 the probability values were all above 0.05, therefore none of the observed improvements can be considered statistically significant results. However, *p*-values for the dimensions of depressed mood and vitality were very close to 0.05, suggesting a trend towards improvement.



As part of the statistical analysis discussed above, the Wilcoxon signed-rank test generated probability values for observed changes in the scores of each of the 22 PGWBI questions between sessions 1 and 4, and between sessions 1 and 3. All of these p-values were non-significant, providing no conclusive evidence of improvement between the sessions. However, in the comparison of sessions 1 and 3, the p-value for improvement in question 12 (dealing with vitality; see Table 5.1) was equal to 0.06, very close to the pre-determined  $\alpha$ -level of 0.05. This suggests a trend towards improved vitality between these two sessions.

The results of this study indicate an improvement trend in the psychological wellbeing of the participants after exposure to BMGIM intervention. Improvement in psychological wellbeing was also found in a study conducted by Burns (1999), reporting on six cancer patients who received BMGIM during their rehabilitation phase. Psychological wellbeing was measured with the Total Mood Disturbance (TMD) and Profile of Mood States (POMS) scales. Results indicated significant differences between pre-test and post-test scores for tension/anxiety, fatigue/inertia and confusion/bewilderment in the experimental group. The psychological wellbeing scores of the experimental group showed further improvement in follow-up assessments, particularly in the areas of tension/anxiety, fatigue/inertia, confusion/bewilderment, depression/dejection and anger/hostility (Burns 1999:50).

A study conducted by Bonde (2005a:147) also investigated the effect of BMGIM on the mood and quality of life of six cancer patients during the rehabilitation phase. The Hospital Anxiety and Depression (HAD) scale was used to assess participants at pre-test, post-test and follow-up intervals. Findings of the study indicated improvement in anxiety at the follow-up stage, as well as an improvement trend in depressed mood. A significant decrease in total mood disturbance and anxiety, and significantly enhanced wellbeing, was also found in a study conducted by Beck (2012:301). This study focussed on participants who experienced work-related chronic stress and who were on long-term sick leave. Furthermore, the study found that total mood disturbance, anxiety and depression were significantly decreased in the group which received BMGIM as an early intervention (Beck 2012:301). In this study, the observed trend towards improvement in self-control as a result of BMGIM can be compared to the findings of Bonde (2005a:159), where analysis of the Antonovsky Sense of Coherence (SOC) scale indicated improvements in manageability and comprehensibility during the follow-up period, following BMGIM interventions.



In summary, statistical analysis of the data collected using the PGWBI questionnaire suggests improvement in baseline averages between sessions 1 and 2, sessions 1 and 3, and sessions 1 and 4. While there was a trend towards improvement in the psychological dimensions which were investigated in the PGWBI, the improvements were not statistically significant. Further analysis of the collected data using the Wilcoxon signed-rank test found statistically significant improvements between sessions 1 and 4, in all six psychological dimensions investigated in the PGWBI. However, these findings need to be interpreted with caution due to a reduction of the sample size in session 4. This attrition of the sample clearly limits generalisation of the findings of this study. However, the results do indicate that BMGIM intervention has a positive effect on cancer patients, and the observed trend towards BMGIM-mediated improvement necessitates further research.

## 5.3.2 Effect of BMGIM on physical wellbeing: Symptom Distress Scale (SDS)

Following the same pattern used for the PGWBI, the SDS questionnaire was completed by participants during weeks 1, 2, 4 and 6 of the six-week research process, and the four data collection phases are referred to as sessions 1, 2, 3, and 4. The SDS is composed of 13 items and measured the constructs of nausea (2 items), appetite, insomnia, pain (2 items), fatigue, bowel, concentration, appearance, breathing, outlook and cough. Participants' responses to the constructs of the SDS were collected via questionnaires, tabulated, and compared between sessions.

In inferential statistics, cross tabulation is a method used to provide a graphical display of the relationship between two categorical variables. The tables display the likelihood of particular events occurring by chance, and they provide a measure of the effect that an independent variable (e.g., BMGIM) has on a dependent variable (e.g., intensity of pain). The statistical significance of such a causal relationship between an independent and dependent variable can be assessed using chi-square statistics or the Fisher's exact test (Kellar & Kelvin 2013:304). The Fisher's exact test "is an alternative to chi-square for 2x2 tables when sample size and expected frequencies are small" (Kellar & Kelvin 2013:458). In this study, in order to determine whether the effect of the independent variable on the dependent variable was significant, an  $\alpha$ -level of 0.05 was used and a p-value less than 0.05 was therefore considered statistically significant. The Fisher's exact test was used to determine the statistical significance of the observed changes in SDS scores between sessions. Table 5.4 shows the association



between sessions 1 and 2, sessions 2 and 3, and sessions 1 and 3, as revealed by each of the 13 items making up the SDS.

Table 5.4 Association between sessions for the 13 different SDS items.

CONSTRUCTS	Fisher's Exact test	Fisher's Exact test	Fisher's Exact test
	Session 1 versus 2	Session 2 versus 3	Session 1 versus 3
Nausea1	0.591	0.115	0.619
Nausea2	0.008	0.013	0.718
Appetite	0.040	0.347	0.011
Insomnia	0.024	0.348	0.281
Pain1	0.882	0.761	0.658
Pain2	0.040	0.004	0.000
Fatigue	0.005	0.036	0.015
Bowel	0.000	0.002	0.237
Concentration	0.002	0.037	0.152
Appearance	0.025	0.173	0.560
Breathing	0.010	0.259	0.005
Outlook	0.877	0.187	0.570
Cough	0.004	0.458	0.065

Significance at  $\alpha$ -level of 0.05

The table above gives the pattern and significance level of changes between the sessions for each construct of the SDS. Using the  $\alpha$ -level of 0.05, a significant improvement was found between sessions 1 and 2 for the intensity of nausea, appetite, insomnia, intensity of pain, fatigue, bowel, concentration, appearance, breathing, and cough. These changes took place between week 1 and week 2, before the initiation of BMGIM interventions. Between sessions 2 and 3, significant improvements were found for intensity of nausea, intensity of pain, fatigue, bowel, and concentration. Between sessions 1 and 3, significant improvements were found for the constructs of appetite, intensity of pain, fatigue, and breathing. When viewed across the whole data-collection period from session 1 to session 3, there is evidence of consistent improvement in the intensity of pain, and fatigue.

In addition to the Fisher's exact test, a Wilcoxon signed-rank test was conducted to determine the significance of differences in the various SDS constructs between sessions 1 and 4. The resultant probability values are displayed in Table 5.5.



Table 5.5 Probability values for differences in the SDS constructs between sessions 1 and 4.

CONSTRUCTS	PROBABILITY VALUE (p-value)
1. Nausea 1	0.1397
2. Nausea 2	1.00
3. Appetite	0.0874
4. Insomnia	0.7917
5. Pain 1	1.00
6. Pain 2	0.3173
7. Fatigue	0.0455
8. Bowel	0.9136
9. Concentration	0.6547
10. Appearance	0.7023
11. Breathing	0.3173
12. Outlook	0.7917
13. Cough	0.5035

Significance at  $\alpha$ -level of 0.05

This analysis revealed a significant improvement in fatigue between sessions 1 and 4. However only 8 participants completed the SDS questionnaire during session 4, compared to the 23 who completed session 1, so this finding should be interpreted with caution.

As has been noted, Fisher's exact test detected significant improvements in many of the SDS constructs between data collection sessions. In practice, between sessions a number of the patients moved from a poor state of health to an improved state. Of particular importance, the significant improvements detected for the intensity of pain and for fatigue were found through most of the duration of data collection (from sessions 1 to 3). Cancer related fatigue has been identified as one of the leading causes of distress in cancer patients, and has been found to peak at 4 to 6 weeks during the period of radiotherapy (Olver 2011:23). The finding in this study, that fatigue apparently improved over the course of data collection, affirms the potential utility of the BMGIM as a viable cancer intervention strategy.

In resonance with this research, a significant improvement in physical wellbeing was also found in a study conducted by Burns (1999:45). Physical wellbeing was measured with the Quality of Life-cancer (QoL-CA) questionnaire, and findings indicated a significant improvement in physical wellbeing factors between pre-test and follow-up scores of the



experimental group (the exact physical factors involved were not specified in the study). Another study (Beck 2012:302) detected a significant decrease in physical symptoms and in bad sleep quality of participants who experienced work-related stress. However, these positive results were not found in a study conducted by Bonde (2005a:153), which measured functional and physical wellbeing through the QoL-C30 scale. Instead, this study indicated no improvement in functional or physical wellbeing at post-test or follow-up stages. Therefore, previous studies show contrasting findings regarding improvements in the physical wellbeing of cancer patients over time.

The data analysed in this study point to some significant improvements in physical wellbeing of cancer patients over the course of the study – some of the participants showed some degree of improvement in some of the domains. Whilst the marked attrition of participants between sessions 1 and 4 does influence the potential of these results to be generalised, the various improvement trends detected in this work necessitate further studies. The improvements also highlight the significant effect of BMGIM interventions on the physical wellbeing of individual participants.

## 5.3.3. Effect of BMGIM on spiritual wellbeing: Spiritual Index of Well Being (SIWB)

The SIWB questionnaire was administered to the participants during the same periods as the SDS and PGWBI questionnaires (i.e., during weeks 1, 2, 4 and 6 of the six-week research period, corresponding to data collection sessions 1, 2, 3, and 4).

The SIWB is composed of 12 items; questions 1 to 6 measure the constructs of self-efficacy, whilst questions 7 to 12 probe life scheme (Daaleman & Frey 2004:499). In the following statistical analyses, self-efficacy is coded as "Spirit SA", and life scheme as "Spirit SB". The Wilcoxon signed-rank test was used to compare the dimensions of self-efficacy and life scheme between different data collection sessions. Using an  $\alpha$ -level of 0.05, significant improvements were found in the scores of both dimensions between sessions 1 and 4 (see Table 5.6). However, these results must be interpreted with caution as only 8 participants completed the SIWB questionnaire during session 4, compared to the 23 participants who completed session 1.



Table 5.6 Probability values for differences in SIWB scores between sessions 1 and 4.

DIMENSIONS	PROBABILITY VALUE (p-value)
Spirit SA = Self-efficacy	0.0017
Spirit SB = Life scheme	0.0023

Significance at  $\alpha$ -level of 0.05

Changes in SIWB scores between sessions 1 and 3 were also analysed using the Wilcoxon signed-rank test, as 19 participants completed the questionnaire during session 3. The results are shown in Table 5.7, and they mirror those for the comparison between sessions 1 and 4 – significant improvement was detected in both self-efficacy and life scheme.

Table 5.7 Probability values for differences in SIWB scores between sessions 1 and 3.

DIMENSIONS	PROBABILITY VALUE (p-value)
Spirit SA = Self-efficacy	0.0054
Spirit SB = Life scheme	0.0322

Significance at  $\alpha$ -level of 0.05

In addition to grouped analyses of the two SIWB dimensions, the Wilcoxon signed-rank test was used to compare changes in scores for each of the 12 SIWB questions between sessions 1 and 3 (see Table 5.8). Using the  $\alpha$ -level of 0.05, a significant improvement was found in question 4, which queried whether participants felt overwhelmed when they had personal difficulties and problems.

Table 5.8 Probability values for changes in the scores of all 12 SIWB questions between sessions 1 and 3.

QUESTIONS	PROBABILITY
	VALUE (p-value)
1. There is not much I can do to help myself	0.1266
2. Often, there is no way I can complete what I have started	0.6547
3. I can't begin to understand my problems	0.6444
4. I am overwhelmed when I have personal difficulties & problems	0.0325
5. I don't know how to begin to solve my problems	0.9159
6. There is not much I can do to make a difference in my life	0.6312
7. I haven't found my life's purpose yet	0.1686
8. I don't know who I am, where I came from, or where I am going	0.3173

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9. I have a lack of purpose in my life	0.2981
10. In this world, I don't know where I fit in	0.5530
11. I am far from understanding the meaning of life	0.1694
12. There is a great void in my life at this time	0.4227

Significance at  $\alpha$ -level of 0.05

Despite an inability of these analyses to demonstrate significant improvements in the scores of most individual SIWB questions over the course of this study, when taken together there was significant improvement in the dimensions of both self-efficacy and life scheme between sessions 1 and 3. Whilst several studies have been conducted using qualitative research methods to explore spiritual experiences during BMGIM interventions, there are apparently no corresponding quantitative analyses available in the literature. As noted previously, the attrition of participants in this study does impact the potential of these results to be generalised. However, the findings do suggest a trend towards improvement as a result of BMGIM interventions, and therefore necessitate further research in this area.

## 5.4 CONCLUSION

This study has revealed significant improvements in certain areas of physical and spiritual wellbeing over the six-week data collection period. In addition, whilst no statistically significant improvements were detected in the psychological wellbeing of participants, qualitative improvement trends were clearly evident. The marked attrition of participants over the course of data collection does perhaps limit the potential of these results to be generalised. However, there were clear trends towards improvement over the course of the study in physical, psychological and spiritual wellbeing, which provide a strong argument for the need for further research. The improvements also highlight the significant effect of BMGIM interventions on the physical, psychological and spiritual wellbeing of individual participants.

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## **CHAPTER 6**

# **QUALITATIVE DOMAIN: FINDINGS**

## 6.1 INTRODUCTION

Experts in research methodology agree that both quantitative and qualitative research methods should be employed in real-life human sciences research (de Vos et al. 2011:434). The rationale for including both quantitative and qualitative domains in the current study was explained in Chapter 4. Findings from the quantitative domain of this research were presented in Chapter 5, and qualitative findings will be presented here, in Chapter 6.

The qualitative domain of this research was conducted within a phenomenological framework. As discussed in Chapter 4, the session summary forms and mandalas from each BMGIM session, as well as the interview transcripts for all participants were analysed using the principles of phenomenology. The data collected with respect to each participant is summarised in Table 6.1.

As described in Chapter 1, the BMGIM process comprises of four phases, namely the prelude, the induction, the music travel, and the postlude. A session summary form was completed by the music therapist for each BMGIM session, and captured a description of each of these phases as they unfolded. Hence, if a participant was involved in five BMGIM sessions, then there would be five session summary forms for that participant, and so on. These forms allowed the music therapist to capture descriptions of the prelude, the process of induction, the imagery seen by the participant during the music travel, and the mandala, and also to record the discussion held between the participant and music therapist during the postlude. Thus, the session summary forms reflect the participants' experiences during their BMGIM sessions, as well as the insights that they gained through the sessions. The session summary forms gave me, the researcher, information on the life circumstances of each participant, as well as a record of their BMGIM session experiences. In analysing the session summary forms, I attempted to find meaning in the sessions as participants could have related their music travel experiences to their real-life circumstances. A total of 55 session summary forms was analysed.

Chapter 6 Qualitative domain: Findings

The next set of the qualitative data collected was the set of mandalas that were drawn by the patients themselves. A mandala is a drawing depicting the music travel phase of a BMGIM session (Bruscia & Grocke 2002:33). Each participant was given the opportunity to draw a mandala following their music travels. In this study, most of the participants drew a mandala in every session. However, there were two participants who each left out the mandala drawing step in one of their BMGIM sessions (the reason for which is discussed in the findings, in section 6.3.1.5). On the other hand, one of the participants chose to draw two mandalas for one of her BMGIM sessions. Thus, 54 mandalas were drawn by the participants in total.

An unstructured interview was conducted with each participant towards the end of their participation in the study. A central, open ended question was asked:

"What was your experience of the BMGIM sessions?"

As it was an unstructured interview, subsequent questions were asked based on the participants' initial responses in order to gain deeper insights into their individual BMGIM experiences. Each interview was digitally recorded. I then transcribed these recordings verbatim. In this study, a total of 18 interviews was conducted. Although the study began with a sample size of 24 participants, not all of these individuals completed their series of BMGIM sessions. Three of them, having given informed consent, were not actually available for any BMGIM sessions, so an interview was not conducted with them. One of the remaining participants unfortunately passed away before her interview could be conducted, and two more exited the study before their interviews took place.



 Table 6.1
 Qualitative domain data collection.

PARTICIPANT	BMGIM	SESSION	MANDALAS	INTERVIEW
	SESSIONS	SUMMARY		CONDUCTED
		FORMS		
1	5	5	5	1
2	2	2	2	1
3	1	1	1	1
4	0	0	0	1
5	1	1	1	1
6	0	0	0	1
7	1	1	0	1
8	3	3	3	1
9	3	3	3	0
10	2	2	2	0
11	5	5	5	1
12	5	5	5	1
13	5	5	5	1
14	5	5	4	1
15	5	5	5	1
16	2	2	2	1
17	2	2	3	1
18	3	3	3	1
19	1	1	1	1
20	0	0	0	0
21	0	0	0	0
22	2	2	2	1
23	2	2	2	0
24	0	0	0	0
TOTAL	55	55	54	18

Analysis of the collected data comprised reading and knowing the data, creating units of meaning, and clustering these meaning units with the goal of understanding the phenomenon better (Dahlberg et al. 2008:236). Because the research design was based on the principles of phenomenology, openness and a 'bridled' attitude (as described in Chapter 4) guided the data analysis.

#### 6.2 OVERVIEW OF THE PARTICIPANTS

As per the stated inclusion criteria, participants in this study were all cancer patients who were receiving either chemotherapy or radiotherapy, or both, in hospitals on an outpatient basis. Participants lived either in a cancer interim home or at their own private homes for the duration of their treatment. During non-medical-treatment times, participants were offered BMGIM sessions. These were conducted at one of three possible venues - the cancer interim home, the participant's private home, or the music therapist's private consulting rooms. The BMGIM sessions were conducted by one of two BMGIM-qualified music therapists. For the purposes of presentation of the findings, these therapists will be referred to as 'music therapist A' and 'music therapist B'.

Upon signing the informed consent form, participants were scheduled to undergo a BMGIM session once per week, for five weeks (i.e. a total of five BMGIM sessions each). However, in reality, the patients' participation in the sessions depended on both their availability and their level of wellbeing at the time of each appointment, neither of which could be guaranteed. Thus, due to the real-life circumstances of the participants, they did not all participate in all of their scheduled sessions. The number of sessions completed by each participant is documented in Table 6.1.

#### **6.2.1** Description of the participants

A brief description of each participant and their level of participation in the study are summarized in Table 6.2.



**Table 6.2** Overview of participants.

Participant	Age	Gender	Race	Type of	Stage	Treatment	Lodging	Place of	No. of	Therapist
_				cancer				BMGIM	sessions	
1	68	Female	White	Breast	4	Radio-	Interim	Interim	5	A
1	08	remaie	Wille	Breast	4	therapy	home	home	3	A
2	72	Female	White	Breast	3	Radio-	Interim	Interim	2	A
2	12	Telliale	Wille	Dieast	3	therapy	home	home	2	A
3	49	Female	White	Breast		Radio-	Interim	Interim	1	A
3	77	1 Ciliaic	Wille	Dicast		therapy	home	home	1	7
4	63	Female	White	Colon		Both	Interim	Interim	0	_
	0.5	Tomare	***************************************	Colon		Both	home	home		
5	78	Female	White	Rectum		Radio-	Interim	Interim	1	Α
				∷		therapy	home	home	3//	
6	42	Female	Black	Cervical	1	Both	Interim	Interim	0	_
							home	home		
7	48	Female	White	Brain		Radio-	Interim	Interim	1	A
						therapy	home	home		
8	64	Female	White	Rectal		Both	Interim	Interim	3	A
							home	home		
9	40	Female	White	Breast	5	Radio-	Private	Private	3	В
						therapy	home	home		
10	46	Female	White	Melano-	3	Chemo-	Private	Music	2	В
				ma		therapy	home	therapist		
								practice		
11	66	Female	White	Primary	4	Chemo-	Private	Music	5	В
				peritoneal	7	therapy	home	therapist		
				cancer				practice		
12	74	Male	White	Squamous	4	Chemo-	Private	Music	5	В
				sarcoma		therapy	home	therapist		
								practice		
13	53	Female	Black	Breast	2	Chemo-	Private	Private	5	A
				100		therapy	home	home		
14	66	Female	Black	Breast	3	Radio-	Interim	Interim	5	A
						therapy	home	home		
15	62	Female	Black	Breast	2	Radio-	Interim	Interim	5	A
						therapy	home	home		
16	53	Female	Black	Cervical	2	Both	Interim	Interim	2	В
			4				home	home		
17	53	Female	Black	Breast		Radio-	Interim	Interim	2	В
						therapy	home	home		
18	68	Female	Black	Breast		Both	Interim	Interim	3	В
							home	home		
19	34	Female	Black	Vulva	3	Radio-	Interim	Interim	1	В
						therapy	home	home		
20	53	Female	Black	Cervical		Both	Interim	Interim	0	-
			460			ļ	home	home		
21	47	Male	Black	Stomach	3	Both	Interim	Interim	0	-
							home	home		
22	48	Female	White	Breast	3	Radio-	Interim	Interim	2	A
						therapy	home	home		
23	57	Male	Black	Prostate &		Radio-	Interim	Interim	2	A
				bladder		therapy	home	home		
24	32	Female	Black	Vulva	3	Radio-	Interim	Interim	0	-
						therapy	home	home		

Participant 1 was a 68-year old, white, female who was diagnosed with stage 4 breast cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in five BMGIM sessions which were conducted at the cancer interim home by music therapist A.

Participant 2 was a 72-year old, white, female who was diagnosed with stage 3 breast cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in two BMGIM sessions which were conducted at the cancer interim home by music therapist A.

Participant 3 was a 49-year old, white, female, diagnosed with breast cancer. The participant did not know her stage of cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in two BMGIM sessions which were conducted at the cancer interim home by music therapist A.

Participant 4 was a 63-year old white female, diagnosed with colon cancer (stage unknown). She received chemo- and radiotherapy and stayed at the cancer interim home. She did not participate in any of the scheduled BMGIM sessions. An interview was conducted with her in order to explore her reasons for not participating in the BMGIM sessions.

Participant 5 was a 78-year old white female, diagnosed with colorectal cancer (stage unknown). She received radiotherapy and stayed at the cancer interim home. She was involved in one BMGIM session, which was conducted at the cancer interim home by music therapist A.

Participant 6 was a 42-year old black female, diagnosed with stage one cervical cancer. She received both chemo- and radiotherapy and stayed at the cancer interim home. She did not participate in any of the scheduled BMGIM sessions. An interview was conducted with this participant in order to explore her reasons for non-participation.

Participant 7 was a 48-year old white female, diagnosed with brain cancer (stage unknown). She was receiving radiotherapy and stayed at the cancer interim home. She only participated in one BMGIM session, which was conducted at the cancer interim home by music therapist A.

Participant 8 was a 64-year old white female, diagnosed with rectal cancer. She did not know the stage of her cancer and was receiving both chemo- and radiotherapy. She stayed at the cancer interim home and participated in three BMGIM sessions, which were all conducted at the cancer interim home by music therapist A.

Participant 9 was a 40-year old white female, diagnosed with stage five breast cancer and receiving radiotherapy. She resided at her private home where she underwent three BMGIM sessions, all conducted by music therapist B.

Participant 10 was a 46-year old white female, diagnosed with stage three melanoma. She was receiving chemotherapy and stayed at her private home. She underwent two BMGIM sessions, which took place at the private practice rooms of music therapist B.

Participant 11 was a 66-year old white female who was diagnosed with stage four primary peritoneal cancer. She was receiving chemotherapy and lived in her private home. She underwent five BMGIM sessions, all of which took place at the private practice rooms of music therapist B.

Participant 12 was a 74-year old white male who was diagnosed with stage four squamous sarcoma. He was receiving chemotherapy and lived in his private home. He participated in five BMGIM sessions, all of which took place at the private practice rooms of music therapist B.

Participant 13 was a 53-year old black female, diagnosed with stage two breast cancer. She received chemotherapy and lived in her private home. She underwent five BMGIM sessions, all of which took place in her private home and were conducted by music therapist A.

Participant 14 was a 66-year old black female, diagnosed with stage 3 breast cancer. She received radiotherapy on an outpatient basis whilst staying at the cancer interim home. She underwent five BMGIM sessions, which were all conducted at the cancer interim home by music therapist A.



Participant 15 was a 62-year old black female, diagnosed with stage 2 breast cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in five BMGIM sessions, all of which were conducted at the cancer interim home by music therapist A.

Participant 16 was a 53-year old black female, diagnosed with stage two cervical cancer. She received both chemo- and radiotherapy and stayed at the cancer interim home. This participant was involved in two BMGIM sessions, both of which were conducted at the cancer interim home by music therapist B.

Participant 17 was a 53-year old black female, diagnosed with breast cancer (stage unknown). She received radiotherapy and stayed at the cancer interim home. She was involved in two BMGIM sessions, both of which were conducted at the cancer interim home by music therapist B.

Participant 18 was a 68-year old black female who was diagnosed with breast cancer (stage unknown). She received chemo- and radiotherapy and stayed at the cancer interim home. She was involved in three BMGIM sessions, which were all conducted at the cancer interim home by music therapist B.

Participant 19 was a 34-year old black female, diagnosed with stage 3 vulva cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in one BMGIM session which was conducted at the cancer interim home by music therapist B.

Participant 20 was a 53-year old black female, diagnosed with cervical cancer (stage unknown). She stayed at the cancer interim home. Unfortunately, she was hospitalised during her treatment and ill health prevented her from participating in any of the BMGIM sessions.

Participant 21 was a 47-year old black male, diagnosed with stage three stomach cancer. He received chemo- and radiotherapy and stayed at the cancer interim home. Unfortunately, like participant 20, he was hospitalised for the full duration of his treatment and did not, therefore, participate in any of the BMGIM sessions.

Participant 22 was a 48-year old white female, diagnosed with stage three breast cancer. She received radiotherapy and stayed at the cancer interim home. She was involved in two BMGIM sessions, both of which were conducted at the cancer interim home by music therapist A.

Participant 23 was a 57-year old black male, diagnosed with prostate and bladder cancer (stage unknown). He received radiotherapy and stayed at the cancer interim home. He was involved in two BMGIM sessions, both of which were conducted at the cancer interim home by music therapist A.

Participant 24 was a 32-year old black female, diagnosed with stage three vulvar cancer. She received radiotherapy and stayed at the cancer interim home. Due to early completion of her treatment, she did not end up participating in any of the scheduled BMGIM sessions.

### 6.3 QUALITATIVE FINDINGS

The qualitative data collected during this study was analysed according to the process described in Chapter 4. The findings were organised into constituents, categories and sub-categories. Categories and sub-categories were created within each constituent to facilitate a better understanding of the intervention of BMGIM as experienced by cancer patients receiving chemo- or radiotherapy. These are presented in Table 6.3.

Findings which emerged through analysis of the session summary forms, the mandalas and the interview transcripts are discussed below. Excerpts from the session summary forms and the interview transcripts are presented in italics. The participants' experiences of the BMGIM are presented within the context of their real-life experience of cancer and its treatment in an effort to present a holistic view of the phenomenon. As suggested by Dahlberg et al. (2008:255) and as described in Chapter 4, the findings of the qualitative domain are presented through the essence and constituents of the findings.

In the sections which follow, the presentation of the various constituents of the findings, namely *Underlying mechanism of action of the BMGIM, Development of coping strategies, Juxtaposition of images and their meaning, Experience of physical wellbeing, Experience of psychological wellbeing,* and *Experience of spiritual wellbeing* will be followed by a discussion on the essence of the findings.



Table 6.3 Constituents, categories and sub-categories.

CONSTITUENTS	CATEGORY	SUB-CATEGORY
Underlying mechanism of	Prelude and setting of the	Distracting effect
action of the BMGIM	intention	Positive outlook
	Effects of classical music	Calming and relaxing
		Stimulation of imagery
	Drawing of the mandala	A reflection on music travel
	Music therapist's role	Characteristics
	Patient's role	Need to concentrate
		Curiosity
		Wellbeing
Development of coping strategies	Distracting effect of the BMGIM	Redirecting concentration
		Taken away to an alternative space
	Experiencing a sense of relief	Voicing real life experiences
	Co-existing with cancer and its effects	Change in perspective
Juxtaposition of images and their meaning	Opportunities and challenges	Surviving cancer
and then meaning		Dealing with uncertainty
Experience of physical	Experiencing a sense of	Relaxation
wellbeing	calmness	Improved sleep patterns
		Decreased perception of pain
Experience of psychological wellbeing	Gaining a sense of hope	Give life
		Forward movement
	Gaining a sense of wellbeing	Strengthening
		Positive attitude
		Empowerment
		Support
		Freedom
	Gaining a sense of strength	Nurturing
	Gaining a sense of rejuvenation	Nourishment
Experience of spiritual	Transcending the realm of	Experiencing the presence of God
wellbeing	physical existence	Soul/Spirit healed
		Feeling of gratitude



### 6.3.1 Underlying mechanism of action of the BMGIM

The BMGIM is a music-centred therapy method whereby images, colours, feelings, kinaesthetic reactions and sensory reactions are evoked by listening to classical music. The method has four phases, namely the prelude, the induction, the music travel, and the postlude (as described in Chapter 1). The BMGIM process aims to bring about personal growth, meaning, and understanding of one's life experiences by exploring and expanding one's own consciousness. This first constituent, i.e. *Underlying mechanism of action of the BMGIM*, explores the participants' experiences of the BMGIM process. The categories and subcategories which emerge within this constituent are summed up in Table 6.4.

Table 6.4 Underlying mechanism of action of the BMGIM - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Underlying mechanism of	Prelude and setting of the	Distracting effect
action of the BMGIM	intention	Positive outlook
	Effects of classical music	Calming and relaxing
		Stimulation of imagery
	Drawing of the mandala	A reflection on music travel
	Music therapist's role	Characteristics
	Patient's role	Need to concentrate
		Curiosity
		Wellbeing

### 6.3.1.1 Prelude and setting of the intention

The BMGIM session involves three role players: the patient, the therapist, and the music. Each session begins with a prelude during which both patient and therapist explore the real-life circumstances of the patient. Through this therapeutic conversation, the needs of the patient are discussed and an intention for the session is set. The intention is a phrase determined by the patient, which directs the focus of the session. During the interview at the end of the study, participant 2 was asked whether she found setting an intention helpful during her BMGIM sessions. She gave the following response:

Ja ek reken so. Dit het jou gefokus om bietjie weg te gaan van jou alle dag se gedagtes af, dat jy bietjie iets anders gefokus het om bietjie anderste te dink. [Translation: Yes, I think so.

It focused you to move away a bit from your everyday thoughts, so that you had something else to focus on to help you think slightly differently.]

In this excerpt, the participant explains how the setting of an intention helped her to direct her concentration away from thoughts of her everyday circumstances. She also added that it helped her to think differently. This participant experienced a physically and emotionally challenging period during the course of her medical treatment, and her stay at the cancer interim home. During the preludes of her BMGIM sessions she voiced the trials that she was experiencing. In each session, after the prelude the music therapist guided her to think of an alternate, more positive way of viewing her circumstances, which led to the setting of her various intention statements. Participant 2 had two BMGIM sessions. Her intentions for sessions 1 and 2 were "Om meer kalm te wees" ["To be more calm"], and "Om moed en innerlike krag te ervaar" ["To experience hope and inner strength"], respectively. These intentions guided her to think in a more positive light.

Another participant who found the setting of an intention for each BMGIM session to bring about a more positive perspective was participant 13 who said the following during the unstructured interview:

You know meeting the focus for each session, it was of, it was very important to me, it gave me something to look forward to or something to maintain for the week. To say if my focus was to take control of what is happening in my body, of importance was to say I must think positively every time when something catches me off guard, ...

In the above excerpt, participant 13 describes how setting the intention allowed her to think more positively, not only for the duration of the BMGIM session but for that whole week, in which she practiced thinking positively whenever she was confronted with a challenging situation. This participant was involved in 5 BMGIM sessions. Some of the intentions which she set during these sessions were: "Building my inner strength" (session 1), "Being at peace within myself" (session 2), and "Embracing what comes" (session 4).

In a similar vein, participant 12 said the following (of setting the intention) during the interview:

... she did direct the focus and by asking you "what do you want out of the session?" or "what do you bring to the session today?" or "what do you think you want to get out of the session today?" That puts your focus on it and I think that is important that you focus on something before you start. It's no good not asking that question and just playing the music, not going to work. Then it's just for entertainment and this wasn't entertainment.

This excerpt shows that the questions asked to guide the setting of an intention for a session were found, by this participant, to be valuable. His experience was that his statements of intention brought focus to his BMGIM sessions. Participant 12 was involved in five BMGIM sessions. Some of the intentions that he set were: "Experiencing peace despite the frustration" (session 3), "Relax and enjoy" (session 4), and "Going forward" (session 5).

Thus, the responses of participants 2, 12, and 13 illustrate that although the participants' real-life circumstances were challenging, the setting of an intention for each session had the ability to direct the patients towards a more positive outlook on these circumstances. Participants also found that the setting of an intention brought about a conscious focus on the BMGIM session itself. Summaries of the preludes for every BMGIM session for every participant, along with the intentions that were set in each case, are presented in Annexure K.

### 6.3.1.2 Effects of classical music

The compilation of classical music selected for a particular BMGIM session becomes a key "role player" in that session. In analysing the session summary forms and the interview transcripts, it was found that participants mainly described the classical music as "calming" and "relaxing".

Participant 11 stated:

... But the different pieces of music just were the most relaxing...

Participant 19 described the music to have a calming effect which allowed her to start thinking differently. She said the following during her unstructured interview:

... the music was very calm. So now when your nerves are very calm then I started thinking about something different.

Further consideration of the session in which this participant said this facilitates a better understanding of the meaning that this feeling of calm brought to her real-life circumstances. During the prelude of this BMGIM session, participant 19 spoke of feeling overwhelmed by the adverse effects of her radiotherapy. The physical changes which these adverse effects brought about also made her feel as though she was losing her Being. She expressed this as follows:

"I felt I was losing the 'T......' that I really am" (She mentioned her name).

These were her predominant thoughts during the time when she was receiving medical cancer treatment. After listening to the music, i.e. during the music travel phase, her thoughts became more positive. In particular, she began to think that she could be the 'real T......' (mentioned her name) once again, and that she was beautiful. Yet she remained in the same physical body, riddled with the same adverse effects she had spoken of before the music was played. This suggests that the music itself, by inducing a sense of calmness, had a positive effect on her thoughts and outlooks, leading her to her view her real-life circumstances in a different light.

The study participants found another effect of the classical music to be the stimulation of imagery, which they visualised during the music travel phases of their BMGIM sessions. These images appeared spontaneously. Participant 5 found the music to transport her, and she was amazed that it could take her back so far into the past where she saw imagery of herself and her family in their younger years. During her unstructured interview, she said the following: maar dit was baie interessant gewees want ek het nooit gedink dat, ek sal myself sal my nooit myself so ver gekry het, jy weet, om terug te gaan so ver in die verlede nie. En ek dink dit was die musiek wat dit gedoen het want daai oomblik toe daai musiek begin toe sien ek water, rustigheid, jy weet, daai kalmte. [Translation: But it was very interesting as I never would have thought that I would get myself to go so far back into the past. And I think it was the music that did it, because the moment that music started playing I saw water, tranquility, you know, that calmness.]

The imagery that she visualised was significant to her, as her intention for that BMGIM session was "vertroosing deur familie bande" ["to find consolation through family ties"].

Participant 17 recognised that the music stimulated certain mental imagery which, through the therapeutic conversation, could be related to her real-life circumstances. Furthermore, the participant spoke about finding solutions to real-life challenges though the therapeutic BMGIM process. The participant said the following during her unstructured interview:

... To say if maybe you play music there are different things that are happening in your mind and then you need to correlate those things into a real life and then you come up with a solution to say...

Participant 1 also found that the music stimulated the visualisation of imagery. During the unstructured interview, she said the following:

The music brought it out. I don't think I had it, when I heard the music it came out.

Also during the interview, this participant reflected on the imagery she had seen in one particular BMGIM session which had taken place on a day when she had experienced a frustrating incident prior to her BMGIM appointment. The incident had left her feeling angry. During the music travel of that session she saw anger within her, symbolised by the colour black. In the following excerpts from her interview transcript, participant 1 describes how she perceived the music to bring about the imagery and also, in a way, to "show" her a solution that enabled her to move forward:

... Cause as I said I had anger in me, in myself. I was disappointed in the doctor and well when I listened to the music I thought I saw that monster in me, I said I don't want a monster so I got to blow [stretched the word 'blooow'] it out. I got to blow it out.

... there was one moment as I said the monster you know the music pulled the monster out. You know the music pulled [stretches the word 'pppulled'] it out and said come on, come on, come on, out you go and that anger 'cause the monster you know is the anger I had. So it just pulled [stretches the word 'pppulled'] it out, you know, breathe it in [takes deep breath in] and blow it out [blew out through mouth].

Thus it seems that the music stimulated imagery which allowed the participant to see the negative state she was in. The anger which she experienced took a form. This appears to have made her response to her real-life circumstances more tangible. The imagery of the music pulling her anger out also encouraged her to want to get rid of that anger, and not to dwell on

the circumstances that had inspired it. After the music travel of session 5 (where this incident took place), the participant reported feeling more relaxed.

Thus, it is clear that the music played during the BMGIM sessions certainly inspired the visualisation of imagery on the part of the participating patients. The imagery that the participants saw often presented to them a visual representation of an intangible entity such as family bonds or feelings of anger. The imagery made the participants aware of the presence of those entities in their lives and, furthermore, they found that they were able to relate those entities to particular real-life circumstances.

As the participants listened to the music they visualised images, and also experienced imagery through the other senses, i.e. smell, hearing, taste and touch. Their various individual responses to their own particular imagery are detailed in Annexure L. The table in that Annexure illustrates the way in which each participant experienced the music travel, i.e. whether their imagery was predominantly visual, emotional, sensory or kinaesthetic.

Through the imagery, the emotions that it evoked, participants' other (non-imagery-related) responses to the music, and the therapeutic conversations with the music therapist which followed during the postlude of each session, the participants were able to find meaning in the imagery and relate that meaning to their real-life circumstances. For many of the participants, the insight gained through this process led to changes in thought patterns, and to a more positive general outlook.

# 6.3.1.3 Drawing of the Mandala

In each BMGIM session, the music travel phase is followed by a postlude. As the music program comes to an end, the music travel concludes. The patient is then assisted by the therapist to return to a more externally orientated state. Before the commencement of the postlude phase, the patient is invited by the therapist to draw on an A3 sheet of paper. This drawing is referred to as a mandala. During the unstructured interviews held towards the end of the study, the participants reflected on their experience of drawing their mandalas.

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Participant 12 said the following of his mandala-drawing experience:

It focuses your mind on what happened while the music played, because they want you to draw a picture about what's in your mind.

Participant 18, too, found her mandala drawings to be linked to the imagery she saw during her music travels:

It was lovely because I was just drawing not knowing what I am drawing but after interpreting I saw that I did something very good.... Connected to what I was seeing when I closed my eyes.

In general, participants reported that their mandalas reflected what they had experienced during their music travels. Thus, the mandalas created starting points for the therapeutic conversations during the postludes. During these conversations, the therapists guided the patients in finding meaning in their music travels, and in extracting insight/understanding from this meaning.

### 6.3.1.4 Music therapist's role

During their unstructured interviews, the participants reflected on the role of the music therapist during their BMGIM sessions.

Participant 13 said the following about her interaction with her music therapist:

I'm content with how things were done and especially that before we did the sessions we would consult or confirm with the therapist she would check, it was not an automatic thing that its scheduled for Wednesday, she would always check are you ok, should I still come. Even when she arrived and you tell her of your experiences of the side effects she would then want to know do you still want me to continue or should we postpone this. You know checking up on such minor details was also of value to me. The therapist was not just to say I am here and this has to be done. Then you could see that she wouldn't have minded if you said I'm not well let's postpone. She would actually still give you another time and not be angry with you to say but you left me to drive all the way and you only tell me now. And she was always very understanding, "are you sure you want us to continue with this?".

...you develop a connection with whoever is helping you and you become comfortable in the presence of this person that you know you can talk to them and whatever and you open to say

anything and somebody out there will listen without being judgemental and would help you to deal with that. You develop this relationship with your therapist you even forget that she is doing this for a research purpose or for a short term purpose.

Participant 12 recorded the following regarding his interactions with the music therapist: *She's very perceptive, She's very observant, she's very thoughtful and she's very kind.* 

In general, the participants in this study found the music therapists to be understanding, kind or thoughtful, non-judgemental and perceptive or observant.

#### 6.3.1.5 Patient's role

In the qualitative findings of this study, the key role played by the patients in the BMGIM sessions was highlighted. When I was conceptualising this study, I had planned for each participant to participate in five BMGIM sessions. As explained in Chapter 4, the BMGIM sessions for each participant were scheduled to take place once per week for five weeks. However, ultimately, in the "real world" of cancer patients receiving medical treatment, not all participants were involved in all five of their scheduled BMGIM sessions. Table 6.1 gives an indication of the number of sessions completed by each participant. During the unstructured interview, where applicable, participants spoke of the circumstances which had prevented them from participating in all of their BMGIM sessions.

Participation in their first few BMGIM sessions showed participants what was required of them to be actively involved in the BMGIM process. Participant 19 said the following during her interview:

It requires you to focus, think about, plan about your future. So you need energy to do that.

You need strength.

Below are some excerpts from the individual interviews in which participants spoke of their real-life circumstances which interfered with their ability to concentrate, and which diminished their energy until they did not have the energy required to be fully involved in the BMGIM sessions.

# Participant 1 said the following:

The one day I was not so well... The headaches and I think it was the second one with the headaches and you know you terribly tired. So I think then you can't concentrate on the music... you know your minds got to be there. If you got a headache you can't concentrate.

Here, the participant speaks of not being unable to concentrate during one of her BMGIM sessions due to a headache and fatigue.

As a result of her medical treatment, participant 7 experienced nausea and a severe headache, which prevented her from participating in most of her BMGIM sessions. During the interview she said the following:

... as ek van die hospitaal af kom voel ek nie goed nie. Die bestraling maak my siek voel. Hoofpyne en naar. Ja, dan is 'n mense, wil jy net rustig wees en bietjie lê. Ek drink pyn pille, dan raak ek weg. [Translation: when I return from the hospital, I don't feel well. The radiotherapy makes me feel ill. Headaches and nausea. Yes, then you only want to be quiet and lie down for a while. I drink pain tablets, then fade away.]

Here the participant describes her experience of the after-effects of radiotherapy. Due to the severity of her symptoms, she only participated in one BMGIM session which had to be concluded early due to the onset of a severe headache during the session.

One of the BMGIM sessions for participant 8 also had to be concluded early due to her adverse physical symptoms. She described her experience of that particular session during the interview as follows:

'Cause I was listening to the music, I was enjoying it, the next minute I had these stomach cramps. And I said to her (music therapist) I don't feel nice and it comes in waves. It passed and then I was fine and then it came again. So if that was to be like that from the beginning I wouldn't be able to concentrate on the music.

She also added the following during the interview:

if you've got pains and things it just, your mind's going from what you concentrating on to yourself. Because these are physical symptoms that make you, you know you have to go to the toilet or you feel nauseous. It takes away that concentration.



As already stated, the four standard phases of the BMGIM were followed during each session in this study. Each sessions should have taken 1.5–2 hours to complete. However, due to the adverse effects of chemo- and radiotherapy such as nausea, fatigue and pain, it was anticipated that the participants in this study would not be able to cope with such lengthy sessions. The music therapists were instructed in the BMGIM practice guidelines (Annexure D) to take this into consideration in the assessment of each participant, and also during all of the BMGIM sessions. The actual durations of the various phases of the BMGIM were recorded on the session summary form for each session. These durations are presented in Table 6.5.

Table 6.5 Actual durations of the various BMGIM phases.

	PHASE 1:	PHASE 2:	PHASE 3:	PHASE 4:	TOTAL
	PRELUDE	INDUCTION	MUSIC TRAVEL	POSTLUDE	DURATION
Duration	5–15 min	3–5 min	10–15 min	5–10 min	40–70 min

Despite the severity of the adverse effects of their medical treatment, most of the participants remained involved in the study, with many of them completing all 5 of their scheduled BMGIM sessions. During the unstructured interviews, participants expressed that they had been curious to know more and to experience the BMGIM sessions. Hence their continued involvement.

Participant 1 said the following in her interview:

I was inquisitive. Maybe it's going to work, maybe it's going to help me...and it did.

Participant 8 said the following of her involvement in the study:

... it was something to look forward to, to see what was next and to see the different subjects and the different pictures that I have experienced was quiet unique...

Likewise, participant 11 reported that curiosity had been a part of her experience of the BMGIM sessions. She said the following:

...the excitement of knowing something is going to come and I don't know what it's going to be and I must just go with the flow and enjoy it.

Participant 13 reported that she always looked forward to the BMGIM sessions, regardless of the severity of her chemotherapy side-effects. She said:

... I always looked forward to the sessions despite how I felt or despite the severity of all the side effects...

The above excerpts reveal that many of the participants were inquisitive and curious regarding the BMGIM sessions, and therefore looked forward to them. Participants also reported experiencing a sense of wellbeing during the BMGIM sessions. This encouraged them to continue their participation in the study.

Participant 11 expressed her experience of a sense of wellbeing due to the BMGIM sessions as follows:

There was never a time where I didn't want to go. But even if I was feeling lousy I came away feeling much more positive and better.

Participant 15 likewise spoke of experiencing a sense of good health after her BMGIM sessions:

These sessions they were, every time after the sessions I felt somehow very at ease and so willing to have another session. My health also was very good after the sessions. I felt so eased and relaxed after the sessions.

The above excerpts reveal curiosity and the experience of a sense of wellbeing as having been motivations for patients to participate in the BMGIM sessions.

Through the underlying mechanisms of action of the BMGIM, participants in the sessions developed coping strategies to address the challenges experienced in their real life circumstances.

# **6.3.2** Development of coping strategies

The BMGIM process allowed participants in this study to see, feel or experience their real-life circumstances in a different way. Through the therapeutic conversations that took place during the sessions, participants (with the guidance of the music therapist) were able to gain insight into those real-life circumstances, and draw meaning from them. Participants were then able to deal with their circumstances in a more constructive and controlled manner. The coping strategies which were developed by the participants through the BMGIM sessions will be



discussed within the constituent called *Development of coping strategies*. The categories and subcategories of this constituent are shown in Table 6.6.

Table 6.6 Development of coping strategies - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Development of coping strategies	Distracting effect of the BMGIM	Redirecting concentration  Taken away to an alternative space
strategies	Experiencing a sense of relief	Voicing real-life experiences
	Co-existing with cancer and its effects	Change in perspective

### 6.3.2.1 Distracting effect of the BMGIM

Analysis of the session summary forms and the interview transcripts revealed that many of the participants in this study found the BMGIM sessions to direct their concentration away from the unpleasant real-life circumstances they were faced with.

Participant 8 lived at the cancer interim home for 6 weeks during the course of her medical treatment. She participated in a total of three BMGIM sessions. One of the main adverse effects of her medical treatment regime was diarrhoea. This led to her experiencing a loss of control of her body, as she experienced embarrassing moments when she did not reach the toilet in time. She shared such experiences with her music therapist during the prelude of session 2. Music therapist A recorded the following in the session summary form:

Patient shared about an embarrassing experience at her daughter's home during the weekend. This had clearly been very difficult for the patient...

During her unstructured interview at the end of her BMGIM treatment, participant 8 expressed how the BMGIM sessions had allowed her to concentrate on imagery instead of the vexing situation she found herself in. She said the following:

... concentrating on what you seeing both visually and spiritually and it just gives you a break from the house, with the situation that you in.... It made me feel good. Relaxed and I enjoy music.... Because it's something that people need as another experience then just focusing on themselves and their illness. I think that it's a very positive thing to do.

The above excerpts illustrate how the BMGIM process allowed this participant to redirect her concentration from her difficult real-life circumstances to the imagery which she visualised during her BMGIM music travels. This imagery, in turn, made her feel good and relaxed.

Participant 13 participated in five BMGIM sessions, all of which were held in her home during her chemotherapy treatment period. She also experienced a number of adverse effects of chemotherapy, such as diarrhoea and fatigue. Emotionally, she experienced feelings of sadness, worry and depression. These symptoms were experienced intermittently throughout her sixweek treatment period. She talked a lot about these struggles during the preludes of her BMGIM sessions. She also experienced a sense of loss of her dignity as captured by music therapist A in the summary form for session 2 with participant 13:

Patient presented as emotional, and spoke of how she felt that the illness was taking control of her. She said she feels drained and tired and was feeling particularly emotionally low because of a sense of loss of dignity due to the nature of the diarrhoea...

During her interview, participant 13 spoke of her experience of the BMGIM sessions:

I think these sessions were really very good. Having to concentrate on music and just forgetting everything about what is happening and concentrating on the music. You know the music was such that it elevated your mood...

... And the answer was also in forgetting about what is it that you are going through and allowing something else to dominate your life like music, only concentrating on it and forgetting everything else. It made you come up with an answer to say, this is for now but there's something that is going to be beautiful after this and which may even last much more longer then what ever one was experiencing.

Thus, participant 13 found that through the BMGIM process she was able to redirect her concentration from her difficult real-life circumstances to the music which was played during each BMGIM session. This resulted in an elevated mood and a sense of reassurance that her life would be beautiful after the difficult period passed.

Also with respect to the development of coping strategies, the session summary forms and interview transcripts revealed that several of the participants in this study found that the imagery experienced during their BMGIM music travels transported them to a different space.

Participant 19 participated in only one BMGIM session. Upon commencement of her medical treatment, she was hospitalised due to ill health. Thereafter, during her stay at the cancer interim home, she experienced severe tiredness, pain due to radiation burns, and reduced mobility due to swollen feet. These adverse effects of radiotherapy negatively influenced her self-image. This is evident in the following excerpt taken from the session summary form completed during her first (and only) BMGIM session by music therapist B:

She feels glad she is at the centre (cancer interim home), as it means she can be on the road to recovery, but it has also been hectic, and she misses her family a lot. She feels she shouldn't belong here where it's all about sickness, at home the focus is not only on illness.

Last few weeks at the centre have been incredibly difficult and overwhelming, her feet have swollen as a reaction to the machine, the radiation has caused her a lot of pain, when she first arrived, she was admitted into hospital – she was completely confused, had a blood transfusion etc etc – difficult that every week there seems to be something new in her symptoms, never knows what to expect.... She really wants to be able to make the best of her time at the centre, to not allow it to get her down. She feels sometimes that, with her sickness, she is losing the 'T.....' (mentioned her name) she really is, and does not want to let that happen.

During this participant's music travel, the following imagery was captured on the session summary form by the music therapist:

A very big space, children running around, she felt no pain, happy smiling, this is where I should be, big house, pool, felt the smell of rain, in the distance tall big trees, very green — they were on other side of the water. Were people across the water, under the trees — looked relaxed as if they were on holiday, smelt sand, wind blowing. As if she saw herself in the imagery, but did not embody this self — was an onlooker. Described herself as a little shorter than she really is, looking very beautiful, dressed in beautiful clothes she didn't recognise as her own — shorts and a big, white T-shirt....

During the postlude, the above imagery was discussed. With the guidance of the music therapist, the participant drew meaning and insight from the imagery. The following excerpt from the session summary form describes this process:

... kept speaking about the beauty of the travel, how beautiful everything was, how happy she was, and all the people there were also so happy. She noted how this journey had brought her

right out of this place to a space where she didn't feel ill at all – where she could just be the real T..... (mentioned her name) and she was so beautiful. We spoke about how big and expansive the space was – so much to take in and look at compared to the confines of being ill and having to come away from home and her children. Spoke about her looking at things from her bedroom window perhaps being likened to how she can hold onto the feeling of peace and space she had felt, even while she is confined in this place with cancer...

Furthermore, the music therapist noted the following in the session summary form:

Very strong sense of feeling happy and at peace – she never stopped smiling, through the journey and afterwards – held onto this strong emotional response rather than exploring other aspects of journey in depth.

Thus, participant 19 experienced the music travel to take her away from the place of her real-life circumstances to a space where she could be her real self, whom she described as beautiful. Also, the expansiveness of the space in her imagery took her away from the confines she was experiencing at that time. Because she had swollen feet which restricted her movement, and because she had stayed at the cancer interim home for the full duration of her medical treatment, she experienced a claustrophobic sense of being confined to one place. The adverse effects of radiotherapy changed her body and negatively influenced her body image. The music travel phase of her one and only BMGIM session transported her to a space where she did not feel ill, where she felt beautiful, and where she experienced feelings of peace, happiness and space.

Participant 11, during the music travel of session 5, found herself in a space where she could observe, see, stop, sit and enjoy. During the course of her BMGIM sessions, this participant struggled within herself to let go of her responsibilities as the matriarch of her family. During her fifth BMGIM session, her music therapist (therapist B) documented the following on the session summary form:

... Then she went for a walk in the berg, noticing and feeling waterfalls and streams, moss and dead trees lying in the water. She said she'd walked along a long path, but now saw beyond, a vastness of mountains and fields, with the sun shining on some of them, and eventually went and sat down on a bench with her partner beside a dam – she said it felt like being snug in a nest.

During the postlude of the same session, this participant and her music therapist discussed this imagery. The following was documented in the session summary form (for session 5) by the music therapist:

... that she had walked a long path through life already, but was now in a space where she could rest, just observe, see, stop wherever she liked, sit on a bench and just enjoy the feeling — like being nestled in a bird's nest. Discussed how even her family that she loved so much left her feeling tired sometimes, and she needed to be able to allow others to do things more so that she could rest.

Thus, this participant's music travel in BMGIM session 5 allowed her to move from a place where she struggled to let go of her responsibilities to a space where she experienced the serenity of just being in a restful space.

Overall, the BMGIM sessions allowed the abovementioned participants to be transported to a space where they could experience their illness in a more positive way. This, in turn, left them feeling calm, restful, peaceful and happy.

## 6.3.2.2 Experiencing a sense of relief

In each of the BMGIM sessions, the participant concerned engaged in a therapeutic conversation with the music therapist. During these conversations, participants could share their life experiences or challenges with the music therapist. This process was therapeutic in itself.

Participant 16 expressed the following during the interview when describing her experience of the BMGIM sessions:

Because I got a chance to voice out what I was worrying about and what I was expecting and I'm still expecting. My wishes so I think it helped me because I voice out what I have in my heart and in my mind.... As I said I got the chance to voice out. Sometimes if you don't get the chance to voice out to one another what you are worrying about it is oppressing you, or it give you more stress...

This excerpt shows that the participant found opportunities during the BMGIM sessions to speak about her worries and her wishes. When she was asked how she felt after expressing her worries, she said the following:

I feel relieved from expressing what is in me... Because I wasn't sleep (She wasn't sleeping well) but after the therapy I felt relieved. When I go to bed I just sleep and forget everything.

The participant spoke of how worries can become burdens and cause stress. She also spoke of how she experienced a sense of relief after speaking about her concerns. This sense of relief resulted in improved rest and sleep. The implication of this is that the emotional relief brought about through the BMGIM sessions cascaded to improve the patient's physical wellbeing as well.

Participant 13 also experienced a sense of relief as a result of speaking about her feelings during the BMGIM sessions. She reported that speaking to the therapist helped her feel that the emotional burden of her illness had been reduced a little. This empowered her to look towards the future with a more positive attitude. During the interview, she said the following about her BMGIM experience:

You know when I say healing, sometimes like most of the time because I was home, you know sick from the side effects of chemo and being at home on your own. You end up being depressed from the side effects and you know just not being able to understand what is going on in your body and at the later, during the course of the week you are able to talk to somebody about it. You know that idea of talking and venting it made me feel, I felt that the burden is becoming a little bit reduced and through that process you end up coming up with a positive attitude to say I shouldn't let these side effects or what I am experiencing put me down. Ja, that is why I think they were healing

... the ability to connect and the ability to share, you know to talk to somebody and work out how can you get out of that. What is it that you want to see happening...

These excerpts show that participant 13 found the sessions to provide her with an opportunity to speak about her real-life experience of living with cancer and the side-effects of its treatment. This gave her a sense of relief, which gave her the courage to think more positively.



### 6.3.2.3 Co-existing with cancer and its effects

Through their BMGIM sessions, some of the participants experienced a change in perspective regarding cancer's effect on their lives.

As explained above, participant 19 only took part in one BMGIM session. During her interview, she said the following:

... it shifted my mind a little from the disease, the illness. Then I start thinking about something else different.... I was thinking about my life, my family, the way I want to live

When asked about the way she had thought about her illness prior to the commencement of her BMGIM sessions, she responded:

... I was only thinking about I have to get better or I'll die. Most of the time I was thinking about that. And if it was not death, I was thinking ok I have to get healthy but **when** (said louder) is it really going to happen? Am I really going to be fine again?

She then described how the sessions had changed her perspective on her illness:

Yes, it changed my mind set. The music calmed me down and said no there's still hope.

There's still life.... Illness doesn't mean death only.... and try to recover and focus.... after the session I started taking life differently. Like if I was feeling a little bit tired I'd push myself. No I need to get up, I need to get up. My mind set changed.....Yes, yes. I have to push myself, have the medication then I can be fine.

From the excerpts above, it is clear that the BMGIM process helped this participant to change her perspective from one of cancer meaning either life or death, to one of hope and courage that motivated her to do more to recover and to focus on living. Thus, she began to take back control of her life.

Participant 15 completed all five of her scheduled BMGIM sessions. During her third session, she visualized imagery of a family holiday in Durban. The following summary of that music travel experience was captured via the session summary form by music therapist A:

Family take a trip to Durban – running up and down on the sand, into the water, walking at the beach, had a braai. See the buildings and cars, taking photos of the family, see Shaka

Marine, the hotel, place where spices are sold, saw the big Stadium, climbed to the top to see the whole of Durban – so nice to see the city and the sea.

Insights gained through this imagery were discussed between the participant and the music therapist. The therapist captured the following in the session summary form:

She related the symbolism of standing on top of the stadium to looking at her life from different perspectives and seeing the bigger picture – that many aspects co-exist to form the 'view' – the larger picture of her life... 'The patient talked about taking the imagery from this session as a source of strength and would continue to reflect on the symbols and imagery from the music journey.

Two of the main challenges which participant 15 experienced during her illness, and during her stay at the cancer interim home, were a feeling of uncertainty with regards to the future and feelings of loneliness as she was away from her family. Through the abovementioned imagery, the participant developed a new perspective on living with cancer. The view from the top of the stadium gave her a sense of the bigger picture in life, and a reminder that in life many different moments co-exist to create the larger experience of life. Thus, the experience of living with cancer became just one part of the bigger picture of her life.

Thus, as a result of their BMGIM therapy, participants 15 and 19 no longer viewed cancer and its effects as taking control of their lives. Rather, they realised that they had the strength to take back control of their own lives, of which cancer was just one part. In other words, these participants began to view and approach their real-life circumstances differently.

Overall, certain participants in this study found the BMGIM sessions to help them cope better with their real-life circumstances by re-directing their concentration, transporting them to an alternative space, allowing them to voice their real-life circumstances, or bringing about a change in their perspectives. The various coping strategies developed by the patients allowed them to co-exist with their illness and the adverse effects of the medical treatment they were undergoing. Co-existing with illness also emerged strongly through the music travel imagery in which the juxtaposition of contrasting images (see section 6.3.3 for further details) contributed to the meaning of the music travels, and gave them meaning which led to important insights for the patients.



### 6.3.3 Juxtaposition of images and their meaning

During their BMGIM sessions, the participants in this study visualised imagery that they were able to relate, metaphorically, to their real-life circumstances. As their music travels progressed, some of the participants' imagery tended to change to reflect alternate concepts that could also be related to their real-life circumstances. These sets of seemingly contrasting images were conceptualized as juxtapositions. The categories and subcategories of the constituent, *Juxtaposition of images and their meaning* are shown in Table 6.7.

Table 6.7 Juxtaposition of images and their meaning - categories and sub-categories

CONSTITUENT	CATEGORY	SUB-CATEGORY
Juxtaposition of images and their meaning	Opportunities and challenges	Surviving cancer  Dealing with uncertainty

# 6.3.3.1 Opportunities and challenges

Participant 18, during her music travel in session 2, visualised the following imagery (as documented in the session summary form by music therapist B):

... Then in her house, sitting down watching TV – was good to be there. Then it suddenly became very dark in her house – she couldn't see anything and was very afraid. She called her daughter and her daughter brought a candle. With the candle she lit her whole house so that it was bright again and felt good.

During the postlude of that session, this imagery was discussed. With the guidance of the music therapist, the participant found meaning in the contrasting (juxtaposed) images of darkness and light. The following was documented during the postlude of session 2 by the music therapist: Focused on how her house was lit up – her daughter only brought a candle, but she lit up her house so brightly as if the sun was out and shining down on it – very strong light. Spoke about how good that was, took her fear away, her house was once more a good place to be in. Kept asking why her house – her own house became dark. Linked images from journey to her life - perhaps this was an image of cancer invading her own body – bringing in fear – and darkness/unknown..... What was most strong was the image of her house lit up – spoke about what that small candle might stand for – she said happiness, the light was happiness –

her daughter was one person who could bring her happiness – even though she just brought a little happiness, this was enough to brighten the whole house. Spoke about how the participant is able to take small happy moments to get the strength to brighten her whole life.

Thus, by thinking of her imagery as a juxtaposition of contrasting ideas, the participant saw the darkness as an image of cancer invading her body. The darkness was then replaced with light from a small candle which represented the small, happy moments in life. She derived strength from the image of this small candle, and made a decision to allow happy moments to brighten up her life.

Similarly, participant 12 derived strength from imagery visualised during the music travel in session 2. Music therapist B captured a record of this imagery as follows:

...then saw waterfall flowing down, then was going on a boat out to sea – exciting, exhilarating but also a little frightening – big waves, unsure where ship was going, but ship then came back into harbour and it was OK.

Through postlude discussions between the participant and the music therapist, the participant unearthed the symbolism of the above imagery. The following description was captured by the music therapist using the session summary form:

... the boat, which had to travel through the cliff the waterfalls fell over (even though these had seemed to be separate images), spoke a lot about the ship navigating through waves and churning water – some fear and excitement – couldn't get around the cliffs and rough sea, difficult, but also a sense of adventure – related this to getting through each day with cancer, light as well gave a sense that there was light – so there were beautiful things in every day to focus on, rather than the rough waves, or busyness of people in the park and so on

Using juxtaposition, the participant likened the imagery of navigating through rough seas to getting through each day with cancer; the light which was sensed was likened to the beautiful things in everyday life which he could focus on instead of the cancer. The insight gained through this session was reinforced with the guidance of the music therapist, who recorded the following:

... he had within him strength to face all the trials he faced, and that there were beautiful things in every day – suggesting he focus on those things that are beautiful, peaceful despite all the roughness, the cliffs, the churning water that surrounds him and he can't get rid of.

Thus, participant 12 derived strength through the imagery visualised in BMGIM session 2.

Participant 13, in her second session, visualised a sunset in a desert. The following was recorded by music therapist A in the summary form for that session:

... dessert, absolutely quiet, watching a sunset in the middle of the day (orange yellowish)..

This imagery was discussed during the postlude. The discussion was recorded by the therapist as follows:

The post talk focused mainly on patient reflecting on the sunset and how it was to be in the desert like place. To be captivated by a sunset in such an arid environment... The patient was able to reflect on the idea of the juxtaposition of the beauty of the sunset within the arid desert place as likened to finding places and moments of beauty within her own personal desert experience.

Using the concept of juxtaposition, participant 13 likened the desert to her real life experience of cancer as a desert-like experience. The beautiful sunset, on the other hand, was likened to places and moments of beauty along the way. The visualisation of these contrasting images encouraged this participant to find the strength to identify and enjoy moments of beauty within her experience of cancer.

By juxtaposing their contrasting imagery, the participants identified both the challenges and the opportunities in their real-life circumstances. It was through this juxtaposition that the participants could find meaning and understanding with respect to their own imagery as well as meaning in having to co-exist with an illness.

### **6.3.4** Experience of physical wellbeing

The participants in this study found their BMGIM sessions to have a positive effect on their physical wellbeing. Through their sessions, the participants experienced physical relaxation, improved sleep patterns and a decreased perception of pain. During the preludes of the various



BMGIM sessions, the participants usually expressed anxieties or uncertainties regarding their health condition. The presence of their cancer, along with the adverse effects of their chemo-or radiotherapy, had introduced a certain level of tension into their real-life situations. Through the BMGIM process, some of the participants experienced physical relaxation and a release of tension. The categories and subcategories for this constituent, i.e. *Experience of physical wellbeing*, are summarized in Table 6.8.

Table 6.8 Experience of physical wellbeing - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Experience of physical	Experiencing a sense of	Relaxation
wellbeing	calmness	Improved sleep patterns
		Decreased perception of pain

### 6.3.4.1 Experiencing a sense of calmness

"Is the treatment working?"

This question was posed by participant 1 as recorded in the summary form for her fourth BMGIM session by music therapist A. It was this question and the pain and discomfort caused by burns due to her radiotherapy which were a source of worry and uncertainty for this participant. Following the prelude where the above question was posed, the participant experienced a very restful music travel. During the postlude the music therapist recorded the following in the session summary form:

She spoke about feeling free and being at peace. She said the 'rusteloosheid is weg' ["restlessness is gone"]. She said she feels that she can cope. She spoke about mind and body relaxation and how this enabled her to relax.

Once again, in the music travel of session 5, this participant experienced physical relaxation. During the postlude of that session the following was recorded in the session summary form by the music therapist:

... She felt relaxed – "Ontspanne". ["relaxed"]

It is also important to note that besides experiencing physical relaxation, this participant also expressed that she felt she could cope.

A similar response was seen in participant 15. She shared her real-life experience of cancer with me during the interview. She also shared her experience of the BMGIM sessions. She said the following:

At first I felt so lonely being here. By listening to this music I imagined myself being with my family again, my family and friends. I imagined them, all them welcoming me home after my treatment, encouraging me to become strong, keep it up. It gave me the positive thoughts. It gave me to become calm and relaxed and become strong and courageous.

Thus, this participant also experienced the calming and relaxing effects of the BMGIM sessions and found these to bring about strength and courage within herself.

Likewise, participant 12 found the BMGIM sessions to have a relaxing effect. He said the following during his interview:

They did help in relaxing me and getting my mind right.

In analysing the session summary forms, I noticed that as the BMGIM sessions progressed, this participant's demeanour during the sessions seemed to change positively. During the music travels of sessions 1, 2 and 3, he visualised imagery such as sitting on the edge of a cliff, and navigating through waves, churning water, and dark stormy clouds. These images created a small level of tension in the participant. However, these experiences of tension diminished over time until, by sessions 4 and 5, he felt entirely peaceful and calm with no tension whatsoever. The music therapist recorded the following in the summary form for session 4:

... his whole body appeared very calm/peaceful throughout whole journey.

This physical relaxation led to a change in his perspective on his real-life situations, after his fifth BMGIM session, he made a conscious decision to be more patient and accepting of his circumstances. During his interview, participant 12 reported that he had experienced improved sleep patterns following his BMGIM therapy:

So I think the sessions have been helpful. I think perhaps I've slept a bit better than I was. Because if I go to sleep then if I wake up after midnight then it's tickets. And it's been like that for years. And I've actually been waking up at three, four in the morning instead of the normal one in the morning. So I guess I've been sleeping better. Perhaps this has helped me relax a little bit....

Participant 14, in her interview, also reported that she had slept better due to the sense of relief that she experienced through the BMGIM:

... I remember telling her (music therapist) that everything I did or I saw in those images, they make me strong and I'm, sometimes I'm happy but sometimes I was sad. I didn't know, it was one time when I felt that, as if I abandoned my child, the one I'm staying with. But I talked, we talked when I went home, and everything went well and I came back and I slept well.

This excerpt shows how the BMGIM sessions empowered this participant to be open with her child about her worries. The two of them spoke over one weekend, and the participant was able to sleep well when she returned to the cancer interim home the following week.

Similarly, participant 16 also experienced a sense of relief which resulted in improved sleep patterns. She said the following during her interview:

I can say that is the gift which I got. Because I wasn't sleep (She wasn't sleeping well) but after the therapy I felt relieved. When I go to bed I just sleep and forget everything.

In analysing the session summary forms and interview transcripts, it emerged that some of the participants had reported an experience of decreased pain perception during their BMGIM sessions.

Participant 12, as recorded by music therapist B, reported feeling no pain during his imagery of walking up a hill during his first BMGIM session:

... walking up hill but he felt no pain...

Participant 14 also experienced a decreased perception of pain during her BMGIM sessions. In real life, this participant had painful knees and experienced difficulty in walking. She used a walking aid to assist her mobility. However, during her second BMGIM session, music therapist A recorded the following:

After a long period of quietness she spoke about experiencing her body being free of pain.

Towards the end of the second track she experienced herself as walking... Patient deeply relaxed during the journey. Experienced the music as soothing while she was walking.

During the postlude, her therapist recorded the following:

Patient reflected on experiencing herself pain free, and being able to walk freely during the journey. She spoke about her difficulty in walking, and how she longs to walk again one day.

During the prelude of session 4, this participant shared with the music therapist that she was feeling sore and uncomfortable following her radiation treatment. After the music travel in that session, she said the following:

The pain is gone. I'm relaxed...

Once again, in the prelude of session 5, she shared her experience of pain and discomfort due to radiation burns. After the music travel in that session, she said the following:

I can go to sleep and rest – I always feel pain and can't rest – I feel that I can rest now – I feel peaceful.

During her unstructured interview, participant 1 also shared her experience of decreased pain perception during her BMGIM sessions:

... you don't even think about pain. You don't think about pain, no, there's no pain there.

Thus, as described by some of the participants, a sense of improved physical wellbeing following the BMGIM sessions led to a sense of relief which, in turn, resulted in improved sleep patterns. Participants also perceived their pain to be reduced during the BMGIM sessions themselves. Furthermore, a sense of improved physical wellbeing led to some participants' taking back control of their real-life circumstances as they experienced increased strength and courage. Some of the participants developed better ways of coping with their circumstances due to the relaxing and calming effects of the BMGIM sessions.

### 6.3.5 Experience of psychological wellbeing

Improved psychological wellbeing was experienced by the participants in this study in a variety of ways. The categories and sub-categories for the constituent called *Experience of psychological wellbeing* are presented in Table 6.9.



Table 6.9 Experience of psychological wellbeing - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Experience of	Gaining a sense of hope	Give life
psychological wellbeing		Forward movement
	Gaining a sense of wellbeing	Strengthening
		Positive attitude
		Empowerment
		Support
		Freedom
	Gaining a sense of strength	Nurturing
	Gaining a sense of	Nourishment
	rejuvenation	

### 6.3.5.1 Gaining a sense of hope

In analysing the collected qualitative data, I found that certain images which participants visualised during their music travels portrayed a sense of life, which gave the participants hope.

Participant 22, during the music travel phase of her second session visualised an image of flowers. Although this was not the only image which she saw during this session, it seemed to be quite prominent to her considering the mandala which she drew for that session depicted only a flower. Music therapist A recorded the following during that session:

The mandala, entitled "Hope", depicts a flower in the center of the mandala. During the prelude she also wrote: "Ready to bloom again!!" at the bottom of the mandala, coming out of a question I asked her during the post talk. I asked her to imagine that the flower represented to her and asked her what the flower, as her, would say right now. That was her response. I asked what her response to that was and she said "go for it". During the postlude the participant further elaborated that she was ready to grow again.

With the guidance of the music therapist, through the imagery of the flower, she saw new life and new opportunities whereby she felt she could grow again. Music therapist A documented the following during the postlude of BMGIM session 2:

Patient also spoke about being ready to grow again. That she could imagine possibilities for her future, that she has been staying in her safe space and not reaching out to others, but that

now she feels ready to reach and develop deeper connections with people. She spoke about needing to move out of her box and that she feels ready to move forward.

Thus, the image of the flower imparted a sense of life and hope.

Similarly, during her music travel in BMGIM session 1, Participant 15 visualised an image of trees which she described as green, moving and tall, with big branches, shaking. In her mandala she drew trees with big leaves, and during the postlude of that session, music therapist A documented the following:

She also reflected on how the tress moved and saw them as signs of life.

The participant then related this imagery to her real life circumstances. The following was recorded by music therapist A in the session summary form:

The patient focused on the last image as bringing hope and she felt that she should focus on the fact that the clouds are rolling away and that she can have life, just as the trees as the symbolism she gave to the movement of the trees.

From the above, it is clear that through the BMGIM process, certain participants visualised images of flowers and trees, which conveyed a sense of life. Through the guidance of the music therapists, the participants were able to relate such imagery and its symbolism to their own real-life circumstances. Furthermore, the sense of life imparted by the imagery of flowers and trees gave these participants hope for the future.

An increased sense of hope was also suggested by imagery that depicted some sort of 'moving forward'. This movement was usually orientated towards the future. The participants saw these images as being symbolic of something to look forward to, giving them a sense of hope for the future.

The idea of moving forward after her cancer treatment, which emerged during her BMGIM sessions, was embraced by participant 16 who said the following in her interview:

... because I've got a chance to imagine my future, to imagine when I go out from the hospital that is my life will be the same? Or I'm going to change the lifestyle? Something like that, so some where somehow I got some answers for my questions...

...I feel relieved because I was able to see I still have some steps to take in life and I mustn't underestimate myself saying that I cannot do this because I had cancer, something like that... ...Because when the music was busy playing, I was just seeing my plans moving. I started to realise I can still go forward with my plans. Everything which I was planning before, it can still happen. I was seeing my plans going forward in the therapy...

In the last excerpt above, the participant was making reference to her plans of applying to become a counsellor in her community. By the end of her BMGIM therapy sessions, she demonstrated hope and the determination to move forward with these plans.

Participant 13 also linked the imagery that she visualised during the music travel of session 5 to a sense of moving forward. During the postlude of that session she reflects on the imagery of the fire in a barn. Music therapist A recorded the following insights in the session summary form:

...the fire in the barn with the distressed sound of the horses made her think about her anxiety, fear and uncertainty and yet when the horse carried her outside she felt the fresh crisp air. Again she related this to her future.

As the participant continued to reflect on this imagery, the music therapist noted the following:

The patient expressed feeling a sense of hope about her future

From these excerpts it is clear that participant 13 was actively reflecting on her anxiety, fear and uncertainty during the BMGIM process. During the prelude of session 5, she spoke of feeling very tired, and complained that her legs had begun to swell, which was a new side effect of her chemotherapy. This contributed to her feelings of anxiety, fear and uncertainty. Through the imagery that she visualised during the music travel phase of session 5, she gained a sense of hope for recovery in the future. This was evidenced by the mandala that she drew during this session which was entitled 'My profound journey to recovery'. Furthermore, when asked in her unstructured interview what meaning the sessions had generated in her life, she responded as follows:

That things were always good and they going to be good going forward

All of the above creates a sense of participant 13 moving forward, and suggests that she found a measure of hope through the BMGIM sessions.

### 6.3.5.2 Gaining a sense of wellbeing

In studying the session summary forms and the interview transcripts, I was able to gain a sense of the images that engendered a sense of strength and wellbeing in the participants.

In her music travel of BMGIM session 1, participant 5 recalled and talked about her husband's death. The following was documented in the session summary by music therapist A:

Towards the end of the journey she expressed discomfort with the music and said that she felt

sad which led to her to recall and talk about husband's death.

The music therapist noted the following during the postlude of the same session:

Patient reflected on her sadness during the journey but how recalling her husband's strength during his illness is what she can draw from at this time for herself.

During the postlude, she reflected on the sadness she had felt during her travel, but also recalled the strength her husband had shown during his illness. She identified this strength as something from which she could draw strength for herself during her own illness.

Participant 14, in the postlude of session 4, discussed imagery of her mother that she had "seen" during the music travel. Music therapist A documented the following in the session summary form:

She then went on to share that she was reminded of how she used to complain to her mother about life being unfair, and her not having a profession – and her mother would say "Baby girl, God is great ...you will reach wherever you need to go and you'll remember me'. She then said I remember her; I remember her words – my life is perfect – no complications Insights into this imagery were also recorded by the music therapist as follows:

The patient reflected on feeling more relaxed on what the words of her mother brought her, as a source of strength and encouragement

Thus, the imagery and words of her mother became for participant 14 a source of strength - especially at a time when she was experiencing tiredness and pain due to radiation burns.

Similarly, participant 13 also gained a sense of strength from the imagery that she visualised during the music travel phase of BMGIM session 2. During this session, the participant experienced both physical and emotional challenges due to her cancer and the effects of its treatment. The following discussion during the prelude of session 2 was documented by music therapist A:

Patient presented as emotional, and spoke of how she felt that the illness was taking control of her. She said she feels drained and tired and was feeling particularly emotionally low because of a sense of loss of dignity due to the nature of the diarrhoea. In general, she is finding it very difficult to manage this and is considering staying at home for the week until there is an improvement. The next round of chemo was due to begin the next day.

However, the following was documented by the music therapist during the music travel phase of that session:

Experienced herself dancing, dancing excitedly, wearing a beautiful dress, she was glowing, she was doing something she longed to do and then said "The fun must never stop", a lot people joined her on the dance floor, synchrony although everyone dancing in different directions, excitement, people glowing, harmony

This imagery was discussed between the participant and the therapist during the postlude. The therapist recorded the following:

She then said she felt excited during the dancing – felt very good about herself during the dance

As the imagery was discussed further, the participant linked the imagery of her dancing to a notion of her "stronger self" who was in control of her body. The following was documented by the music therapist in this regard:

... to allow herself to imagine her free stronger self that danced as being in control of her body during a time when she felt that the illness was taking control of her.

Collectively, the above excerpts from the BMGIM summaries and the interviews of participants 5, 13 and 14 illustrate how certain participants drew strength from the imagery that they visualised during their music travels.

Participant 18 participated in three BMGIM sessions. She stayed at the cancer interim home for the entire duration of her medical treatment. During the prelude of her first session, she expressed that she felt alone and that she was worried about her children. As her medical treatment progressed, she experienced tiredness and severe burns due to the radiotherapy. However, during her post-BMGIM-therapy interview she said the following:

I was worried before. I nearly wanted to leave everything. But I said let me go, take me. If I die it's okay. I even say to my children, don't worry about me, if I die it's okay. Because this thing came after my husband's death. Then I was still very, very sad, unhappy. Then I said well it's okay, let me just go with your father. I will follow him. But now no, no, no, no, I'm alright, I'm alright (and everything is going to be alright). And everything is going to be alright. I see my future, very, very bright

This excerpt clearly shows that this participant experienced a shift during her BMGIM therapy from a place where she had a very unhappy disposition to one where she had regained a far more positive attitude towards her future. During her interview she made reference to a particular set of images that she had visualised during one of her BMGIM sessions, and related the meaning of that imagery to her real-life circumstances:

I feel there is some meaning because when I saw this light in the rooms that means that I'm healed and that means everything will go alright. I mean it went alright from the beginning till this time. And really I see my future now there is a light. There is a light in my future.

The insert demonstrates how the participant gained a positive outlook to her real life circumstance through the imagery of light in her BMGIM session. In terms of wellbeing we see how through the BMGIM sessions a shift takes place within the participants which enables them to think in a more positive way despite their challenging real life circumstances.

Some participants reported that the BMGIM process had empowered them to take necessary action to resolve certain challenging circumstances that they had found themselves in.

Participant 1, during the prelude of BMGIM session 3, expressed the following (recorded in the session summary form by music therapist A):

Patient talked about the need to stay positive as it was easy in that environment to lose courage and become negative. She spoke again about being drained by other patients and

was trying to find the balance between being there for others but also taking time for herself to rest

In this excerpt, participant 1 described the challenges that she was experiencing in the interim cancer home environment. During the prelude of session 2, she had also verbalised feeling drained and drawn into the depression of other patients. The mandala which she drew after her music travel in session 3 was described by the music therapist as follows:

Picture of a wall, grey clouds and a table on the other side of the wall with coffee and cookies, flowers on the side

During the postlude of that session, the music therapist documented the following insights:
...the wall symbolised the need for her to distance herself for her own self—care; the table
with the coffee and cookies symbolised for her a space which feeds and nurtures her...

After discussion of this imagery with the music therapist, the participant reached a point of resolution. The music therapist noted the following in the session summary:

What the patient seemed to take away from this session was a resolve to not feel guilty about taking time out for herself to rest and reflect

Thus, through the BMGIM sessions, with guidance from the music therapist, this participant found meaning in the imagery that she had visualised during her music travels. Furthermore, through the insight gained during the BMGIM process, she made a resolution to improve her real-life circumstances. It is important to note here that the participant did, in fact, go on to take appropriate action in order to stick to her resolution. The following week (i.e. in BMGIM session 4), music therapist A documented the following during the session prelude:

Patient talked about having moved rooms since the previous session and that she was experiencing some relief because of this. We referred to the "Wall" from her previous session as being a distancing factor, which she had acted on

Thus, it is clear that through her BMGIM therapy, participant 1 was enabled to deal with her challenges in a constructive way which led to a shift from a drained state to a relieved and liberated state.

Participant 3, who also stayed at the cancer interim home during her medical treatment, also experienced empowerment during one of her BMGIM sessions. Her being away from home and work during her treatment period had created a difficult dynamic between the participant and her husband. During the prelude of session 1, she talked about the situation. Music therapist A recorded the following:

Patient came into the room very distressed saying that she was not feeling well and that she and her husband were experiencing difficulty. He was not calling her and this had left her feeling anxious and emotional. She was tearful as she spoke

However, during the postlude of the same session, after the music travel phase, the music therapist recorded the following:

Patient reflected at an emotional level in terms of how her emotions and anxiety levels had shifted during the music listening. She felt that the session had given her peace to continue into the day. The insight that she gained was that what she was looking for in the garden which she could not find in the journey, was actually the fact that she was looking for peace and she had experienced it through the journey. During the after talk (postlude) she used words such as "rustig" ["quiet" / "tranquil"], "dit het my kalmeer" ["it calmed be down"], "voel asof ek 'n ander mens is" ["I feel like a new person"], "ek het nou die krag om my man te bel" ["I now have the strength to phone my husband"].

This excerpt shows that the participant experienced a sense of peace through the imagery that she visualised during the music travel. This sense of peace enabled her to feel she had the energy to call her husband. What comes through very strongly in her experience is a shift from feeling anxious, distressed and emotional about a particular circumstance to feeling at peace, calm and empowered to face it head-on.

Thus, through the BMGIM process, both participants 1 and 3 experienced a shift from anxiety to peace with respect to their particular circumstances. This shift empowered them to respond to their situations in constructive ways.

Another positive effect of the BMGIM that was experienced by some of the participants in this study was a feeling of being supported in their struggles. This sense emerged as a result of certain imagery that was visualised during their music travels.

In this regard, participant 2 said the following during her unstructured interview:

Ja, jy weet, die kanker bietjie ligter word. Dit is nie meer daai swaar gevoel wat jy dra alleen nie... Hmm ... hoe sal ek se. [pause] Ek weet nie om hoe dit vir jou te stel nie. [pause] Maar dit definitief hier binne mak dit vir jou iets ligter wat dit nie te swaar is nie. [Translation: Yes, you know, the cancer has become a bit lighter. It is no longer that heavy feeling that you need to carry on your own ...Hmm ...how can I put it ...[pause] i do not know how to put it to you ... [pause] ... but definetely here on the inside it makes something lighter that is not too heavy].

Here, the participant does not make reference to any particular imagery, but the BMGIM process as a whole led her to feel that she did not bear the load of her cancer alone. She therefore experienced a sense of support.

Similarly, participant 13 in BMGIM session 5 also experienced a sense of support through the imagery that she visualised in her music travel. The following story, narrated by the participant and captured in the session summary by music therapist A, demonstrates imagery of support: There were horses in a barn. One specific horse that paid attention to me. Walked towards me, rubbed itself against me, lightly brushing me. Brown horse with white markings. Licking my face and interacting with me. Fire broke out, hay was burning. The other horses distressed and ran away. Fire stopped at the horse, I climbed onto the horse. It was a windmill, farming place – no houses nearby – house close to the barn, burnt completely. Mountainous place, green trees, cool wind blowing, water. Horse took me into the water – water not becoming deep...shallower. We crossed the water. It was like a dam in the farmlands. I was afraid to go into the water but then I relaxed. I arrived at a huge house, palace, surrounded by big walls...as we were riding past it the horse stopped and I gazed at its beauty. The gates opened – the horse moved on. Somebody was communicating with it. The horse just moved inside. Beautiful yard – a lot of vegetation – green trees on the other side. The main door opened – voice on the inside said "you are most welcome to come in". I climbed off the horse and took slow steps -....

In this story (imagery), a horse offered the participant protection and support by carrying her out of a place of danger into the crisp air and then further through nature. They crossed a river. The participant was afraid, but relaxed afterwards. The horse took her further, to a palace where

she found rejuvenation. During this music travel she was never alone, but rather experienced the constant support of the horse until she was left at the doorstep of the palace which symbolised hope.

Participant 15, during BMGIM session 3, visualised the following imagery during the music travel:

Saw her family praying and thanking God for her health and her recovery. They were celebrating her coming back from the hospital. Family and friends at home. Co-workers also there and are also rejoicing. "They encouraged me to be strong. They're saying at the end, 'you're a survivor'.... She saw herself celebrating with them. Eating cake

Through this imagery, participant 15 experienced a sense of community, support, and acceptance back into the community. Furthermore, this imagery included the concepts of health, recovery, and a sense of wellbeing.

Participants 2, 13 and 15 all experienced adverse side effects of the medical treatment which they were undergoing. These side effects included nausea, fatigue, pain, diarrhoea and depression. Participants 2 and 15 stayed at the cancer interim home (away from their loved ones) during their treatment periods. Participant 13, on the other hand, stayed at home and tried to protect her loved ones by keeping her suffering to herself. The imagery visualised by all of these participants during their music travels led to a reassurance that they were not alone in their struggles, and left them with a sense of being supported.

During their music travels, certain participants experienced feelings of freedom. Participant 1, for instance, visualised several images which symbolised freedom to her. In fact, freedom emerged as a common theme in several of her sessions. In session 1, she experienced herself flying, dancing and feeling free. Music therapist A recorded the following in the session summary:

Experienced feelings of freedom – wind, flying, dancing, water

In session 2, she visualised imagery of kites and balloons. These kites and balloons were present throughout the music travel and appeared in her mandala for that session, which she

entitled "Vry" (i.e. "free"). During the postlude of session 2, one of the concepts which the participant identified was freedom. Music therapist A documented the following:

The kites and balloons represented freedom for her, being filled with air to fly

Again in session 3, the participant saw herself dancing. That particular music travel also included imagery of water, wind and drifting clouds - all of which evoked in her a sense of freedom. Participant 1 was staying at the cancer interim home throughout her medical treatment and her BMGIM therapy. The needs that she felt at that time were to feel that she was not alone, and to find a balance between being there for others and taking time to rest. She described feelings of being alone in the midst of friends, and of being drained and drawn into the depression of the other patients in the interim home. She worked through these things during her first three BMGIM sessions. The feeling of freedom which she gained through these sessions may be related to her need to be released from an environment which she viewed as potentially negative, and where she felt she was being drained. The liberation that she ultimately found may be considered an improvement in her psychological wellbeing as she took steps to distance herself from this negative situation after her third BMGIM session.

Participant 8 also visualised imagery which depicted freedom. In session 3, she visualised a couple dancing, which was captured in the session summary by music therapist A:

Image from Black and White film – Ginger Rogers and Fred Astaire dancing – long flowing dress; Waltz...slow and gentle

The dancing couple appeared in her mandala for that session, which she entitled 'Natural freedom'. During the postlude of session 3, music therapist A documented the following:

During the post talk I asked the patient to identify which image she most connected with in her mandala. She selected the dancers and spoke about dance representing beauty and natural freedom.

Participant 8 went on to demonstrate further insight into this imagery of dance as follows:

The patient spoke about how the symbol of the dance and thinking about beauty and freedom relates to how she wants to move forward into this next chapter post radiation. She has much to look forward to and is wanting to experience freedom.



During her interview, this participant reflected on the dance imagery and said that she was dancing along with the black and white picture image. She further elaborated on how the imagery led to a feeling of wellbeing:

...today's wish would be wellbeing and getting back to normal. And dance is freedom and I see myself as being better and being, not being able to dance, but enjoying the freedom of dance that you get out of music.

This comment is quite significant as she places her feeling of freedom within the context of her real life. She had experienced unpredictable and loose bowel motion during the course of her medical treatment, which had led to difficult experiences and embarrassing moments. In the excerpt above she explains how, through the imagery of dance, she was able to experience and enjoy freedom even though at that stage she was unable to dance. Within the context of this imagery she saw dance as a symbol of strength.

### 6.3.5.3 Gaining a sense of strength

Some of the participants, in certain BMGIM sessions, experienced a sense of being strengthened when they visualised imagery of a nurturing nature.

Participant 18, in the music travel phase of her first BMGIM session, visualised imagery of her mother. Music therapist B noted the following in the session summary:

Then she noticed her mother coming towards her, wearing a torn dress. Her mother came up to her and held her hand, and they were both crying, while her mother asked her – what are you doing here?

This imagery was discussed during the postlude, during which music therapist B documented the following:

one insight was that her mother is there to hold her hand, in a place where she has no-one else who can offer her nurture.

It is important, at this juncture, to note that during the prelude this participant spoke of her departed husband. She also spoke of her three children and the challenges that she was experiencing with them. She was worried about them, and she felt alone without her husband. Her cancer had merely added to her already overwhelming worries. Within this real-life

context, it is understandable that the image of her mother offered this participant a sense of being nurtured at a time when she felt particularly adrift.

Participant 17 also experienced a sense of being nurtured through the imagery that she visualised during the music travel phase of her first BMGIM session, recorded by music therapist B as follows:

Then she saw a very old man sitting across a river from her. He was very old, and held a stick, and he was asking her to 'come' to him. She waded into the river — even though she couldn't swim (in reality) she was fine, the water was soft and warm around her. As she waded across she noticed that the man was her grandfather. He held his arms out to her and said 'come'. As she came towards him he hugged her and held her.

This imagery was discussed between the participant and the therapist during the postlude of this session. Music therapist B documented the following in the session summary:

Focus was very much on the experience of her grandfather. She said she would hold onto that image. In her own life she is the one who has to take care of everyone else, she never has the experience of being cared for herself. Her grandfather was very close to her – he practically raised her, and thus was a very important figure who could nurture her. She was surprised that she had been able to get through the river to her grandfather – something that did not seem possible as she couldn't swim. Thus she had done something she didn't feel she was able to in order to be nurtured by her grandfather. She thanked me for 'bringing' her her grandfather.

The above anecdotes illustrate the way in which BMGIM imagery unfolds to bring meaning to the real-life circumstances of BMGIM therapy patients. Interestingly, in all of the imagery discussed in this section, the participants' sense of nurturing came from significant family members.

### 6.3.5.4 Gaining a sense of rejuvenation

Another type of imagery that emerged during the music travels of certain participants was imagery that symbolised nourishment.

Participant 1, during BMGIM session 3, visualised imagery of a table in a garden with coffee and cookies on it. During the postlude of this session, while discussing the symbolism of this imagery, music therapist A noted the following:

...the table with the coffee and cookies symbolised for her a space which feeds and nurtures her...

During the prelude of session 3, this participant had talked about her need to stay positive. She said that it was easy in the context of the cancer interim home to lose courage and become negative. She was trying to find the balance between being there for others and taking time to rest. As illustrated through the excerpt above, during her music travel she found a space which fed and nurtured her. Furthermore, with the guidance of the music therapist she resolved not to feel guilty about taking time out to rest and reflect. Through the BMGIM process, participant 1 drew meaning from her imagery and, by relating this meaning to her real-life circumstances, was able to make a resolution to improve her situation.

Likewise, participant 18 visualised imagery of nourishment in two of her BMGIM sessions. In session 2 she "saw" imagery of herself eating white mielies. Music therapist B recorded the following in the session summary:

She was eating white mielies (couldn't describe them or their taste), she was alone. Other people came and watched her eating – they wanted some mielies but she did not share with them. They eventually went away, but one person stayed standing there. He looked sad and wanted some of her mielies. She felt pity for him but did not give him any

This imagery was discussed during the postlude of that session. The participant related this imagery of the mielie to nourishment for herself. She said that she felt pity for, but could not share her resources with others at that time. Music therapist B documented this insight in the session summary as follows:

Eating mielie could be possibly that she needs that mielie/nourishment for herself – she feels pity but cannot share with others at this time.

Finally, in a music travel which participant 13 entitled "My profound journey to recovery", she narrated a story to the therapist during the postlude. Part of her story involved finding herself



in a palace which she described as she "walked" through it. The part of her story which related to a sense of nourishment was documented by music therapist A as follows:

...There is a bench and a big mirror – I just sit there – speechless – it is very mysterious – I don't feel uncomfortable– I want to be in there. It is relaxing – eyes are closed. Opened my eyes and there is some tea and a plate of scones – a voice said "enjoy your tea" ... I hesitate – but then I want to eat and drink, so I take it. So I am drinking a choir sings "welcome, we've been waiting for you. You're going to have fun. You're going to enjoy. They sang "Here comes the Bride". I'm going to go back home feeling rejuvenated ...

Through this imagery, participant 13 experienced being able to sit, close her eyes, relax, eat and drink, and thus be rejuvenated.

Thus, through the music travels of these participants, imagery of food, drink and rest emerge as symbols of nourishment and rejuvenation to the participants.

# 6.3.6 Experience of spiritual wellbeing

Through the imagery visualised during their BMGIM sessions, certain participants in this study experienced enhanced spiritual wellbeing which was felt and described in many ways (see Table 6.10)

Table 6.10 Experience of spiritual wellbeing – categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Experience of spiritual	Transcending the realm of	Experiencing the presence of God
wellbeing	physical existence	Soul/Spirit healed
		Feeling of gratitude

### 6.3.6.1 Transcending the realm of physical existence

Some participants reported experiences of transcending the physical realm during certain BMGIM sessions in which, they believed, they had encountered the "presence of God".

During her unstructured interview, participant 1 said the following:

... You got to know God is there for you, you can go to Him anytime.... that's why you positive and the sessions kept me positive.

Participant 1 reported experiencing the presence of God in several of her BMGIM sessions. In session 2, she visualised a church and heard a choir singing. During the postlude of that session, the following insight was captured by music therapist A:

When she was in the church, hearing the choir sing she had a strong sense of the presence of

Jesus Christ with her which was very strengthening for her during this time

Overall her music travel in session 2 was quiet and restful. She experienced session 3 as very restful as well. During the music travel phase of this session, she was alone - which she said she enjoyed. The following was recorded by the music therapist during the music travel phase of session 3:

... alone throughout the journey which she enjoyed "nobody bothering you"... "just want to be alone, just want to listen to the music".

During the postlude of session 3, the participant reflected on this imagery of being alone:

She talked about God being with her in that alone space and that she can go to him with her

sadness and to spend time thinking.

Thus, it is clear that within the restful, positive environment created during her BMGIM sessions, this participant was able to experience the presence of God.

Participant 13 also reported experiencing the presence of God. She linked this experience with feelings of being healed and being well. The following was recorded during the postlude of session 3 by music therapist A:

She then said I am going to be healed and be well, with God by my side.

Participant 3 was another patient who experienced the presence of God in one of her BMGIM sessions (session 1). She reflected on this experience during her interview as follows:

... What I saw at the end of that was the light and that is the Lord tell me His going to help me. And that I'm always thinking about even this whole time here. I don't have to go away to think about that. Since that day it is in me...

In this excerpt, participant 3 described the imagery that she visualised as a light which she knew to represent God. She spoke of the supportive presence of God, and of how the imagery remained with her and continued to be a source of support in her real-life circumstances.

Another type of spiritual experience that some of the participants had during their BMGIM sessions was sensing that their soul or spirit was being healed.

Participant 15 had such an experience. During the music travel phase of her first BMGIM session, she visualised imagery of herself in a church, listening to the word of God, people praying, and people worshipping. During the postlude of this session, the following was captured by music therapist A:

... When in the church she felt safer and said that her spirit had been uplifted.

During her interview, participant 15 reflected on this imagery and said the following:

... when I've closed my eyes listening to this music. I'd imagine myself in church, people singing, soft music (voice soft) and that would make my soul so good, it felt so good.

As the music played I felt my soul was somehow healed. From being far away from my family and my friends and being sick being, being alone. As I listened to this music I just felt alright.

It was soothing my soul.

Participant 18 also found her BMGIM sessions to play a role in uplifting and healing her spirit. During her interview, when asked about her experience of the BMGIM sessions, she said the following:

... And it seems I was, my spirit was healed.

Participant 8 also reported having a spiritual experience as a result of her BMGIM therapy. When asked about this in her unstructured interview, she said:

... it made me experience what I wrote down on the pages. It was like gratitude....

Here, the participant links gratitude to what she experienced spiritually. Later in the interview she elaborated on her spiritual experience further. She said this:

... as I say it was more like just to say thank you God for trees and nature and nice things, you know good things. Being grateful for the family that I've got ...

This excerpt captures what she experienced during her first BMGIM session. During the prelude of that session, the participant expressed her need for closeness as she was living away from home at that time. The intention which she set session 1 was, therefore, "Experiencing spiritual closeness". During the music travel of that session, part of the imagery that she visualised comprised scenes from nature. Music therapist A captured the following during the music travel phase:

... Sitting on a bench. Reading. Enjoying the sunshine. Thankful for family, grandchildren. Looking at the trees – tall, green leaves. Walking looking at sky. Feeling of being grateful....

During the postlude of the same session, the music therapist recorded the following:

The main theme that came through was her sense of gratitude for her life and family and an awareness that she needs to focus on this at this time

Participant 15 also experienced a feeling of gratitude through the BMGIM process. In the mandala which she drew in her fourth BMGIM session, she wrote down all that she was grateful for, which included God, the staff at the hospital she was receiving her treatment, and the music therapist. During the postlude of session 4, the following was documented by music therapist A:

The patient reported that the music had reminded her of the all that she had to be grateful for: her home, grandchildren, her church and looks forward to going back to church...she imagined the voices of the church choir and said she felt good....

Thus, it is clear that a number of participants in this study experienced a sense of spiritual wellbeing through their experiences of the presence of God, of their soul or spirit being healed, and of a sense of gratitude.

The findings of the study have been grouped according to six constituents, namely, *Underlying mechanism of action of the BMGIM*, *Development of coping strategies*, *Juxtaposition of images and their meaning*, *Experience of physical wellbeing*, *Experience of psychological wellbeing*, and *Experience of spiritual wellbeing*. The findings within each constituent have been presented within the context of the participants' real-life experiences of cancer and its treatment.

### 6.4 THE ESSENCE OF THE FINDINGS

Thus far, this chapter has presented the findings of the qualitative domain of this study, grouped into six constituents. The meaning of the phenomenon, ie: the intervention of BMGIM as experienced by cancer patients receiving chemo- or radiotherapy emerged through these constituents. In order to gain a broader understanding of the phenomenon, the constituents can be related to one another to form a pattern. In doing so, phenomenological analysis facilitates the development of a better understanding of the phenomenon than there was before the research took place. According to Dahlberg et al. (2008:245) a phenomenon's essence is its essential meaning, and it is through research that this meaning is disclosed.

In this study cancer patients on chemo- and/or radiotherapy participated in BMGIM sessions. Cancer patients who are receiving chemo- or radiotherapy as treatment experience multi-dimensional health care needs. A wide range of physical symptoms may present due to the effects of cancer and its treatment on the different systems of the body. Along with adverse physical symptoms, patients experience feelings of grief and suffering due to the perceived losses that they endure during the experience of being diagnosed with cancer and undergoing associated treatments. From a spiritual perspective, they may question the meaning of life as what they once considered meaningful, such as their work and their ability to provide for themselves and others, becomes reduced.

It is on this journey of illness and treatment that cancer patients are cared for by nurses who are part of multi-disciplinary cancer care teams.

In nursing, the act of caring takes place within the context of the nurse-patient relationship. It is through this relationship that a nurse identifies the specific health needs of a particular patient. A scientific nursing process allows for these needs to be addressed through systematic assessment, diagnosis, planning and implementation of nursing interventions. Through this process, the nurse aims to care for the needs of the patient and, through that caring, to restore or maintain the patient's optimal physical, psychological and spiritual wellbeing.

During the process of planning the care regime for a particular patient, a nurse may identify health needs which require the use of evidence-based alternate therapies, or the expertise of other health care professionals in order to provide the patient with comprehensive, holistic care.



In this study I worked collaboratively with BMGIM-qualified music therapists to complement the care currently provided to cancer patients receiving chemo- or radiotherapy.

Participants in this study experienced positive effects of the BMGIM in more than one dimension of their lives. This illustrates the potential of the BMGIM to become a means of offering holistic care to cancer patients receiving chemo- or radiotherapy. The BMGIM has been found to enhance physical, psychological and spiritual wellbeing. In patients diagnosed with cancer, this could be considered vital as they experience health needs in all three of these dimensions.

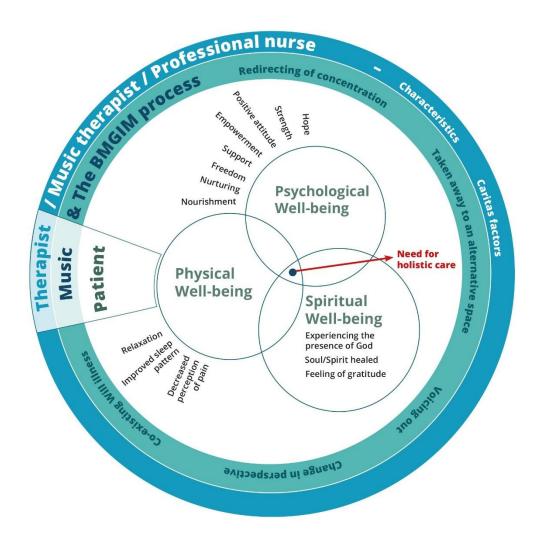


Figure 6.1 Diagram depicting the essence of the findings.



Many of the challenges experienced in the real-life circumstances of cancer patients could be addressed, at least in part, by their participation in BMGIM therapy. This type of therapy offers patients the opportunity to experience self-fulfilment through spontaneity, creativity and personal growth. Furthermore, through the BMGIM process, constructive coping strategies can be developed which could contribute to a long-term or sustained influence on the life of a patient. The essence of the findings of this study are presented in Figure 6.1.

In essence, human beings are holistic beings encompassing physical, psychological and spiritual dimensions. Within these dimensions, human beings experience physical, psychological and spiritual needs. Nurses are mandated to care for all of the bio-psychosocial needs of their patients. In doing so, they provide these patients with holistic care. The ethos of caring ignites within the nurse an aspiration to care comprehensively for her patient.

### 6.5 CONCLUSION

This chapter began with an inventory of the collected data and an overview of the participants in the study. The findings of the study were then presented through both their essence and their constituents. Excerpts from the session summary forms, the interview transcripts, and the mandalas represented the "voice" of the participants within the six constituents and the essence of the findings. These findings will be discussed further in Chapter 7.



# **CHAPTER 7**

# QUALITATIVE DOMAIN: DISCUSSION OF FINDINGS

### 7.1 INTRODUCTION

In Chapter 6, the findings of the qualitative domain of this study were presented. Chapter 7 will weigh up these findings in light of applicable literature.

# 7.2 DISCUSSION OF THE FINDINGS

Through the process of data analysis, meaning and understanding were found in the qualitative data that was collected by means of the session summary forms, the mandalas and the interview transcripts. In order to gain a better understanding of the intervention of BMGIM, the findings of the study were summarized into six constituents:

- Underlying mechanism of action of the BMGIM;
- Development of coping strategies;
- Juxtaposition of images and their meaning;
- Experience of physical wellbeing;
- Experience of psychological wellbeing;
- Experience of spiritual wellbeing.

Categories and sub-categories within each constituent further illuminated the findings of the study. The constituents with their ensuing categories and sub-categories were presented in Chapter 6 and tabulated in Table 6.3. The findings of the study will now be further discussed with respect to each constituent. This will be followed by a discussion of the essence of the study.

### 7.2.1 Underlying mechanism of action of the BMGIM

Participants in this study each underwent 5 BMGIM sessions which comprised the standard four phases of the BMGIM, i.e. prelude, induction, music travel and postlude. In each session, participants listened to classical music in a relaxed state, and a BMGIM-qualified music therapist guided them in the therapeutic process. Thus, each BMGIM session involved three role players, namely the patient, the music and the therapist. These role players are encompassed by Bruscia and Grocke (2002:29) who define the BMGIM as "a process that



involves a patient who is willing and able to explore his/her inner process, through carefully selected music, in an altered state of consciousness, with a trained BMGIM therapist".

The findings with regard to the *Underlying mechanism of action of the BMGIM* will now be explored. This constituent and its categories and sub-categories are summarized in Table 7.1.

Table 7.1 Underlying mechanism of action of the BMGIM - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Underlying mechanism of	Prelude and setting of the	Distracting effect
action of the BMGIM	intention	Positive outlook
	Effects of classical music	Calming and relaxing
		Stimulation of imagery
	Drawing of the mandala	Reflection on music travel
	Music therapist's role	Characteristics
	Patient's role	Need to concentrate
		Curiosity
		Wellbeing

The first phase of the BMGIM process is the prelude. Here, the patient can relate events of the past week, pressing issues, and his or her current feelings to the therapist (Bruscia & Grocke 2002:31). Through questions posed and statements made by the therapist, the patient is assisted in focussing internally. This phase influences the statement of intention by the patient and the music selection by the therapist. According to Bruscia and Grocke (2002:31), the prelude may take approximately 30 minutes.

In a study conducted by Zanders (2011:54), participants found that the prelude gave them an opportunity to verbalise their life happenings, to let go of certain experiences, and to refocus where needed. Participants in this study likewise experienced the prelude and the formulation of the statement of intention as opportunities to talk about their real life circumstances, especially during the period when they were receiving either chemo- or radiotherapy, or both. With the guidance of the music therapist, participants were led towards a more positive view of their circumstances, which became the foundation of the intention for the session at hand.



According to Bruscia and Grocke (2002:31), stating an intention assists patients in focusing on their internal environment by screening out the external environment. In this study, participants experienced setting the intention as a very positive undertaking - one which gave focus and direction to the rest of each BMGIM session. In other words, the setting of a positively phrased intention set the stage for the remainder of the session. Specific participants' experiences of setting the intention were presented in section 6.3.1.1. The prelude and the intentions set for each of the BMGIM sessions by each participant in this study are summarized in Annexure K.

Because relaxation is a component of the BMGIM (Bruscia & Grocke 2002:31), the setting of the intention is followed by the induction. During the induction the music therapist guides the patient towards a state of relaxation. After the induction, the patient enters into the third phase the BMGIM process, namely the music travel. According to Bruscia and Grocke (2002:31), the music travel phase takes approximately 30–50 minutes. However, Bonny (2010:4) reported on music programs where this phase lasted just 20–35 minutes or even less. Bonny (2010:3) described the music travel phase as one where an already relaxed patient listens to a selected music program. The classical music stimulates the formation of mental images. With the guidance of the therapist, the patient verbalises what he/she sees. The emotions brought forth by the images are often spontaneously expressed by the patient. Images may also be expressed in terms of any of the five senses, namely smell, taste, touch, hearing or sight. An image of a rose may be visualised. However, a patient may also experience that image by actually perceiving the fragrance of the rose through the sense of smell. It is in this way that, through images, the BMGIM links the inner world of the patient to the outer world of their physical senses. Furthermore, the way in which the images manifest becomes a symbolic representation of the patient's inner self (Cadrin 2006:115).

Because the standard BMGIM process was followed in this study, in each session the music therapist selected the most appropriate music program for the music travel phase based on the needs and intention stated by the patient during the prelude. Participants in the study responded to the classical music in a variety of ways. As reported in section 6.3.1.2 and in Annexure L, participants did indeed experience visual imagery during their music travels. In other words, whilst the music played the participants (whose eyes were closed) "saw" images which they verbally expressed to the therapist. These images were often accompanied by other responses to the music. Some participants expressed emotions by crying, laughing or smiling. Some



participants responded to the music in other sensory ways, e.g. "smelling" the sea, kelp and fish, or "feeling" the wind blowing, or "feeling" the sand between the toes during visual imagery of being at the seaside. Many participants reported feeling very restful during their music travels.

Grocke and Wigram (2007:49) identified how the sense of movement and flow created by classical music can enhance both relaxation and imagery. The classical music programs played in this study were found to induce relaxation as well as stimulate imagery. Participants found the music to be calming and relaxing. Within the context of the BMGIM sessions, this relaxation incited the participants to think differently or more positively.

In a study conducted by Chou and Lin (2006:100) involving depressed patients who received BMGIM therapy, 21.8% of the participants found the music to stimulate a sense of enjoyment and physical relaxation, whereby their bodies, usually wracked with the effects of depression and anxiety, were allowed to rest. Lin, Hsu, Chang, Hsu, Chou and Crawford (2010:1143) found that the relaxation effect of BMGIM sessions resulted in deeper levels of physical, emotional and spiritual harmony and stability for therapy patients. It was because of this relaxation that participants were able to experience meaningful moments in which they may have felt more closely connected to nature or even to their own souls. Participants in the current study experienced feelings of gratitude as a result of their experiences of imagery which connected them with nature.

The current study found the relaxing effect of the classical music to incite the participants to think differently or more positively and to experience meaningful moments. This emphasises the value of the music to bring about relaxation as it appears that relaxation is pre requisite to deeper levels of work during the BMGIM sessions. The question which arises is whether classical music is experienced as relaxing by all people? Furthermore, classical music and set music programs are prescriptive in traditional BMGIM. This area could be further explored in future research.

In addition to the music having calming and relaxing effects, participants in the current study also found the music to stimulate the imagery that they experienced during the music travel phase. As presented in section 6.3.1.2, for one of the participants the music stimulated a



memory of herself and her family in their younger years. This was of particular significance to her as she had expressed the need to experience family bonds. A study conducted by Chou and Lin (2006:98) found 18.2% of BMGIM therapy patients experienced imagery of actual past experiences during the music travel phase.

The use of classical music distinguishes the BMGIM from other Guided Imagery and Music therapies. Summer (2010:7) described classical music as a catalyst for imagery. Each carefully selected BMGIM music program comprises a medley of classical music pieces. Those that are played first are chosen to evoke comfortable and relaxed imagery (facilitating relaxation). These are followed by pieces chosen to assist the patient in exploring new imagery whilst maintaining the sense of comfort established in the first part of the music program.

Classical music, due to its composition, is considered as the most appropriate type of music to stimulate unconscious thoughts and to evoke imagery (Summer 2010:6). Classical music is found to access repressed memories, solutions to problems, suppressed positive aspects of self, and experiences of a spiritual and transpersonal nature. Through the BMGIM process, these unconscious thoughts may be uncovered, and with the guidance of a trained therapist, transformation of a physical, psychological and/or spiritual nature may occur.

When the music program has come to an end and the music travel phase is complete, the therapist assists the patient in returning to a more externally orientated state. Often, the imagery experienced during the music travel phase is processed in a creative way such as drawing a mandala, modelling clay, writing poetry or writing in a journal (Bruscia & Grocke 2002:33). After the creative process, the patient and the therapist engage in a therapeutic conversation during the postlude. This conversation, referred to as a cumulative discussion by Short, Gibb and Holmes (2011:7), focuses on the imagery and the music travel experience as a whole. Through the postlude the patient is able to gain insight and understanding with regards to their music travel, and to connect the imagery that was evoked to everyday life (Bonny 2010:4). In the current study, participants were provided with an A3 page (which had a large circle drawn on it) and pastels with which to draw a mandala. A mandala is defined by Bruscia (2010:17) as "a drawing enclosed in large part within a circle". Participants found that the mandala provided a starting point for the therapeutic conversation during the postlude phase. This was because the mandalas generally represented the most prominent imagery that they had visualised during their music travel.

Whilst reflecting on the postlude phase, a participant in Zanders' study (2011:61) said that the postlude had given her a sense of depth. Another participant in the same study experienced the postlude as an opportunity to be creative in the process of finding meaning in the imagery. In a study conducted by Bruscia (2010:14) the therapist found that the mandala provided a context within which the imagery that had been visualised could be understood.

The respective roles of the patient and the specialist are important in the context of the underlying mechanisms of the BMGIM. Chou and Lin (2006:100) described the therapeutic roles of a BMGIM therapist as follows: to observe, to inspire introspection, to listen, to encourage, and to analyse.

In a study conducted by Lin et al. (2010:1144), participants found that a therapist's display of commitment and patience created a nurturing environment which allowed for a deeper level of therapeutic interaction between therapist and patient. In a study conducted by Choi and Lee (2014:72), participants who trusted the therapist deeply were found to experience an increased therapeutic effect as a result of the BMGIM. In contrast, participants who were not fully open to the BMGIM process could only engage with it fully once they were convinced that the therapist was trustworthy. This implies that it is vitally important for a BMGIM therapist to build a trusting therapeutic relationship with a patient in order for the BMGIM therapy to be optimally effective. Young (2012:61) found that a trusting therapist/patient relationship encouraged participants to fully engage in the therapeutic process, i.e. in connecting the imagery visualised during the music travel to their real life circumstances.

The findings of this study further highlighted the importance of the respective roles of the therapist and the patient in BMGIM therapy. Participants in the study listed characteristics such as understanding, thoughtfulness, a non-judgemental attitude, and being perceptive or observant as being important qualities in a BMGIM therapist (see section 6.3.1.4). It is therefore vital that health care professionals who implement BMGIM be trained in the necessary knowledge, skills and attitude. This is supported by Chou and Lin (2006:101) who recommend that nurses who are interested in implementing the BMGIM in clinical practice



should undergo the necessary training in psychotherapy and music. Furthermore, it was recommended that therapy rooms should be set up in hospital wards in order to promote the implementation of BMGIM therapy for hospitalised patients.

Short et al. (2013:E79) concurred with Chou and Lin (2006:101) that a fully trained professional therapist is necessary in order to facilitate the generation of deeper understanding and meaning in patients' lives by the BMGIM. The dialogue which takes place between therapist and patient plays an important role in helping the therapist understand what the patient has experienced in response to the music. Therefore, the therapist needs skills to be able to facilitate a dialogue regarding the patient's experiences, and to be able to maintain a therapeutic presence during that dialogue (Grocke & Wigram 2007:20).

The development of a helping-trusting relationship is also significant in nursing, and is the fourth caritas factor in Watson's philosophy and science of caring in nursing practice (Alligood 2010:113). This caritas factor promotes the development of a helping-trusting, authentic caring relationship within which a caring dialogue will help a patient find meaning in their experiences. Furthermore, this caritas factor guides a nurse toward translating patients' concerns into goals for their recovery and self-care. This caritas factor relates well with intentional meaning which is central to phenomenology. According to Dahlberg et al. (2008:47) intentionality is the relationship between a person and the event of experience and that it is through understanding the intentionality that the lifeworld experience can be understood. In the current study, the event of experience was the intervention of BMGIM. During BMGIM participants experienced their relationship with the therapist as therapeutic. This trustful and caring relationship allowed participants to express their concerns and wishes verbally. Through therapeutic conversations with the therapist, participants found meaning in their experience and concerns were translated into goals which led to patients' recovery and self-care. With the necessary training, nurses could use the BMGIM to develop a helpingtrusting relationship with their patients.

The role of the patient in the BMGIM process was also explored in the current study. Participants found the physical and psychological setbacks in their wellbeing to influence their level of participation in the BMGIM sessions. These setbacks included symptoms such as headaches, tiredness, nausea and abdominal cramps. Participants explained that these



symptoms prevented them from concentrating or focusing during the BMGIM sessions. This is considered an important finding as the participants level of participation in the BMGIM sessions was influenced by the adverse effects of the medical treatment they were receiving. Because of these effects, as reported in section 6.3.1.5, the length of the therapy sessions in this study did not comply with the recommended 1.5–2 hour duration. As discussed in section 6.3 (see Table 6.5), the findings of the current study show that the BMGIM sessions were shorter in duration to accommodate participants who were experiencing adverse side-effects of chemoor radiotherapy.

Burns (2001:62) recommended that further studies should be conducted to clarify the appropriate duration of BMGIM sessions under extenuating circumstances. However, previous studies on the BMGIM as a therapy for cancer patients were not conducted during the patients' treatment period. Thus, there was no literature to consult regarding this challenge and its effects in other contexts. Furthermore, previous studies by Burns (1999), Bonde (2005a) and Cadrin (20005-2006) in which cancer patients received BMGIM which followed the traditional process and duration during the rehabilitation phase (not while receiving chemo- or radiotherapy) did not experience any attrition of participants. In contrast in the current study which was conducted during the treatment phase, there was a limited duration of time during which BMGIM could have been implemented, ie; six weeks. Therefore, the ill health of the participants greatly influenced attrition as missed sessions could not be made up during the weeks that followed as that is when they would no longer be on medical treatment.

Despite the unpleasant experiences of less-than-optimal wellbeing, some of the participants continued their involvement in the BMGIM study. Participants cited curiosity and the improved wellbeing experienced as a result of the BMGIM sessions as the motivation for this continued participation. As the primary researcher in the study, I observed that some of the participants were far more invested in experiencing the effects of the BMGIM sessions than others. The more dedicated participants were almost always available for the scheduled sessions unless they were feeling extremely unwell following medical treatment.

A study by Choi and Lee (2014:72) found that the characteristics of a participant influenced the extent to which they found the BMGIM session to be therapeutic. Participants with an open, positive attitude and who trusted the therapist and the music were found to take greater



initiative in exploring the imagery and relating it to their real life circumstances. On the other hand, participants with a closed attitude depended on the therapist for a therapeutic BMGIM encounter. The participants' attitudes, therefore, contributed significantly to the nature of their therapeutic experiences. The willingness of a patient to try something new and to use symbolism to understand their real life circumstances was also highlighted by Thoni (2002:184) as an important contributing factor to whether patients participated wholeheartedly in the BMGIM therapy.

In a study conducted by Thoni (2002:186), a BMGIM participant who lived with depression, fatigue and psychosomatic disorders underwent 50-minute BMGIM therapy sessions. It was found that the shorter music programs played in these sessions still yielded significant personal development for the participant. Music for these sessions was chosen to correspond with the particular needs of the participant, and for its stimulative and supportive effect (Thoni 2002:186). The authors reported that the 50-minute duration limit necessitated discipline and focus during the sessions. This was found to be a positive adaptation. Thoni (2002:187) did make it clear, however, that the shorter BMGIM sessions did not allow for the deep inner work facilitated by traditional BMGIM sessions. Nevertheless, even just the experience of the inner world elicited by the BMGIM was considered to provide a scaffold towards expanded awareness.

Grocke and Wigram (2007:148) present an adaptation of the BMGIM simply called "Guided Music Imaging", in which sessions are shorter than traditional BMGIM sessions. Similar to BMGIM encounters, Guided Music Imaging sessions involve a short prelude, an induction, a music program (approximately 10-20 minutes in duration), drawing of a mandala, and a postlude. The entire session is usually completed within an hour. During the music travel phase of Guided Music Imaging, as in the BMGIM, the therapist and the patient engage in dialogue about the imagery that the patient is seeing. Thus, the main difference between the BMGIM and Guided Music Imaging is the duration of the sessions.

The therapy sessions conducted in the current study ultimately embodied the Guided Music Imaging model, in that they encompassed the four traditional phases of the BMGIM, but were shorter in duration than traditional BMGIM sessions. As explained above, this was because participants did not have the physical or mental energy to endure such lengthy sessions. Grocke



and Wigram (2007:148) recommended that BMGIM training, at least at levels one and two, should be a minimum requirement for practitioners wishing to implement the adapted version of the BMGIM, i.e. Guided Music Imaging.

The findings discussed under this constituent, i.e. Underlying mechanism of action of the BMGIM, have clearly shown that participants in this study experienced the BMGIM process as therapeutic and beneficial to their wellbeing. Thus, within the healthcare regime of a patient diagnosed with cancer and undergoing chemo- or radiotherapy, a nurse could consider implementing the BMGIM as a therapy to complement the other care provided to the patient. This is in line with the sixth caritas factor in Watson's philosophy and science of caring in nursing practice, which is the systematic use of scientific problem solving methods for decision making. This factor allows for the creative use of the self, and for an engagement in the artistry of caring-healing practices. It also calls for nurses to be open to non-traditional, creative interventions and care (Alligood 2010:114).

#### Development of coping strategies 7.2.2

Within the real-life circumstance of living with cancer and enduring the adverse effects of chemo- or radiotherapy, participants found the BMGIM sessions to assist them in developing coping strategies to support them through their real-life experiences. Thus, the constituent, Development of coping strategies was designated. This constituent and its categories and subcategories are presented in Table 7.2.

Table 7.2 Development of coping strategies - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Development of coping	Distracting effect of the	Redirecting concentration
strategies	BMGIM	Taken away to an alternative space
	Experiencing a sense of relief	Voicing real-life experiences
	Co-existing with cancer and its	Change in perspective
	effects	

Participants in this study found the imagery that they visualised to redirect their concentration and transport them to an alternate space where they experienced positive feelings. One participant experienced being "taken" to a natural space which evoked feelings of serenity and



restfulness. Likewise, in a study by Chou and Lin (2006:98), participants who visualised natural scenery during their music travels experienced feelings of relaxation, calm and comfort. Participants also experienced a sense of psychological and physical wellbeing as a result of expressing their feelings during the pre- and postlude phases. Furthermore, the therapeutic process of the BMGIM brought about changes in perspective whereby participants began to view their real life circumstances more positively.

In a study by Lin et al. (2010:1144) the participants, who were diagnosed with depression, found the BMGIM sessions to give them an opportunity to express their innermost feelings and emotions. They found that through the therapy they learnt to think differently about their problems. Participants described how the imagery inspired new meaning in their unwanted thoughts, feelings or memories. A study conducted by Thoni (2002:187) found that the introspection and self-expression facilitated by the BMGIM, over time, led to an improvement in participants' coping abilities. The interdisciplinary field of psychoneuroimmunology supports the use of therapeutic methods which bring about emotional disclosure, as this has been found to improve mood and reduce stress (French, Vedhara, Kaptein & Weinman 2010:264).

In the current study, participants expressed their worries and wishes during the therapeutic conversations that took place in the BMGIM sessions. During the individual in-depth interviews, several participants spoke of the opportunity to voice their real-life circumstances as bringing about a sense of relief. This sense of relief, in turn, resulted in improved sleep patterns and a more positive outlook on the future, which ultimately contributed to an improvement in the patients' ability to cope with their real-life circumstances.

Thus, the BMGIM process supported participants in their expression of both positive and negative emotions. This harmonises with the fifth caritas factor of Watson's philosophy and science of caring in nursing practice, namely the promotion and acceptance of the expression of positive and negative feelings (Alligood 2010:114). From the findings of the current study, it is clear that the BMGIM process accomplished this convincingly.

Participants also experienced a change perspective with regard to their real-life circumstances. Where participants initially viewed their lives as having only two options -death, or life filled



with uncertainty and loneliness due to cancer - the BMGIM therapy process brought about changes in their viewpoints until many of them could embrace hope and courage, and take back control of their lives through the insights gained in the BMGIM sessions. In a case study by Bonde (2005b:145), one participant who underwent BMGIM therapy during her cancer rehabilitation phase described how her perspective and approach with regard to her real-life circumstance shifted during BMGIM therapy. She moved from a place of trying to handle everything despite her ill health to a point where she was at peace in the present moment. Similarly, in a study by Short, Gibb, Fildes and Holmes (2013:E78) the BMGIM was found to bring about a change in the perspectives of cardiac rehabilitation patients who, through the therapy, began to view themselves, their bodies and the way they engaged with their real-life circumstances in a new light. This new perspective enabled them to take initiatives towards improved health and wellbeing. In Cadrin's study (2005-2006:7), a patient diagnosed with breast cancer underwent BMGIM therapy during the last eight months of her life. Through the BMGIM process, she realised the state of negativity that she was in. As the BMGIM sessions continued she found meaning in her circumstances, and developed ways to co-exist with her illness. She gained an increased sense of control and strength as she addressed her feelings of shame emanating from her cancer diagnosis. Through the BMGIM, the patient was able to reconcile with her estranged family members. Thus, by enabling participants to develop new perspectives on their real-life circumstances, the BMGIM was found to help participants harness their own innate coping mechanisms and regain a sense of hope for the future.

### 7.2.3 Juxtaposition of images and their meaning

The designation of the constituent dubbed *Juxtaposition of images and their meaning* led to a fascinating conceptualisation of the often contrasting images which were visualised by participants during the music travel phase of the BMGIM. The categories and sub-categories of this constituent are summarized in Table 7.3.

Table 7.3 Juxtaposition of images and their meaning - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Juxtaposition of images and their meaning	Opportunities and challenges	Surviving cancer  Dealing with uncertainty
and then meaning	enanenges	Bearing with uncertainty



Participants in the current study found meaning in their imagery by connecting the contrasting images visualised during their music travels to the challenges and opportunities in their reallife circumstances. The juxtaposition of these images created an understanding within the participants that they could indeed co-exist with their illness.

In a study by Short et al. (2013: E44), cardiothoracic patients found that they could explore the physical and emotional pain caused by their surgery through the images they experienced during the music travel phase of their BMGIM sessions. In another article, Short et al. (2011:15) explained how the BMGIM allowed patients to recall their past experiences; the vividness of the visualised imagery set the scene for further action and resulted in positive personal development. The ability of BMGIM patients to relate visualised imagery to real-life circumstances was also seen in a study by Blom (2011:197) in which a BMGIM participant diagnosed with depression found that her interaction with the selected music programme, and her dialogue with the therapist whilst listening to the music, allowed her to relate visualised images to her real-life circumstances. The potential for integration of BMGIM imagery and real-life experiences was also observed in a study by Creagh (2005:224) in which patients who were experiencing bereavement felt more integrated after addressing painful real-life circumstances through the BMGIM than through verbal therapy.

In the current study, a juxtaposition of contrasting images allowed participants to experience their past or present real-life circumstances differently and more vividly. As explained in section 6.3.3, imagery of darkness, navigating rough seas, and being in the middle of a desert all signified living with cancer and dealing with the accompanying uncertainty. The contrasting imagery of light and a beautiful sunset, on the other hand, signified moments of beauty and happiness which participants saw as opportunities in real life. The meaning and understanding that the juxtaposition of these images brought to the participants resulted in a realisation of inner strength and a change in perspective. This may be viewed as a form of personal development. In other words, through contrasting imagery, participants experienced significant moments which resulted in positive transitions in their inner worlds. Through these transitions they began to perceive their real-life circumstances differently.

Grocke (1999:49) and Lin et al. (2010:1141) describe a transition as a turning point, or a significant or critical moment. Grocke (1999:49) further describes a transition as a liberating



moment in which patients experience transformation. Through the BMGIM process, the experience of a real-life circumstance is confronted and a subsequent "turning point" results in self-understanding.

In the current study, the transition experiences of three of the participants were considered within this constituent, i.e. *Juxtaposition of images and their meaning*. The imagery of darkness, navigating through rough seas and being in a desert illustrated how they confronted their respective experiences of living with cancer and its uncertainties. While this imagery provoked uncomfortable feelings, it was followed by imagery of light and a colourful sunset which illustrated the patients' transition into understanding and a peaceful co-existence with their real-life situations through experiencing moments of happiness and beauty despite the presence of cancer in their lives.

The physical, psychological and spiritual transformations which were experienced in the participants of the current study will be further discussed within the constituents of *Experience* of physical wellbeing, Experience of psychological wellbeing, and Experience of spiritual wellbeing, respectively.

Assistance with the gratification of human needs is the tenth caritas factor of Watson's philosophy and science of caring in nursing practice. This factor encompasses the process of nursing in order to assist patients with basic needs in all dimensions of wellbeing (Alligood 2010:116). In this way, Watson's philosophy encourages the delivery of holistic nursing care.

### 7.2.4 Experience of physical wellbeing

Pain, discomfort, tension, worry and uncertainty were some of the participants' experiences of cancer and the chemo- or radiotherapy that they were receiving at the time of this study. According to French et al. (2010:260), stress hormones secreted due to anxiety and worry lead to increased cortisol and catecholamine levels which can, through the neuro-endocrine pathway, lead to adverse health consequences such as alterations in the distribution and activity of immune cells resulting in poor immune function. Thus, the interdisciplinary field of psychoneuroimmunology explores how psychological and emotional processes and its interactions with neuro-endocrine pathways can impact the immune system, and thus health the wellbeing of an individual (French et al. 2010:259). Research in psychoneuroimmunology

has shown that certain psychological interventions can reduce negative mood and attenuate sympathetic nervous system and hormonal activation, thus regulating immune processes (French et al. 2010:264). In the current study, the BMGIM intervention was found to promote physical relaxation, improve sleep patterns, and decrease the perception of pain in participants. Patients also found that the physical relaxation they experienced brought about an improved sense of coping, strength and courage, and a shift in perspective. The categories and subcategories of this constituent are presented in Table 7.4.

Table 7.4: Experience of physical wellbeing - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Experience of physical	Experiencing a sense of	Relaxation
wellbeing	calmness	Improved sleep patterns
		Decreased perception of pain

In a study by Chou and Lin (2006: 100) in which patients with depression underwent BMGIM therapy, participants experienced a sense of physical relaxation brought about by the music. This in turn led to improved physiological functioning such as improved mood, blood pressure, heart rate and sleep patterns. In the current study, participants also reported feeling physically relaxed and having experienced improved sleep patterns following BMGIM therapy (see section 6.3.4). The sense of physical wellbeing experienced by patients during BMGIM sessions also led to feelings of courage and strength. This was also found in the study by Chou and Lin (2006: 100) in which a participant who received BMGIM therapy experienced a sense of physical wellbeing which gave her the courage to face life.

Burns (1999:48) conducted a study in which four cancer patients took part in BMGIM sessions during their rehabilitation phase. All of the participants in that study showed significant improvement in their physical wellbeing scores on the follow-up QoL-CA test when compared to the pre-test scores. Burns (1999) recommended that further studies with a larger sample size be undertaken. Beck (2012:302) found a significant decrease in adverse physical symptoms and an improvement in the sleep quality of BMGIM participants who had been experiencing work-related stress. However, these positive results were not found in the study by Bonde (2005a:153) which measured functional and physical wellbeing using the QoL-C30 scale.



Bonde's study indicated no improvement in functional or physical wellbeing at post-test or follow-up when compared to pre-test values.

### 7.2.5 Experience of psychological wellbeing

According to Grocke and Wigram (2007:49), music conveys mood. Similarly, Thoni (2002:187) found the combination of music and imagery to bring about a link to feelings, forgotten memories and sources of energy, thus reviving strength. Thoni (2002:187) elaborated that the self-development and self-expression which result from being in touch with one's feelings lead to a sense of relief, and subsequently to healing. This sense of relief and healing was also recorded by participants in the current study who found the BMGIM process to bring about a sense of hope, wellbeing, strength and rejuvenation.

The psychological wellbeing experienced by participants in this study was revealed by their recorded feelings of hope, increased strength, positivity, empowerment, support, freedom, nurturing and nourishment (see section 6.3.5). The categories and sub-categories of this constituent, i.e. *Experience of psychological wellbeing*, are summarized in Table 7.5.

Table 7.5: Experience of psychological wellbeing - categories and sub-categories.

CONSTITUENT	CATEGORY	SUB-CATEGORY
Experience of	Gaining a sense of hope	Give life
psychological wellbeing		Forward movement
	Gaining a sense of wellbeing	Strengthening
		Positive attitude
		Empowerment
		Support
		Freedom
	Gaining a sense of strength	Nurturing
	Gaining a sense of	Nourishment
	rejuvenation	

Participants in this study found the BMGIM sessions to given them a sense of hope, which emerged through images of the future and imagery of flowers and trees. The imagery of flowers and trees, in particular, gave participants a sense of life which, in turn, gave them hope for the



future and for moving forward in life. In a study by Short et al. (2011:14), one participant experienced imagery of plants and of the process of photosynthesis to be beautiful and to give a sense of life.

The instillation of faith-hope is the second caritas factor in Watson's philosophy and science of caring in nursing practice (Alligood 2010:113). The current study shows that the BMGIM process can bring a sense of hope back into the real-life circumstances of cancer patients. Thus, the BMGIM could complement the nursing care already provided to cancer patients receiving chemo- or radiotherapy by restoring a sense of wellbeing through encouraging the patient to find hope.

In the study by Lin et al. (2010:1144), participants with depression acknowledged that after their BMGIM sessions they experienced a sense of an inner power which enabled them to cope with certain tasks. Prior to BMGIM therapy, these participants did not have the energy or the strength to make life changes. However, after BMGIM therapy, they felt more equipped to confront their challenges. In the current study, some of the adverse physical symptoms experienced by the participants included pain, feelings of being drained or tired, and the feeling of the cancer taking control which resulted in a loss of dignity. Imagery experienced during the music travel phase, e.g. dancing or words or memories which conveyed a message of strength, reminded the participants of their own inner strength.

Another compelling finding of this study was that participants experienced a shift towards a more positive attitude towards their real-life circumstances as a result of BMGIM therapy. One participant demonstrated a shift from feelings of worry, tiredness and pain towards a more positive attitude that allowed her to feel optimistic about her future and express the conviction that she was healing. Similarly, in a study by Lin et al. (2010:114), participants identified that their thoughts changed from negative to more positive ones during BMGIM therapy. In a study by Thoni (2002:184) in which shorter 50-minute GIM sessions were conducted with the participant, it was found that five minutes was sufficient for positive memories to surface if the right music program was selected. Likewise, Bonde (2005b:146) reported a shift in one of the BMGIM participants' mind sets from negativity to a point where she said that her life was filled with many good, positive things which she could look forward to.



In the current study, participants reported that their BMGIM sessions empowered them to manage their real-life circumstances in a constructive manner. Participants who were feeling distressed, anxious, drained, or otherwise emotional during the prelude of a particular BMGIM session experienced feelings of relief, peace and calmness during and after the music travel phase of that session. These more positive feelings, in turn, enabled them to amicably manage the real-life circumstances that were causing them distress. This finding was in line with results reported by Heiderscheit (2005:123) in which the manageability sub-scores (for BMGIM participants in the experimental group) on the Sense of Coherence questionnaire significantly increased from pre-test to post-test. This improved manageability was attributed to participants' improved coping skills as they addressed their own interpersonal conflicts and repressed emotions through the BMGIM process (Heiderscheit 2005:125). The participants in Heiderscheit's study were individuals struggling with chemical dependency. Goldberg and Dimiceli-Mitran (2010:14) studied the effects of the BMGIM on an individual dealing with loss, who also found the BMGIM process to be empowering as she incorporated self-care activities into her life.

Participants in the current study experienced a sense of being supported during their BMGIM sessions. The classical music compilations selected for BMGIM sessions "move" in predictable ways and changes in melody, harmony, rhythm and instrumentation have "musical logic". The compilations may also include repetitions of melodic fragments or entire sections, imparting a sense of trust and security to the patient (Summer 2010:5).

In a study conducted by Beck (2005-2006:50) the participant, who had been a victim of sexual abuse during his childhood, experienced imagery of walking up stairs and finding a "Great Light" at the top as a nurturing experience. The term "nurturing" also used by various participants in the current study to describe some of their imagery, e.g. family members offering them solace. This, in turn, gave those participants a sense of strength.

#### 7.2.6 Experience of spiritual wellbeing

Spiritual wellbeing was experienced by the participants through their experiences of the presence of God, a sense of their soul or spirit being healed and through feelings of gratitude. The categories and sub-categories of this constituent are shown in Table 7.6 below:

Table 7.6 Experience of spiritual wellbeing - categories and sub-categories.

CONSTITUENT CATEGORY		SUB-CATEGORY	
Experience of spiritual wellbeing	Transcending the realm of physical existence	Experiencing the presence of God Soul/Spirit healed	
		Feeling of gratitude	

With regards to the experience of sensing the presence of God during BMGIM sessions, some of the participants in the current study verbalised that they felt God was with them or by their side. They also verbalised that they felt they could go to God at any time. Participants experienced the presence of God to bring about a sense of strength and healing. Having experienced a deep sense of relaxation in a space where she was alone, one of the participants sensed the presence of Jesus Christ with her. This was spiritually significant and relevant to her at a time when she needed her faith to support her. In general, a BMGIM session becomes a space away from the cares of everyday life for contemplation, prayer and spiritual refreshment - similar to a spiritual retreat (Marr 2001:401).

In a study by Marr (2001:405), one participant physically experienced the presence of God (during a BMGIM) session through symbolic imagery of rain and a sense of God's presence. Similarly, in a study by Cadrin (2006:130) one participant diagnosed with Amyotrophic Lateral Sclerosis (ALS) experienced a connection with someone higher than herself through the BMGIM process and associated journal writing activities. In Thoni's (2002:186) study, the participant experienced a willingness to release her troubles to God, and also a renewed sense of spiritual energy.

Where the BMGIM has led participants (in various studies) to a point where they actively surrender or let go of something that was troubling them, this process has been described as a transpersonal spiritual experience. This kind of surrender has been described by Blom (2011:189) as opening up, or as setting out on a path to spiritual development. During the process of surrender, a sense of human smallness in relation to something greater such as nature, life or death is experienced on the part of the patient. In surrendering, a person learns to embrace that sense of smallness or mortality (Blom 2011:200). Part of the underpinning

philosophy of the BMGIM is that through images and their symbolism and significance, a patient can discover their purpose and place within a cosmic perspective (Marr 2001:400).

In the current study, participants began the process of surrender through engaging with imagery of nature and family. Elements of surrender were evident in the way that participants expressed gratitude in response to a number of images that involved elements of nature. A sense of gratitude for life was also apparent in cases where participants expressed thankfulness for family, and especially for their grandchildren. Through these images of nature and families participants experienced the greatness of life and thus experienced a feeling of surrender.

The current study has found that participants experienced a sense of spiritual wellbeing through sensing the presence of God, feeling their soul/spirit being healed, and experiencing a sense of gratitude. The cultivation of sensitivity to oneself and to others is the third caritas factor in Watson's philosophy and science of caring in nursing practice (Alligood 2010:113). This can also be thought of as the promotion of spiritual wellbeing. This study has shown that, through the BMGIM process, a nurse can care for the spiritual needs and the soul needs of the patient.

#### 7.3 THE ESSENCE OF THE FINDINGS

In this study, music therapy was identified as a discipline that could add value to the care provided to cancer patients receiving chemo- or radiotherapy. According to Bonny (2002:187) music therapy involves "the use of specially prescribed musical activities under the supervision of qualified personnel to aid the patient in achieving a definite therapeutic goal". Within the discipline of music therapy, one of the methods employed is the Bonny Method of Guided Imagery and Music (BMGIM) which involves "listening to classical music in a deeply relaxed state of consciousness to stimulate imagery, feelings, and memories that lead the patient to psychological and spiritual transformation" (Bonny 2002:179).

The findings of this research show that the BMGIM, as an intervention, had physical, psychological and spiritual effects on the study participants. Health has been defined by the WHO (2015) as "the state of complete physical, mental and social wellbeing, not simply the absence of illness" (Geyer, Mogotlane & Young 2009:18). Marks, Murray, Evans and Estacio (2011:6) added other key elements of human health and wellbeing to this definition, and defined health as, "a state of wellbeing with physical, cultural, psychosocial, economic and



spiritual aspects, not simply the absence of disease". The word 'health' (derived from Old High German and Anglo-Saxon) means 'whole', 'hale' and 'holy'. Thus, from its roots in Proto-Indo-European language, the word 'health' has connotations of wholeness, holiness, goodness and Godliness (Marks et al. 2011:4). It can be said that from a holistic perspective on wellbeing, 'feeling well' involves wellness of mind, body and spirit (Marks et al. 2011:12).

The opposite of health is illness - "a state in which a person's physical, emotional, intellectual, social, developmental, or spiritual functioning is diminished or impaired compared with previous experience" (Potter & Perry 2007:12). During the experience of an illness such as cancer, patients have been found to experience a variety of signs and symptoms as a result of the illness itself, as well as its treatment modalities. Infection, reduced white blood cell counts, bleeding, skin problems, nutritional problems, pain, fatigue and psychological stress are just some of the health challenges experienced by patients diagnosed with cancer - illustrating how the effects of illness span across multiple dimensions of a holistic being (Smeltzer, Bare, Hinkle & Cheever 2010:366).

In nursing science, various conceptual frameworks have been developed to describe the nature of human beings. 'Holism' or 'wholeness' emerges from these frameworks as a consistent philosophical component of the idea of a 'person' (Chinn & Kramer 2008:56). In Western philosophies that are grounded in reductionism, the concept of holism is difficult to address. Reductionism reduces the whole to a set of constituent parts, and treats the whole as being equal to the sum of those parts. Interrelationships between the different parts of the whole are investigated, and generalisations about the whole are made. On the other hand, Eastern traditions view the whole as being greater than the sum of its parts (Chinn & Kramer 2008:56). Many nursing theories adopt the latter view of holism. However, in practice, many nurses have been trained to think in a reductionist paradigm (Chinn & Kramer 2008:56).

In an attempt to bring about a shift in both the theoretical and practical aspects of nursing care delivery, Watsons' philosophy and science of caring nursing practice summarizes human care processes and the so-called ten caritas factors in nursing care. According to Watsons' philosophy and science of caring nursing practice, "a person is viewed holistically whereby the body, mind and soul are interrelated, each part is a reflection of the whole, yet the whole is



greater than and different from the sum of its parts" (Alligood 2010:118). Thus, Watsons' philosophy represents a holistic view on nursing.

According to Watson's philosophy, there are three spheres of being within a person - body, mind and spirit - which are influenced by the concept of 'self' (Alligood 2010:118). Nursing's goal in the caring-healing process is "to help persons gain a higher degree of harmony within the mind, body, spirit, which generates self-knowledge, self-reverence, self-healing and selfcare processes allowing for diverse possibilities" (Chinn & Kramer 2008:55). This goal is realised through the integration of human care processes and the ten caritas factors in nursing care. This integration leads to a shift in focus from disease and treatment to human caring, healing, and the promotion of spiritual health (Alligood 2010:120). Seven of the ten caritas factors were found to complement the findings of the current study as discussed with respect to each constituent, above.

In order to take nursing care beyond disease and pathology into a space which highlights the potential for healing, Watson's philosophy promotes the integration of the "healing arts" into nursing care. Furthermore, Watson's philosophy embraces multiple ways of knowing such as intuitive, kinaesthetic, spiritual and moral/ethical knowing. It also acknowledges the expansion of the caring sciences to include interdisciplinary and trans-disciplinary fields such as ethics, arts, humanities and mind-body-spirit medicine (Alligood 2010:122). Marks et al. (2011:9) concur with Watson's philosophy and add that that complementing scientific medicine with psycho-social and other evidence-based approaches could shift the entire health care system towards becoming more efficient and evidence-based. In addition, a more holistic healthcare approach would promote better health for all.

Caring is considered central to nursing practice (Potter & Perry 2007:482). The concept of caring encourages nurses to consciously preserve wholeness, to potentiate healing, and to preserve the dignity, integrity and life-generating processes of a patient (Alligood 2010:121). In order to preserve wholeness and to bring about healing, Watson's philosophy and science of caring nursing practice encourages the use of different caring-healing modalities. In practice it is the nurse's intention through which she consciously mobilises internal and external resources to meet a patient's needs for wholeness and healing (Alligood 2010:122). This was the philosophical basis and the rationale for the current study, which demonstrated collaboration



between the professions of nursing and music therapy in implementing the BMGIM to complement the care provided to cancer patients receiving chemo- or radiotherapy. In order to meet the objectives of the study, in phase one a systematic review was conducted and music therapists were consulted as experts. In phase two the intervention of BMGIM was implemented by BMGIM qualified music therapists. The implementation of the intervention was guided by a BMGIM practice guideline which was collaboratively developed by the researcher (professional nurse) and two BMGIM qualified music therapists. In phase three the effect of the intervention was evaluated by the researcher who is a professional nurse.

In essence, humans are holistic beings with physical, psychological, social and spiritual dimensions (Geyer et al. 2009:105). The essence of the findings of this study was that through the BMGIM, participants experienced holistic care across these dimensions as their physical, psychological and spiritual needs were all addressed. Furthermore, the principles of psychoneuroimmunology (which explains how psychological and emotional processes influence the immune and endocrine systems of the body (French et al. 2010:260) were also supported as I found the participants' experiences of physical, psychological and spiritual wellbeing to be interlinked as wellbeing experienced in one dimension often resulted in a sense of wellbeing in another dimension.

#### 7.4 CONCLUSION

Central to nursing practice is the concept of caring (Potter & Perry 2007:20). Patients in states of physical and emotional distress are in need of care, which nurses are mandated to provide (Askinazi 2004:33). The caring approach adopted by a nurse during interactions with a patient forms the basis of their nurse-patient relationship (Potter & Perry 2007:482). Hagerty and Patuskt (2003:145) concur that the nurse-patient relationship should be considered as the foundation of nursing care. This relationship - developed through counselling, helping, supporting and empathising - determines how the patient will use the nurse's support to regain control during the health improvement process (Searle, Human & Mogatlane 2009:16). A therapeutic nurse-patient relationship can foster a healing environment at both the physical and non-physical levels. The sixth caritas factor of Watson's philosophy and science of caring in nursing practice - the provision of a supportive, protective, and corrective mental, physical, sociocultural, and spiritual environment - supports this notion (Alligood 2010:115).

The findings of the current study, discussed in this chapter, constitute evidence that the BMGIM process can lead to improved physical, psychological and spiritual wellbeing in the lives of cancer patients receiving chemo- or radiotherapy.

Final conclusions and recommendations with respect to the study, as well as the study's limitations, will be presented and discussed in Chapter 8.



#### **CHAPTER 8**

### CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

#### 8.1 INTRODUCTION

The findings of this study were generated in three different "parts" or "components". The first was a systematic mixed-studies review (SMSR), the findings emanating from which were presented and discussed in Chapter 3. The second and third "parts" of the study were both empirical – one being a quantitative domain and the other a qualitative domain. The findings generated by the quantitative domain were presented and discussed in Chapter 5, whilst the findings generated by the qualitative domain were presented and discussed in Chapters 6 and 7, respectively. In this final chapter of the dissertation, limitations of the study are acknowledged, conclusions are drawn, and recommendations are made.

#### 8.2 AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to implement the BMGIM in selected cancer interim homes in Gauteng, South Africa, and then to evaluate this method's complementary effects on the physical, psychological and spiritual wellbeing of a selected group of cancer patients.

The objectives of the study were as follows:

- 1. To conduct a systematic review to identify methods that have been used to implement the BMGIM in other health care settings, and evaluate the reported effectiveness of the BMGIM in cancer care contexts (Phase 1);
- 2. To implement the BMGIM in selected cancer interim homes in order to introduce an existing music therapy method into a new setting (Phase 2);
- 3. To evaluate cancer patients' experiences during BMGIM therapy, as well as to evaluate the effect of the BMGIM on patients' physical, psychological and spiritual wellbeing for the duration of their stay in the cancer interim home (Phase 3).

#### 8.3 SUMMARY OF MAIN FINDINGS

The first phase of this study was a systematic mixed studies review (SMSR). Through a rigorous process of study selection, two reviewers identified six reports that qualified to be used for data extraction. The subsequent processes of data extraction and quality assessment

allowed for a comparison of the characteristics of the selected studies and of their quantitative and qualitative findings. Within a convergent qualitative synthesis framework, the adoption of the technique of thematic qualitative synthesis allowed for the integration of the findings of the selected reports. Themes, categories and sub-categories common to all of the reports were systematically identified. The four themes common to Burns (1999, 2001), Bonde (2005a, 2005b, 2007), and Cadrin (2005-2006) emerged as being: self-realisation, change in mood, change in quality of life, and perception of music.

The systematic review revealed that participants in other BMGIM programmes have gained emotional insights through the imagery that was evoked during their BMGIM sessions. The imagery of angels, churches and religious figures like Jesus Christ, for instance, offered them reassurance, creating an awareness in the participants of their inner faith. Through the imagery, the participants also gained new cognitive insights into their real-life situations. These new emotional and cognitive insights were seen to signify change within the participants. This inner change brought about improvements in mood and quality of life as participants implemented constructive behaviours such acts of forgiveness and allowing themselves time to grieve and relax, to mention a few.

None of the studies included in the systematic review involved the implementation of the BMGIM amongst cancer patients who were receiving chemo- or radiotherapy. This study represents an endeavour to study and document exactly that. Therefore, Phase 2 of this study, which was informed by the systematic review, encompassed the implementation of the BMGIM as part of a comprehensive cancer care regime for patients engaged in a period of medical cancer treatment.

Phases 2 and 3, together, represent the empirical part of this study and were conducted within the framework of intervention research, and the five standard steps of intervention research, as presented by Fraser et al. (2009:36), were followed in their execution.

Using a logic model, the BMGIM intervention was described and intervention activities were matched with immediate and distal outcomes. Physical, psychological and spiritual wellbeing constituted the measured intermediate outcomes. The study encompassed both quantitative and qualitative domains to allow for the rigorous measurement of these outcomes. Whilst a



"prospective intervention study" was conducted within the quantitative domain, the qualitative domain followed a phenomenological approach.

The findings generated by the qualitative domain were presented through their constituents and their essence. The essence of the findings made clear the cancer patients' experience of the BMGIM process as an alternate and holistic care regime during their real-life experiences of chemo- and/or radiotherapy. This essence was illuminated through the categories and subcategories of the six constituents, which were *Underlying mechanism of action of the BMGIM*, *Development of coping strategies*, *Juxtaposition of images and their meaning*, *Experience of physical wellbeing*, *Experience of psychological wellbeing*, and *Experience of spiritual wellbeing*. In order to bring together the findings of the qualitative and quantitative domains, a summary of the quantitative domain findings are presented concurrently with the qualitative domain findings.

#### 8.3.1 Underlying mechanism of action of the BMGIM

The BMGIM process implemented during this study encompassed the traditional four BMGIM phases, namely prelude, induction, music travel, and postlude. Findings revealed that within the real-life circumstance of having cancer and receiving chemo- and/or radiotherapy, participants in the study found the prelude (and the associated setting of an intention) to direct them towards a more positive outlook on their real-life circumstances. As a result of the prelude and the setting of a positive intention, participants had positive experiences of visualised imagery that was closely related to their emotions. Furthermore, the intentions that were set during each prelude provided conscious foci for the sessions, which allowed participants to give attention to particular real life challenges in each BMGIM session.

During the music travel phase, the participants found the classical music to be calming and relaxing, and to stimulate imagery. In addition to visual images, participants also experienced the classical music through their senses of smell, hearing, taste and touch. Regardless of whether the music travel experience was visual, emotional, sensory or kinaesthetic, the "journey" allowed the participants to experience the challenges and opportunities of their real-life circumstances in new ways. They were able to see, hear, smell or feel the presence of the challenges and/or opportunities during their music travels. This, in turn, confirmed the existence of these phenomena, and allowed the participants to acknowledge them and move



on. Thus, the music travel phase of the BMGIM gave participants an opportunity to move past their negative emotions.

Following the music travel, participants were given the option of drawing a mandala to reflect their experiences during the travel. Where participants did choose to draw mandalas, these were found to be instrumental in initiating the postlude, which guided the participants in processing the content of their music travels. During the postlude, the music therapist played a key role in guiding the participants towards finding meaning in and gaining understanding from their music travels, and then linking this newfound insight with their real-life circumstances.

Participants identified kindness, thoughtfulness, a non-judgementalism, understanding, perceptiveness and attentiveness as important characteristics for a BMGIM therapist. This highlights the importance of the proper education and training of therapists who intend to practice the BMGIM, and of the preparation of clinical environments that are conducive to the practice of the BMGIM.

Participants cited their own curiosity as well as their experience of enhanced wellbeing following their initial BMGIM sessions as motivations for them to continue their participation in the study. However, they also found the adverse effects of cancer and its treatment to impact on their ability to concentrate during the BMGIM sessions. The phases of the BMGIM sessions implemented in this study were, therefore, shorter than those of traditional BMGIM sessions, though the traditional BMGIM process was followed in all other respects.

#### **8.3.2** Development of coping strategies

The findings generated within the constituent of *Development of coping strategies* showed that the BMGIM sessions allowed participants to develop coping strategies, e.g. directing their concentration away from unpleasant real life experiences, being transported by music to an alternate space, and speaking about their real-life experiences. In addition, through their BMGIM sessions, participants experienced a change in perspective with regard to their circumstances. This left them feeling calm, restful, peaceful and happy.

Through the coping strategy of speaking about their real-life experiences, participants experienced a sense of relief. This, in turn, created a space where healing could take place as

the sense of relief improved the participants' ability to sleep and rest, and improved their attitudes towards the future. Through the insights and understanding gained through therapeutic conversations with the music therapist, participants developed new perspectives on their illness and other real-life experiences. This change in perspective improved their ability to cope with their co-existence with cancer and its effects which, in turn, gave them the strength to take back control of their own lives of which cancer was now just a part.

#### 8.3.3 Juxtaposition of images and their meaning

By juxtaposition, contrasting images were placed together, side by side, for consideration. The meaning of the contrast was then related to the real-life challenges of surviving cancer and dealing with the associated myriad of uncertainties that it introduces. Generally, through a lens of juxtaposition, participants found the contrasting images to be symbolic of the challenges and opportunities in their real-life circumstances. Once the contrasting images were related to real life, participants realised that both challenges and opportunities always co-exist in life. Thus, through juxtaposition, participants found meaning and understanding in their imagery as well as in co-existing with their illness.

#### 8.3.4 Experience of physical wellbeing

Participants in the BMGIM sessions reported a sense of enhanced physical wellbeing linked to physical relaxation, improved sleep patterns and decreased pain perception. These relaxing and calming effects of the BMGIM imparted to the participants feelings of strength, courage and better ways of coping with the real life challenges.

Improvements in the participants' physical wellbeing were also identified through data collected using the SDS. Significant improvements were found, particularly with respect to the constructs of pain intensity and fatigue. These findings seem to be in line with those of the qualitative domain where participants reported experiencing decreased pain perception, increased physical relaxation, and improved sleep patterns due to the BMGIM intervention.

#### 8.3.5 Experience of psychological wellbeing

Enhanced psychological wellbeing was experienced by patients as they developed an increased sense of hope, wellbeing, strength and rejuvenation.



During the music travels, it was found that images of flowers and trees gave participants a sense of life which, in turn, signified hope for the future. Hope for the future was also engendered by imagery that symbolised forwards movement in life which created a sense of things to look forward to.

Participants also experienced a greater sense of psychological wellbeing through imagery which symbolised strength, a positive attitude, empowerment, support and freedom. A sense of strength was further engendered by imagery that symbolised being nurtured. Lastly, imagery of nourishment by food, drink and relaxation left participants with a sense of rejuvenation.

In the quantitative domain, an upward trend in the psychological wellbeing of the participants across the course of the BMGIM therapy was identified. Likewise, a statistical analysis of the data collected through the PGWBI found improvements with regard to depressed mood and vitality as the BMGIM programme progressed. However, these findings were not statistically significant.

#### 8.3.6 Experience of spiritual wellbeing

Through the experiences of being in the presence of God, the soul/spirit being healed and feeling deep gratitude, participants felt a sense of enhanced spiritual wellbeing through transcending the realm of physical existence.

The experiences of the presence of God were associated with a restful, positive environment and with feelings of wellbeing healing. Through imagery of being in a church and listening to the word of God, certain participants experienced a feeling of their soul or spirit being healed. Participants also associated simply listening to the music with a sense of their soul or spirit being healed.

Participants likened the feeling of gratitude to a spiritual experience. The feeling of gratitude was generally experienced through imagery of nature. Certain participants expressed that the music reminded them of all that they were grateful for, such as their families, homes and churches. In this way, some of the participants experienced a spiritual connection to God through the BMGIM sessions.



In general, Participants experienced an enhanced sense of spiritual wellbeing through imagery that allowed them to embrace their real-life circumstances and find meaning in their past memories.

In the quantitative domain, data collected through the SIWB indicated a significant improvement in the domains of self-efficacy and life scheme. This can also be seen as a spiritual outcome of the BMGIM.

#### 8.4 ESSENCE OF THE FINDINGS

The six constituents of the findings illuminated the essence of the findings. In essence, the findings suggest that the BMGIM was successful in delivering holistic care to cancer patients undergoing chemo- and/or radiotherapy. Participants in this study reported that the BMGIM brought about improvements in the physical, psychological and spiritual dimensions of their wellbeing. Evidence of the quantitative domain also saw trends towards improved physical, psychological and spiritual wellbeing. The BMGIM process enabled the music therapists to guide the participants towards finding meaning in, and understanding of their suffering thus developing insight into their real life experience. Through the BMGIM, participants were assisted in developing coping strategies for co-existing with their illness and the effects of its treatment.

The BMGIM was also placed within the context of the nurse-patient relationship as the caritas factors of Watson's philosophy and science of caring in nursing practice were incorporated into the study's findings. Collaboration with professional music therapists throughout the research process demonstrated the potential for future collaboration between the profession of nursing and music therapy in providing holistic care to cancer patients. Nurses are mandated to provide comprehensive patient care, and in this study, the BMGIM has proven to be a useful tool in this regard.

#### 8.5 RECOMMENDATIONS

#### 8.5.1 **Recommendations for practice**

The findings of the study show that participants involved in the BMGIM sessions experienced enhanced physical, psychological and spiritual wellbeing as a result. It is therefore recommended that the BMGIM be systematically implemented in settings where care is provided to cancer patients receiving chemo- or radiotherapy. It is further recommended that health care professionals be trained in BMGIM, so that there are enough trained people available to implement the BMGIM in such contexts. The role of advance psychiatric nurses in BMGIM should also be further explored.

According to the findings of this study, it is recommended that the traditional phases of the BMGIM be followed, but that the length of the phases be shorter in duration (see Table 8.1) due to the particular health challenges experienced by cancer patients on medical treatment.

Table 8.1 Actual durations of the various BMGIM phases.

	PHASE 1:	PHASE 2:	PHASE 3:	PHASE 4:	TOTAL
	PRELUDE	INDUCTION	MUSIC TRAVEL	POSTLUDE	DURATION
Duration	5 - 15 min	3 - 5 min	10 - 15 min	5 - 10 min	40 -70 min

#### 8.5.2 Recommendations for nursing education and administration

The findings of the study support the implementation of the BMGIM by appropriately qualified health care professionals in cancer care settings. It is therefore recommended that professionals such as nurses who are interested in practicing the intervention of BMGIM receive the necessary theoretical and practical training to equip them with the knowledge, skills and attitude required to deliver BMGIM therapy safely.

Nurse educators in both educational institutions and health care settings should be made aware of the beneficial effects of the BMGIM, and of the pre-requisites for using this complimentary therapy method together with more traditional nursing care approaches. In-service training for health care personnel is also recommended in order to increase nurses' knowledge about this complimentary therapy and its potential to promote holistic care. It is also recommended that nurse administrators be made more aware of therapies such as BMGIM, as this is likely to lead to promotion of BMGIM and a greater acceptance of the BMGIM in "mainstream" health care institutions.

The findings of this study show that through the implementation of the BMGIM, music therapists were able to deliver more holistic health care to the participants than before. It is therefore recommended that nursing administrators motivate for the inclusion of BMGIM-qualified health care professionals in multi-disciplinary cancer care teams.



The BMGIM involves the use of certain equipment that needs to be purchased. Provision for this in the budgets of cancer care facilities would ensure its availability, and would hence promote the BMGIM as a legitimate form of intervention in health care settings.

#### **8.5.3** Recommendations for future research

The framework of intervention research which was adopted in this study involved the development of certain program material (Annexure D). This material was developed according to the requirements of the various stages of intervention research (Fraser et al. 2009:70). During this study, program material was only developed for stages one and two. Development of programme material for stages three and four will require that refinements and revisions be made to the existing program material based on more than one study. Therefore, it is recommended that further studies be conducted in alternate settings in order for the program material to become relevant in a range of potential practice settings. Indeed, further research in this area would not only contribute to the revision and refinement of the program material but would also assess the efficacy of the BMGIM intervention in other settings.

Furthermore, it is recommended that the BMGIM intervention be incorporated into the structure of an organisation, and that additional research be conducted on the effectiveness of the intervention to ensure that the desired outcomes are achieved when the intervention is implemented under routine practice conditions in a diverse array of health care contexts. This is in line with step four of intervention research (See Chapter 4, section 4.3.4).

Theories such as Margaret Newman's Health as Expanding Consciousness Theory and Hildegard Peplau's Interpersonal Relations Theory can be used in future research to develop areas of scientific meaning in BMGIM research.

More robust research methods such as experimental research which probes the cause and effect relationships between an intervention and its outcomes, or randomised controlled trials which are considered the strongest type of experimental study are recommended frameworks for future research on the BMGIM and its effects.

In addition to evaluating the benefits of the BMGIM intervention, it should also be evaluated whether the benefits of the method outweigh the costs thereof. Socioeconomic benefits such as improved mobility, work functioning, mood state and social relationships should be researched with respect to BMGIM implementation and development. Furthermore, comparative effectiveness research can be conducted on the cost analysis and feasibility of BMGIM training.

Given the health challenges (such as fatigue and pain) experienced by cancer patients receiving chemo-or radiotherapy, studies should be conducted to identify the most appropriate BMGIM music programs and duration for cancer patients in the treatment phase. Furthermore, future research can be conducted on the feasibility and effectiveness of adapted BMGIM for cancer patients during the treatment phase so that they do not experience the prospect of additional treatment fatigue.

This study found the BMGIM to equip participants with coping strategies and new perspectives that were of great value in their real-life circumstances. Future research is recommended to evaluate the effects of the BMGIM intervention when implemented amongst cancer patients earlier in their cancer journey, perhaps even from the time of diagnosis. Furthermore, the long-term effects of implementing the BMGIM throughout the treatment and rehabilitation phases should also be studied.

The collaborative roles of professional nurse and professional music therapist during the process of BMGIM, for example during the prelude and postlude phases of BMGIM can also be investigated in future research.

#### 8.6 CONTRIBUTION TO THE FIELD OF NURSING

The systematic review conducted in Phase 1 of this study highlighted a lack of research regarding the effects of the BMGIM on the wellbeing of cancer patients when implemented during a period of cancer treatment. This study produced evidence that the BMGIM intervention can be successfully and beneficially implemented amongst cancer patients whilst they are receiving chemo- and/or radiotherapy and that BMGIM can be incorporated into existing cancer care regimes.

During the empirical part of the study, i.e. Phases 2 and 3, I experienced challenges in the implementation of the BMGIM as the participants did not always feel well enough to participate in the therapy due to the adverse effects of their cancer and its treatment. However, these very challenges in themselves contributed to the findings of the study as they led to the necessary adaptation of the duration of the BMGIM session. Thus the study generated new knowledge on the appropriate duration of the various BMGIM phases that can be recommended for cancer patients who are receiving chemo- or radiotherapy.

The adoption of the intervention research framework for this kind of study is unique. The steps of intervention research facilitated the development of valuable program material which will be further refined in future studies. The steps of intervention research will enable me, as researcher, to conduct studies in the future. Through collaboration with clinical health care practitioners, the next step is to integrate the BMGIM into a setting where I do not have direct control over its implementation. The research design and methods used in this study could assist other nurses to conduct similar studies in their own unique contexts.

This study involved collaboration with professional music therapists who are specially qualified in the BMGIM. This collaboration began right from the proposal development phase of the research. This study therefore highlights the importance of nurses' collaborating with other necessary health care professionals in order to render holistic care to cancer patients.

#### 8.7 LIMITATIONS

A blended approach to research design was taken as both quantitative and qualitative approaches made up the research design of the current study. This was done in order to strengthen the research findings. However, the adverse effects of chemo- and radiotherapy limited certain participants' involvement in the study and contributed to the relatively high attrition rate. The initial sample size of the study was 24, but only 8 participants completed the final set of questionnaires during data collection. This small ultimate sample size limits the generalisability of the findings of the study, and limited my ability to draw statistically significant conclusions from the findings generated by the quantitative domain of the study. Although the findings of the quantitative domain suggested trends towards improvements in physical, psychological and spiritual wellbeing the ultimate small sample size reduced the strength of these findings.



As the population of the study was cancer patients living in a cancer interim home or their private home during the course of chemo- or radiotherapy, the intervention of BMGIM and evaluation thereof had to be conducted within a period of six weeks, ie; during the course of their medical treatment. This posed as a limitation in the study as data collection had to be conducted within a particular period of time and participants who experienced ill health could not be accommodated outside this time period ie; after the six weeks when they were not receiving chemo- or radiotherapy. In addition, the National Cancer Registry (2010:1) reported that cancer was more prevalent in males than in females in 2010. However, in the current study, the female representation in the patient sample was much higher than the male representation. In addition, whilst the sample comprised equal representations of both the white and black racial groups, other racial groups were not represented. This also negatively affects the generalisability of the findings within the South African context.

#### 8.8 FINAL CONCLUSIONS

This study was guided by its aim, which was to implement the BMGIM in selected cancer interim homes in Gauteng, South Africa, and evaluate its complementary effects on the physical, psychological and spiritual wellbeing of cancer patients undergoing medical treatment. A systematic review was conducted to identify methods that have been used to implement the BMGIM in other health care settings, and to evaluate the reported effectiveness of the BMGIM in other cancer care contexts. The systematic review was followed by the empirical component of the study which, according to the intervention research framework, had both a quantitative and a qualitative domain. Both domains were geared toward understanding the cancer patients' experiences during their BMGIM therapy, and evaluating the effects of the BMGIM on their physical, psychological and spiritual wellbeing.

The current study has found the BMGIM to represent a holistic approach to caring for the needs of cancer patients receiving chemo- or radiotherapy. Conclusions drawn from the findings indicate that the BMGIM intervention was perceived by patients as a positive experience which enhanced their sense of physical, psychological and spiritual wellbeing. Furthermore, the intervention research framework offers opportunities for future nursing research which can facilitate the further development of holistic nursing care. With appropriate training, nurses could successfully implement the BMGIM to complement existing care provided to cancer patients receiving chemo- and/or radiotherapy, thus promoting holistic patient care.



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#### ANNEXURE A

# APPROVAL FROM THE FACULTY OF HEALTH SCIENCES RESEARCH ETHICS COMMITTEE OF THE UNIVERSITY OF PRETORIA (362/2013)



The Research Ethics Committee, Faculty Health Sciences, University of Pretoria complies with ICH-GCP guidelines and has US Federal wide Assurance.

- FWA 00002567, Approved dd 22 May 2002 and Expires 20 Oct 2016.
- IRB 0000 2235 IORG0001762 Approved dd 13/04/2011 and Expires 13/04/2014.



Faculty of Health Sciences Research Ethics Committee

19/09/2013

#### Approval Certificate New Application

UNIVERSITEIT VAN PRETORIA

Ethics Reference No.: 362/2013

Title: Implementation of Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng. Dept: of Nursing Science Institution: University of Pretoria Cell: 0784121540

Dear Ms VM Bhana

The **New Application** as supported by documents specified in your cover letter for your research received on the 29/08/2013, was approved by the Faculty of Health Sciences Research Ethics Committee on the 18/09/2013, as intervention therapy with music.

Please note the following about your ethics approval:

- Ethics Approval is valid for -2 years.
- Please remember to use your protocol number (362/2013) 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 on 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

Dr R Sommers; MBChB; MMed (Int); MPharMed.

Deputy Chairperson of the Faculty of Health Sciences Research Ethics Committee, University of Pretoria

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).

<sup>◆</sup> Tel:012-3541330

<sup>♦</sup> Web: //www.healthethies-up.co.za

<sup>♦</sup> Fax:012-3541367 Fax2Email: 0866515924

<sup>♦</sup> H W Snyman Bld (South) Level 2-34

<sup>♦</sup> E-Mail: manda@med.up.ac.za

<sup>♦</sup> Private Bag x 323, Arcadia, Pta, S.A., 0007

#### **ANNEXURE B**

### PERMISSION TO ACCESS CANCER INTERIM HOMES





Research • Educate • Support

Toll-Free 0800 22 66 22 www.cansa.org.za



HEAD OFFICE

+27 11 616 7662 +27 11 622 3424

Fax Address

26 Concorde Road West Bedfordview, 2008

Postal

PO Box 2121 Bedfordview, 2007

TO WHOM IT MAY CONCERN

This document serves to confirm that permission was granted to

Ms Varshika M Bhana PhD Student, Department of Nursing Science, University of Pretoria

To conduct research at selected Interim Homes of the Cancer Association of South Africa (CANSA)

#### Important Exclusion

The request by Ms Varshika M Bhana to be granted access to clinical records, files and databases of individual patients cannot be granted by the Research Ethics Committee of CANSA. Ms Bhana will have to negotiate access to any existing clinical records, files and databases of patients with each individual patient, their treating oncologist and Head of the Oncology Centre where they are undergoing cancer treatment.

Patients who reside in CANSA's Interim Homes are independent individuals who board and lodge in the CANSA Interim Homes while undergoing treatment at an Oncology Unit. These individuals are not patients of the Cancer Association of South Africa - they are independent individuals who are provided with board and lodging facilities by CANSA while undergoing cancer treatment.

Professor Michael C Herbst For CANSA Research Ethics Committee Registered with the Research Ethics Council Registration No: REC-071010-029

Prof Michael C Herbst 29 July 2014





Non-Executive Directors: B B Pancha (Chairperson), D A Foster (Vice Ghairperson), M Jennings, Dr C M Masuku, Dr M de P A Mandew, P K Maharai, L D Lekota



# Permission to do Research and access Records / Files / Data base at selected CANSA Interim Homes in Gauteng

To: H

Head: Health

**CANSA** 

Professor Michael C Herbst

From: The Investigator

Miss Varshika M Bhana

Re: Permission to do the following research at selected CANSA Interim homes in Gauteng

I, <u>Varshika M Bhana</u> am a Phd student working at the <u>University of Pretoria</u>, Department of <u>Nursing Science</u>. I hereby request permission to conduct a study at <u>selected CANSA interim homes</u> that involves access to patient records.

The title of the study is:

Implementation of Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng Province

I intend to publish the findings of the study in a professional journal and/ or at professional meetings like symposia, congresses, or other meetings of such a nature.

I furthermore request in terms of the requirements of the Promotion of Access to Information Act. No. 2 of 2000 that I be granted access to clinical records, files and databases.

I undertake not to proceed with the study until I have received approval from the Faculty of Health Sciences Research Ethics Committee, University of Pretoria and from the CANSA Research Ethics Committee.

Yours sincerely	
VMBhana.	
Signature of the Principle Investigator	

Permission to do the research study at selected CANSA Interim Homes in Gauteng and to access the information as requested, is hereby approved. See note below

Chief Executive Officer	
Hospital	9 e
Prof/Dr_Michael C HerLst	Million.
	Signature of the 950 Head: Health

NB access to patient records will have to be arranged by Ms Bhana with each patient individually. CANSA cannot provide access on behalf of patients

Hospital Official Stamp

University of Pretoria



#### ANNEXURE C

## PARTICIPANT INFORMATION AND INFORMED CONSENT **DOCUMENT**



# PARTICIPANT INFORMATION AND INFORMED CONSENT DOCUMENT

#### TITLE OF STUDY:

Implementation of the Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng Province.

#### INTRODUCTION:

You are invited to voluntarily participate in a research study. The purpose of this leaflet is to help you decide on whether you would like to participate. Read through the information leaflet and if you have any questions do not hesitate to ask the researcher. You should be satisfied with all which the study involves before agreeing to participate.

#### THE PURPOSE OF THIS STUDY:

The aim of this study was to implement and evaluate the complementary effect of the BMGIM on the physical, psychological and spiritual wellbeing of patients in selected cancer interim homes in Gauteng, South Africa.

The information gained from this study will increase health care professionals and patients' awareness of BMGIM. In this way we would be able to work together to transform routine care to excellent care.

#### **EXPLANATION OF PROCEDURE:**

As a participant of this study you will be involved in BMGIM sessions during your stay in the cancer interim home. The BMGIM sessions will be conducted by health care professional who has received training in BMGIM. The BMGIM sessions are therapeutic sessions which explore your experiences of life through listening to short pieces of music and then drawing to express your emotions, feelings or experiences of your health. You will be involved in BMGIM sessions which will take place once a week for five weeks. Participation in the study will also involve completion of questionnaires, photographs of your drawings and an interview before discharge.



### ETHICAL APPROVAL:

Ethical approval has been granted by the University of Pretoria Ethics Committee. The proposal of this study was submitted to the organisation which heads the cancer interim home. They are aware of this research being conducted and their permission has been granted.

### YOUR RIGHTS AS A PARTICIPANT:

You have the right to be protected from harm and to be well informed about the research procedure, so don't hesitate to ask questions. Your participation is entirely voluntary and you can refuse to participate at any time during the study. This will not affect your access to medical care. The researcher reserves the right to withdraw you from the study if it is in your best interest.

### RISK AND DISCOMFORT INVOLVED:

No risks are involved in this study. The BMGIM sessions will not interfere with your essential treatment.

### POSSIBLE BENEFITS OF THIS STUDY:

The findings of this study will help promote the use of BMGIM as supportive cancer care. This will create a more therapeutic environment for the patient thus promoting health and wellbeing. Both health professionals and patients will become aware of the therapeutic effects of this alternative therapy.

### INSURANCE AND FINANCIAL ARRANGEMENT:

Neither you nor your medical aid will be expected to pay for your participation in the research study.

### **CONFIDENTIALITY:**

Any information that you supply will be kept strictly confidential. Results will be published or presented in such a fashion that you as a participant will remain unidentifiable.

#### SOURCE OF ADDITIONAL INFORMATION:

If you have any questions about the research you are welcome to contact the researcher, Miss V. M. Bhana (078 412 1540) or research supervisors; Professor FM Mulaudzi (012 354 2125), Professor MD Peu (012 354 2133)



### INFORMED CONSENT TO PARTICIPATE IN THIS STUDY

I voluntarily agree to participate in this research study. The researcher, Miss V.M. Bhana, has informed me of the nature, conduct, benefits and risks of this research study. I have received, read and understood the information leaflet and informed consent regarding the study. I understand that, at any time during the study I may refuse to participate. This will not affect my access to health care. The researcher reserves the right to withdraw me from the study if it is my best interest. My participation in this study will be kept confidential.

I feel I am well informed, have had sufficient time to ask questions and am prepared to participate in this study. I have received a signed copy of this informed consent agreement.

Participant:

Name

Signature

Date

I Miss V.M. Bhana herewith confirm that the above participant has been fully informed about the nature, conduct, risks and benefits of the above study.

Name	Signature	Date
Witness:		
Name	Signature	Date



### **ANNEXURE D**

# **BONNY METHOD OF GUIDED IMAGERY AND MUSIC:** PRACTICE GUIDELINE



# **BONNY METHOD OF GUIDED IMAGERY AND** MUSIC: PRACTICE GUIDELINE FOR THE STUDY TITLED:

Implementation of the Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng Province



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# **BMGIM PRACTICE GUIDELINE**

### 1. Introduction

My name is Varshika Bhana. Firstly I would like to thank you for accepting the invitation to facilitate BMGIM sessions with patients diagnosed with cancer and who are receiving chemotherapy and/or radiotherapy. You have been highly recommended to facilitate these BMGIM sessions as you have the necessary qualification and experience in this therapy. The implementation of BMGIM is part of my Phd study which is titled:

Implementation of Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in the Gauteng province

The field of music therapy encompasses a number of practices and methods. One of the methods is the Bonny Method of Guided Imagery and Music (BMGIM) which is a receptive method of music therapy. BMGIM is a music-centered transformational therapy which facilitates self-awareness and the integration of physical, psychological, social and spiritual dimensions of a being (Cadrin 2005-2006:5).

The current study aims to implement and evaluate the complementary effect of the BMGIM on the physical, psychological and spiritual wellbeing of patients in selected cancer interim homes in Gauteng, South Africa. In order to identify research evidence and best practices to support the implementation of BMGIM in cancer care a systematic review was conducted. The systematic review formed Phase 1 of the study and thus informs the implementation of BMGIM which is Phase 2. The findings of the systematic review and the expert opinion of professional music therapists; Mrs K Swart (M.Mus. (Music Therapy) – SMU, Dallas TX USA, GIM Fellow-AMI) and Ms C Lotter (BA Hons (Psychology)-UNISA, M.Mus. (Music Therapy)-UP, GIM Fellow-AMI,MARI Practitioner) have guided the development of the BMGIM procedure guidelines for this study.



### 2. BMGIM procedure

In this study BMGIM sessions will follow the four phases as specified by Professor HL Bonny. The four phases are described below and the durations of each phase are indicated in Table 1:

The process of implementation of BMGIM involves four phases namely; prelude, induction, music travel and postlude. The prelude involves exploration of the patients' current life experience and through the guidance of the therapist the patients' attention is turned towards the inner world and a focus for the session is identified. This phase takes approximately 15 to 20 minutes.

The next phase; induction lasts for two to seven minutes. The patient sits or lies down in a comfortable position and the therapist, through the use of words guides the patient into a relaxed state. In the third phase, music travel, carefully selected music based on the focus of the session begins to play. The therapist guides the patient through exploration of imagery which the music may evoke. This phase lasts for 30 to 50 minutes (Wigram, Pedersen & Bonde 2002:117-119).

The final phase, postlude is where the music ends and the patient is guided to awareness of the present moment. The patient spends the next 5 to 10 minutes drawing on paper in order to capture the experience of the music travel. From a Jungian perspective the drawing also referred to as a mandala gives form to the images experienced during the music travel. Patients usually draw the images which were the most explicit in their music travel and the process of drawing clarifies and enriches these images. Through drawing the images are brought closer to consciousness and facilitate the patients' process of healing through integration and transformation (Bruscia & Grocke 2002:223). Further, the mandala is a symbolic representation of the current inner state and usually conveys the salient features of what has been gained during the music travel. Processing the mandala with the patient thus aids the therapeutic process.

This is followed by a 10 to 20 minute dialogue between patient and therapist to link the experience with the focus of the session and the patients' daily life (Wigram et al. 2002:117-119). The method allows individuals to address questions, experiences and to search for



meaning in their current circumstances (Cadrin 2005-2006:5). Table 1 reflects the duration of each phase of a BMGIM session as recommended by Wigram et al. (2002:117-119).

**Table 1: Duration of BMGIM phases.** 

BMGIM PHASES:	DURATION (62-107min)
Prelude and intention	15 to 20 minutes
Induction	2 to 7 minutes
Music travel	30 to 50 minutes
Mandala and postlude	5 to 10 minutes
	10 to 20 minutes

Studies included in the final data extraction process of the systematic review also followed the process of BMGIM as described by Wigram et al. (2002:117-119). The systematic review findings regarding the BMGIM procedure are presented in Table 2.

REPORT	PHASE 1	PHASE 2	PHASE 3	PHASE 4
The effects of BMGIM	Discussion and	Relaxation	Music listening	Review & relate
on quality of life &	goals	15 minutes	30-40 minutes	30-40 minutes
cortisol levels of cancer	15 minutes			Complete self-report
patients by Burns (1999)				scales
The BMGIM with	Prelude	Induction	Music listening	Postlude
cancer survivors. A	15-30 minutes	5-10 minutes	20-50 minutes	30-40 minutes
psychosocial study with				
focus on the influence of				
BMGIM on mood and				
quality of life by Bonde				
(2005)				
Dying well: The	Standard BMGIM p	procedure followed	1	
BMGIM at the end of	Duration of each ph	ase not specified		
life by Cardrin (2005-				
2006)				

Table 2: Systematic review findings: BMGIM procedure followed.



In the studies conducted by Burns (1999), Bonde (2005a) and Cadrin (2005-2006) participants who had a previous or current diagnosis of cancer received the BMGIM sessions. These participants were not receiving chemotherapy and radiotherapy during the BMGIM intervention.

In the current study BMGIM will be implemented for patients diagnosed with cancer and who are currently receiving medical treatment (chemotherapy or radiotherapy). Taking into consideration the possible ill health of these patients the duration of the BMGIM sessions will be dependent on the level of well-being of the patient. However the BMGIM sessions will still comprise of the four phases of BMGIM.

The duration of the session and the phases will also be recorded on the session summary form (Annexure A). As the participants will be receiving five BMGIM sessions in total, the duration of each session would depend on the condition of the participant at that moment and may vary between approximately 90 to 40 minutes.

### 3. The research process

The BMGIM sessions will be implemented once a week for 5 weeks. A schedule for the BMGIM sessions will be planned with the patient, therapist and researcher before and BMGIM sessions will not interrupt the medical treatment the patients are receiving.

Physical, Psychological and Spiritual well-being questionnaires will be completed by the patients upon receiving written consent and then before the first BMGIM session and after the third and the fifth BMGIM sessions. The completion of these questionnaires will be facilitated by me although there may be instances where I will request you to collect these questionnaires from participants. Further, all therapists are requested to complete the session summary form for each session and take a photograph of the mandala as these will be included in data collection.

I will also conduct an individual interview with each participant on completion of the five BMGIM sessions.



### 4. Conclusion

The above procedure serves as a guideline. Further comments and recommendations on these guidelines or the BMGIM sessions will be highly appreciated and can be directed to me at varshika.bhana@up.ac.za or telephonically at 078 412 1540.

I look forward to more interaction with you during the study. Thank you once again for your time and dedication invested in this study.

### 5. Acknowledgements

I would like to acknowledge:

Mrs K Swart (M.Mus. (Music Therapy) – SMU, Dallas TX USA, GIM Fellow-AMI) and Ms C Lotter (BA Hons (Psychology)-UNISA, M.Mus. (Music Therapy)-UP, GIM Fellow-AMI, MARI Practitioner),

for their valuable input and guidance during the writing up of the BMGIM practice guidelines for this study. Further I would also like to thank them for giving me access to the session summary form and for allowing and guiding the additions to the session summary form to best suit this study.

Thank you

Varshika Bhana



### 6. REFERENCE LIST

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Wigram, T., Pedersen, I.N. & Bonde, L.O. 2002. A comprehensive guide to music therapy: Theory, clinical practice, research and training. Philadelphia: Jessica Kingsley Publishers.



# ANNEXURE A **SESSION SUMMARY FORM**



# **Session Summary Form**

<b>Date:</b>	Time:	<b>Guide:</b>	
Patient:		Session number:	
Activity the patient was	occupied in before the session:		
Brief summary of the Pr	elude: (Keywords/Themes):		
	<del></del>		
Prelude [Duration]:			
Intention:			
Music:			
Brief summary of Induct	tion:		
Induction [Duration]:			
Brief summary of the mo	usic travel:		
Keywords:			
T - 11 2		G	
ravellers' response to t	he music (Emotional, Kinaesthetic,	Sensory etc):	

# Music travel [Duration]: Brief description of the mandala: Brief description of the postlude (Keywords/Themes): Postlude [Duration]: Describe the patients' ability to recognise, explore and discuss emotions, insights, important themes: Describe the patients' willingness to take actions to improve the life circumstance: Duration of the session:\_\_\_\_\_ NB: Please take a photograph of the mandala. Signature of therapist:\_\_\_\_\_ Date:\_\_\_\_\_

Annexure E: Information flyer 2016

# ANNEXURE E

# **INFORMATION FLYER**



#### MUSIC THERAPY SESSIONS

### Music therapy has been found to improve the mood and quality of life of cancer patients

### Have you been diagnosed with cancer?

### Would you be interested in experiencing the beneficial effects of music therapy?

You are invited to participate in a study which involves the use the Bonny Method of Guided Imagery and Music in cancer care

### **REQUIREMENTS:**

- Available for 6 weeks
- Older than 18 years of age
- Diagnosed with cancer
- Currently receiving medical treatment (radiotherapy or chemotherapy) for at least 6 weeks
- No history of an acute psychiatric condition

The music therapy sessions are one-on-one individual sessions, done by a qualified music therapist. Sessions will be done once a week for 5 weeks and will be approximately 1 hour in duration.

Dates, times and location will be arranged for your convenience.

### This invitation is extended to persons living in the following areas (in Gauteng):

Pretoria: Rietfontein, Hatfield

Johannesburg West: Honeydew, Ruimsig, Little Falls, Allensnek, Harvestone, Strubensvalley, Constantia, Northcliff, Fairland, Berario, Blackheath, Cresta, Linden, Weltevredenpark, Randburg, Melville, Westdene, Florida.

East Rand: Edenvale and surrounding areas

**COST:** No cost involved

### For more information or to book appointments please contact:

Varshika Bhana (cell: 078 412 1540, email: varshika.vb@gmail.com or send me a message on facebook: Varshika Bhana)



# ANNEXURE F

# **DEMOGRAPHIC QUESTIONNAIRE**





# **DEMOGRAPHIC QUESTIONNAIRE**

Please complete the following questionnaire. Should you require any assistance during completion of the questionnaire please do not hesitate to ask the researcher.

NAME	E & SURNAME	Ξ:	
AGE:			
Please	tick the approp	riate b	ox:
GEND	ER:		Male
			Female
RACE	:		Black
			White
			Coloured
			Indian
Please	state the type of	f cance	r you have been diagnosed with:
	tick the approp		
What s		cer hav	e you been diagnosed with:
	Stage I		
	Stage II		
	Stage III		
	Stage IV		
What t	reatment are vo	u curre	ntly receiving at the hospital?
	Chemotherapy		
$\Box$	Radiotherapy		
	Both		
At whi	ch hospital are	you rec	reiving your treatment?

Where a	re you stay	ying for th	ne duratio	n of your	medical t	treatment' 	?		
	currently i Yes No	receiving	treatment	t for a psy	chiatric c	ondition?			
_ Z	earn a stea Yes No	dy incom	e (ie: a w	eekly wag	ge or a mo	onthly sala	ary)?		
_ '	self-emplo Yes No	oyed?							
□ P	work for a Private Public Not applica		r public o	rganisatio	on?				
	ile of 1 to , please ci				support of	and 10 be	ing the h	ighest lev	el of
	uld you ra				from you	ır <b>family</b> ʻ	?		
1	2	3	4	5	6	7	8	9	10
How wo	uld you ra	te the sup	port whic	ch you get	from you	ır <b>employ</b>	ver?		
1	2	3	4	5	6	7	8	9	10
How would you rate the support which you get from your <b>church</b> ?									
1	2	3	4	5	6	7	8	9	10
How wo	uld you ra	te the sup	port whic	ch you get	from you	ır <b>friend</b> s	3?		
1	2	3	4	5	6	7	8	9	10

Do you	have children?
	Yes
	No
If you h	have answered yes to the above question, how many children do you have?
Thank v	you



# **ANNEXURE G**

# SYMPTOM DISTRESS SCALE (SDS)

### SYMPTOM DISTRESS SCALE

### Instructions

Below are 5 different numbered statements. Think about what each statement says, then place a circle around the one statement that most closely indicates how you have been feeling lately. The statements are ranked from 1 to 5, where number one indicates no problems and number five indicates the maximum amount of problems. Numbers two through four indicate you feel somewhere in between these two extremes. Please circle one number for each item.

### **DEGREES OF DISTRESS**

### NAUSEA (1)

1	2	3	4	5
I seldom if ever have nausea	I have nausea once in a while	I have nausea fairly often	I have nausea half the time at least	I have nausea continually

### NAUSEA (2)

1	2	3	4	5
When I do have nausea, it is very mild	When I do have nausea, it is mildly distressing	When I have nausea, I feel pretty sick	When I have nausea, I usually feel very sick	When I have nausea, I am as sick as I could possibly be

### **APPETITE**

1	2	3	4	5
I have my normal appetite and enjoy good food	My appetite is usually, but not always, pretty good	I don't really enjoy my food	I have to force myself to eat my food	I cannot stand the thought of food

### **INSOMNIA**

1	2	3	4	5
I sleep as well as I always have	I occasionally have trouble getting to sleep and staying asleep	I frequently have trouble getting to sleep	I have difficulty getting to sleep and staying asleep almost every night	It is almost impossible for me to get a decent night's sleep

### PAIN (1)

1	2	3	4	5
I almost never have pain	I have pain once in a while	I have pain several times a week	I am usually in some degree of pain	I am in some degree of pain almost constantly

### PAIN (2)

1	2	3	4	5
When I do have pain, it is very mild	When I do have pain, it is mildly distressing	When I do have pain, it is usually fairly intense	The pain I have is very intense	The pain I have is almost unbearable

#### **FATIGUE**

1	2	3	4	5
I seldom feel tired or fatigued	There are periods when I am rather tired or fatigued	There are periods when I am quite tired and fatigued	I am usually very tired and fatigued	Most of the time, I feel exhausted



### **BOWEL**

1	2	3	4	5
I have my normal bowel pattern	My bowel pattern occasionally causes me some discomfort	My present bowel pattern occasionally causes me considerable discomfort	I am usually in considerable discomfort because of my present bowel pattern	I am in almost constant discomfort because of my bowel pattern

### CONCENTRATION

1	2	3	4	5
I have my normal ability to concentrate	I occasionally have trouble concentrating	I occasionally have considerable trouble concentrating	I usually have considerable difficulty concentrating	I just can't seem to concentrate at all

### **APPEARANCE**

1	2	3	4	5
My appearance has basically not changed	Occasionally I am concerned about the worsening of my physical appearance	I am not often concerned that my appearance is worsening	Most of the time I am concerned that my physical appearance is worsening	The worsening of my physical appearance is a constant, preoccupying concern

### **BREATHING**

1	2	3	4	5
I usually breathe normally	I occasionally have trouble breathing	I often have trouble breathing	I can hardly ever breathe as easily as I want	I almost always have severe trouble with my breathing

### **OUTLOOK**

1	2	3	4	5
I am not worried or frightened about the future	I am slightly worried but not frightened about things	I am worried and frightened about things	I am very worried and frightened about things	I am terrified by thoughts of the future

### **COUGH**

1	2	3	4	5
I seldom cough	I have an occasional cough	I often cough	I often cough, and occasionally have severe coughing spells	I often have persistent and severe coughing spells

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### **ANNEXURE H**

# PSYCHOLOGICAL GENERAL WELL BEING INDEX (PGWBI)



### THE GENERAL WELL-BEING SCHEDULE

Name:				_ Sex: M: [ ] F: [ ]	Age:
	Last	First	Middle		
have b		*	-	s about how you feel and estion tick [ ] the answe	
1.	How have you (Tick one box)	been feeling in ger	neral during the pa	ast week?	
	In very good sp In good spirits i I have been up In low spirits m	oirits mostlyand down in spirits nostly	a lot		□ 5 □ 4 □ 3 □ 2 □ 1 □ 0
2.	How often we week? (Tick one box)	re you bothered by	y any illness, infir	mity, aches or pains du	ring the past
	Every day Almost every d About half of th Now and then, Rarely	ay ne time but less than half the	e time		0 1 2 3 4 5 5
3.	Did you feel de (Tick one box)	epressed during the	e past week?		
	Yes - to the poi Yes - very depr	nt where I did not coressed almost every	are about anything. day		□ 0 □ 1 □ 2
	Yes - a little de	pressed now and ag	ain		□ 3 □ 4 □ 5



4.	Have you been in firm control of your behaviour, thoughts, emotions or fee the past week?  (Tick one box)	lings during
	Yes, definitely so	☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ 0
5.	Have you been bothered by nervousness or your "nerves" during the past v (Tick one box)	veek?
	Extremely so - to the point where I could not work or take care of things  Very much so	□ 0 □ 1 □ 2 □ 3 □ 4 □ 5
6.	How much energy, or vitality did you have or feel during the past week? (Tick one box)	
	Very full of energy - lots of vitality	☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ 0
7.	I felt downhearted and low during the past week. (Tick one box)	
	None of the time  A little of the time  Some of the time  A good bit of the time  Most of the time  All of the time	□ 5 □ 4 □ 3 □ 2 □ 1 □ 0



8.	Were you generally tense or did you feel any tension during the past week? $(Tick \ one \ box)$	
	Yes - extremely tense, most or all of the time Yes - very tense most of the time Not generally tense, but did feel fairly tense several times I felt a little tense a few times My general tension level was quite low I never felt tense or any tension at all	□ 0 □ 1 □ 2 □ 3 □ 4 □ 5
9.	How happy, satisfied, or pleased have you been with your personal life durweek?  (Tick one box)	ing the past
	Extremely happy - could not have been more satisfied or pleased	☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ 0
10.	Did you feel healthy enough to carry out things you like to do or had to do past week?  (Tick one box)	during the
	Yes - definitely so	☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ 0
11.	Have you felt so low, discouraged, hopeless, or had so many problem wondered if anything was worthwhile during the past week?  (Tick one box)	s that you
	Extremely so - to the point where I have just about given up  Very much so  Quite a bit  Some - enough to bother me  A little bit  Not at all	□ 0 □ 1 □ 2 □ 3 □ 4 □ 5



PGWBI - Acute – UK/English – Aug 03 – Mapi Research Institute.

ID1957 / PGWBI-Acute\_AU1.0\_eng-GB.doc



12.	I woke up feeling fresh and rested during the past week. (Tick one box)	
	None of the time	□ o
	A little of the time	□ 1 □ 2
	A good bit of the time	
	Most of the time	□ 4 □ 5
13.	Have you been concerned, worried, or had any fears about your health duri week?  (Tick one box)	ing the past
	Extremely so	<b></b> 0
	Very much so	
	Quite a bit	
	Some, but not a lot	
	Practically never	_ 3 □ 4
	Not at all	<b>□</b> 5
14.	Have you had any reason to wonder if you were losing your mind, your losing control over the way you act, talk, think, feel during the past week? (Tick one box)	memory or
	Not at all	<b>□</b> 5
	Only a little	□ 4
	Some - but not enough to be concerned or worried about	□ 3
	Some and I have been a little concerned	$\square$ 2
	Some and I am quite concerned	□ 1
	Yes, very much so and I am very concerned	
15.	My daily life was full of things that were interesting to me during the past w (Tick one box)	eek.
	None of the time	<b>□</b> 0
	A little of the time	□ 1
	Some of the time	$\square$ 2
	A good bit of the time	□ 3
	Most of the time	□ 4
	All of the time	□ 5



16.	Did you feel active, vigorous, or dull, sluggish during the past week? (Tick one box)				
	Very active, vigorous every day	□ 5			
	Mostly active, vigorous - never really dull, sluggish	<b></b> 4			
	Fairly active, vigorous - seldom dull, sluggish	<b>□</b> 3			
	Fairly dull, sluggish - seldom active, vigorous	$\square$ 2			
	Mostly dull, sluggish - never really active, vigorous	□ 1			
	Very dull, sluggish every day	<b></b> 0			
17.	Have you been anxious, worried or upset during the past week? (Tick one box)				
	Extremely so - to the point of being sick or almost sick	□ 0			
	Very much so	□ 1			
	Quite a bit	$\square$ 2			
	Some - enough to bother me	<b>□</b> 3			
	A little bit	□ 4			
	Not at all	□ 5			
18.	I was emotionally stable and sure of myself during the past week. $(\text{Tick one box})$				
	None of the time	$\square$ 0			
	A little of the time	□ 1			
	Some of the time	$\square$ 2			
	A good bit of the time	<b>□</b> 3			
	Most of the time	□ 4			
	All of the time	□ 5			
19.	Did you feel relaxed, at ease or agitated, on edge or wound up during the particle (Tick one box)	st week?			
	Felt relaxed and at ease the whole week	□ 5			
	Felt relaxed and at ease most of the time	□ 4			
	Generally felt relaxed but at times felt fairly on edge	□ 3			
	Generally felt agitated but at times felt fairly relaxed	$\square$ 2			
	Felt agitated, on edge, or wound up most of the time	□ 1			
	Felt agitated, on edge, or wound up the whole week	$\square$ 0			



20.	I felt cheerful, lighthearted during the past week. (Tick one box)	
	None of the time  A little of the time  Some of the time  A good bit of the time  Most of the time  All of the time	□ 0 □ 1 □ 2 □ 3 □ 4 □ 5
21.	I felt tired, worn out, used up, or exhausted during the past week. (Tick one box)	
	None of the time	☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ 0
22.	Have you been under or felt you were under any strain, stress, or pressure past week?  (Tick one box)	e during the
	Yes - almost more than I could bear or stand Yes - quite a bit of pressure Yes, some - more than usual Yes, some - but about usual Yes - a little Not at all	□ 0 □ 1 □ 2 □ 3 □ 4 □ 5

# **ANNEXURE I**

# SPIRITUAL INDEX OF WELL BEING (SIWB)



### SPIRITUALITY INDEX OF WELL BEING

#### Reference:

Daaleman, T. P. & Frey, B. B. (2004). The Spirituality Index of Well-Being: A new instrument for health-related quality of life research. *Annals of Family Medicine*, 2, 499-503.

### **Description of Measure:**

Defines spirituality as a sense of meaning or purpose from a transcendent source. It is a 12-item instrument that measures one's perceptions of their spiritual quality of life. The scale is divided into two subscales: (1) self-efficacy subscale and (2) life-scheme subscale.

Each item is answered on a 5-point scale ranging from 1 (Strongly Agree) to 5 (Strongly Disagree).

### **Abstracts of Selected Related Articles:**

Hill, P. C. & Pargament, K. I. (2003) Advances in the conceptualization and measurement of religion and spirituality. *American Psychologist*, 58, 64-74.

Empirical studies have identified significant links between religion and spirituality and health. The reasons for these associations, however, are unclear. Typically, religion and spirituality have been measured by global indices (e.g., frequency of church attendance, self-rated religiousness and spirituality) that do not specify how or why religion and spirituality affect health. The authors highlight recent advances in the delineation of religion and spirituality concepts and measures theoretically and functionally connected to health. They also point to areas for growth in religion and spirituality conceptualization and measurement. Through measures of religion and spirituality more conceptually related to physical and mental health (e.g., closeness to God, religious orientation and motivation, religious support, religious struggle), psychologists are discovering more about the distinctive contributions of religiousness and spirituality to health and well-being.

Frey, B. B., Daaleman, T. P., & Peyton, V. (2005). Measuring a dimension of spirituality for health research: Validity of the Spirituality Index of Well-Being. *Research on Aging*, 27, 556-577.

Health-related studies of *spirituality* are threatened by the lack of conceptual distinctions between religion and spirituality, the use of small, nongeneralizable samples, and by measurement error in many instruments that unreliably and invalidly capture this domain. The authors review the construct and validity evidence for the Spirituality Index of Well-Being (SIWB), an instrument designed to measure a dimension of spirituality linked to subjective well-being in patient populations. The SIWB was developed using qualitative research methods and subsequently conceptualized with two dimensions; *self-efficacy* and *life scheme*. Primary psychometric data from three sample populations are reviewed and summarized. A secondary,





confirmatory factor analysis, using pooled data from all samples, supports the theoretical two-factor structure. In addition, SIWB scores correlate more strongly with established measures of well-being than the Spiritual Well-Being Scale (SWB) or other recognized religiosity instruments. The SIWB is a valid and reliable instrument that can be used in health-related studies.

Ozaki, M., Kobayashi, K., & Oku, T. (2006). Healthy spirituality and genuineness: From the research on spirituality with authenticity and flow. *Journal of International Society of Life Information Science*, 24, 165-175.

The purpose of this study was to investigate the relationship between healthy spirituality and two important concepts in positive psychology; sense of authenticity (SOA) and flow experience, and also with sense of coherence (SOC). SBAS-TEST, Sense of Authenticity Scale (SOAS) and Flow Experience Check list were administered for 211 college students in Tokyo metropolitan area. The result showed the high correlation of authenticity with spiritual behavior (Will) (r=0.49, p<0.001) and spiritual attitude (Joy) (r=0.65, p<0.001) and no relation with spiritual sense. The relation of SOA with healthy spirituality is the same as the relation between SOC and healthy spirituality. Flow has high correlations with all three domains (Will, Joy, and Sense) of healthy spirituality. This means that the status of healthy spirituality is explained to become our true self uniting with the authentic nonlocal consciousness, and that healthy spirituality contributes to psychological growth and general health.





**Scale:** Instructions: Which response best describes how you feel about each statement?

Statement	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree
1.) There is not much I can do to help myself.	1	2	3	4	5
2.) Often, there is no way I can complete what I have	1	2	3	4	5
started.					
3.) I can't begin to understand my problems.	1	2	3	4	5
4.) I am overwhelmed when I have personal difficulties and	1	2	3	4	5
problems.					
5.) I don't know how to begin to solve my problems.	1	2	3	4	5
6.) There is not much I can do to make a difference in my	1	2	3	4	5
life.					
7.) I haven't found my life's purpose yet.	1	2	3	4	5
8.) I don't know who I am, where I came from, or where I	1	2	3	4	5
am going.					
9.) I have a lack of purpose in my life.	1	2	3	4	5
10.) In this world, I don't know where I fit in.	1	2	3	4	5
11.) I am far from understanding the meaning of life.	1	2	3	4	5
12.) There is a great void in my life at this time.	1	2	3	4	5

### **Scoring:**

Items 1-6 make up the Self-Efficacy Subscale Items 7-12 make up the Life Scheme Subscale

Scoring is kept on a continuous basis.





# **ANNEXURE J**

# **SESSION SUMMARY FORM**



# **Session Summary Form**

<b>Date:</b>	Time:	Guide:	
Patient:		Session number:	
Activity the patient was	occupied in before the session:		
Brief summary of the Pr	relude: (Keywords/Themes):		
Prelude [Duration]:			
Intention:			
Music:			
Brief summary of Induc	tion:		
Induction [Duration]:			
Brief summary of the m			
Travellers' response to t	he music (Emotional, Kinaesthetic, S	ensory etc):	

Music travel [Duration]:
Brief description of the mandala:
Brief description of the postlude (Keywords/Themes):
Postlude [Duration]:
Describe the patients' ability to recognise, explore and discuss emotions, insights, important themes:
Describe the patients' willingness to take actions to improve the life circumstance:
Duration of the session:
NB: Please take a photograph of the mandala.
Signature of therapist:

List of research University of Pretoria (VM Bhana



### **ANNEXURE K**

# SUMMARY OF THE PRELUDE AND STATEMENT OF **INTENTION FOR SESSIONS**



# SUMMARY OF THE PRELUDE AND STATEMENT OF **INTENTION FOR SESSIONS**

PARTICIPANT	PRELUDE	STATEMENT OF INTENTION			
P1: Session 1	<ul> <li>Worried about family</li> <li>A need for reassurance</li> <li>A need for finding acceptance</li> </ul>	"Om my gerus te stel" ["To comfort me"]			
P1 Session 2	<ul> <li>longing for those that she is close to</li> <li>feeling alone even though she was in the midst of friends</li> <li>felt drained</li> <li>giving out a lot and this was tiring</li> <li>drawn into the depression</li> <li>A need to be filled &amp; not to feel alone</li> </ul>	"Om samesyn te ervaar" ["To experience company"]			
P1 Session 3	<ul> <li>The need to stay positive</li> <li>Easy to loose courage and become negative</li> <li>She also was trying to find the balance between being there for others but also taking time for herself to rest.</li> </ul>	"Being positive"			
P1 Session 4	<ul> <li>- Feeling of relief</li> <li>- Action taken on resolve of session 3</li> <li>- Distanced herself</li> <li>- The need to stay strong</li> <li>- "Is the treatment working?"</li> <li>- "Gebedsaak" ["Issue of prayer"]</li> </ul>	"Keeping the faith"			
P1 Session 5	<ul> <li>Not feeling well</li> <li>Uncomfortable due to infection</li> <li>Felt dismissed by the doctor</li> <li>Difficult facing the uncertainties of her illness</li> <li>A need to deal with the anger she was feeling about this</li> </ul>	"Letting go of the anger"			
P2 Session 1	<ul> <li>Concern about her daughter</li> <li>Lost her child</li> <li>Recently lost her grandchild.</li> <li>Can't cope as well</li> <li>Get tired easily.</li> <li>Struggling with anxiety</li> <li>When anxious she acts out of character.</li> </ul>	"Om meer kalm te wees" [To be more calm]			
P2 Session 2	- Looked tired and drawn - "naer" ["nauseous"], - "moeg" ["tired"], - "Ek het nie krag nie" "[I don't have energy"], - "Voel alleen" ["Feel alone"] Longing for home	"Om moed en innerlike krag te ervaar" [To experience hope and inner strength]			
P3 Session 1	<ul> <li>Very distressed,</li> <li>Feeling anxious</li> <li>Emotional</li> <li>Not feeling well.</li> <li>She also teared as she spoke</li> <li>Emotional due to difficulties with her husband</li> </ul>	"Vrede in my kry" [Obtain inner peace]			



P4	No sessions done			
P5 Session 1	<ul> <li>Was not feeling well</li> <li>Experiencing pain.</li> <li>Missing her family and</li> <li>Needed the nurturing comfort of family bonds</li> </ul>	"Vertroosing deur familie bande" [Comforting through family ties]		
P6 Session 1	- Not feeling well - Difficulty in articulating a focus	"Om binneste vrede te ervaar" [To experience internal peace]		
P7 Session 1	<ul> <li>A need for closeness as she was away from home</li> <li>Was easy to relate to the other women in the home</li> <li>Easy to initiate closeness.</li> </ul>	"Experiencing spiritual closeness"		
P7 Session 2	<ul><li>Embarrassing experience over the weekend (not in full control of body function)</li><li>Difficult experience for her</li></ul>	"Remaining grateful"		
P7 Session 3	<ul> <li>Mixed emotions as she was leaving</li> <li>Was feeling emotional</li> <li>Relief treatment had come to an end</li> <li>Looking forward to going home</li> <li>Relieved next treatment can take place at home.</li> <li>Another difficult experience over the weekend. (not in full control of body function)</li> <li>Desire to experience normal functioning again without embarrassing moments.</li> <li>Desire to visit her mother in Scotland.</li> </ul>	"Experiencing well-being in functioning".		
70				
P8	No sessions done			
P9 Session 1	- Tired - Did not feel strong - Struggled to always have to depend on others which made her feel guilty and lowered her sense of self - Would love to travel and felt frustrated that she could not join her partner in July - Would love to be uplifted Feeling uplifted would look like yellow bright rings.	"To be lifted beyond the tiredness and frustration"		
P9 Session 2	<ul> <li>She was good but was tired, more than last week</li> <li>Felt out of control and depends of others for everything</li> <li>She hated this and found it difficult.</li> <li>Felt tired, physically, emotionally and spiritually</li> <li>She longed for freedom from all this/peace.</li> </ul>	"Experiencing peace"		
P9 Session 3	- Even more tired - When asked what she <u>needed most</u> she said elevation - When asked what this would look like, she said, 'Like birds flying'	"Being elevated like a bird flying".		
P10 Session 1	- The thing most on her mind is her eight year old son - His birthday was soon and this puts the whole thing of having cancer in her face - Really wants to see him through school	"Allowing the journey"		



P10 Session 2	<ul> <li>Lots of support but wants to be able to take care of her son</li> <li>Experiencing a sense of extended loss that cannot be taken away</li> <li>Struggle between allowing her son space to express himself and release his feelings and drawing the line at what is inappropriate</li> <li>Pulled between the need to protect her son (and his need to protect her) and being unable to protect him from her cancer (or herself)</li> <li>Need to cope with cancer and the changes/uncertainties it brings</li> </ul>	"Allowing and coping with uncertainty"
D11		<b>"</b> 6
P11 Session 1	<ul> <li>Expresses initial shock of being diagnosed</li> <li>Devastated to find treatments not working</li> <li>Created a bucket list – making the best of life</li> <li>Cancer led her to make the most of every moment</li> <li>Very appreciative of life and empathetic of those with cancer</li> </ul>	"Creating new precious moments"
P11 Session 2	<ul><li>Expressed frustration with her health</li><li>Worries a lot about her family</li><li>Worries about having to let go of her role in the family</li></ul>	"Letting go of the matriarchy"
P11 Session 3	<ul> <li>- Her daughter recently found a lump in her breast</li> <li>- Family very close, supporting each other</li> <li>- Worried about the possible future</li> <li>- Unsure of how to comfort her daughter</li> </ul>	"Letting go of the matriarchy"
P11 Session 4	<ul> <li>Over the last while been through a lot of difficult things</li> <li>All of which turned out well, so that she is now in a happy, good space</li> <li>Daughters' test is clear of cancer</li> <li>Family seems to be doing well</li> <li>Feeling good</li> <li>Wanted a session that strengthened her happiness</li> </ul>	"Celebrating the positive"
P11 Session 5	- Just completed a cycle of chemotherapy - Excited as going on holiday soon - Proud of the children who were able to get everything organised so that she could relax - Getting more tired, can't do the things she always did	"Just being"
D12	X	
P12 Session 1	<ul> <li>Not particularly worried about life</li> <li>Feels he is on bonus time</li> <li>Happy to die when it comes</li> <li>Family very supportive and help with everything</li> <li>Chemotherapy tests interfere with life but his generations just learnt to accept things as they come</li> </ul>	"Drink and be merry for tomorrow we die"



P12	Vary fractional or decrease don't give an avvenue	"Coming to the surface?
Session 2	- Very frustrated as doctors don't give answers	"Coming to the surface"
Session 2	- Cannot get any order in life	
	- Compared himself to a submarine, trying to get to	
	the surface but often feeling sunk by medical procedures, doctors and so on – to whom he feels like	
	a "prisoner"	
P12	- Extremely annoyed with people who rip him off	"Experiencing peace despite
Session 3	- Expressed a feeling that no one cares for old values	the frustration"
Session 3	and ways of doing	the fi ustration
	- 'Just a number to them'	
	- Just frustrated	
P12	- Spoke about enjoying things he had done over the	"Relax and enjoy"
Session 4	past week	relax and enjoy
Bession 1	- Tired from chemotherapy	
	- Wanted to relax this week	
P12	- Had fun in last weeks session and is feeling good	"Going forward"
Session 5	- Just to enjoy the last session	Going for war u
Bession 5	bust to enjoy the last session	
P13	- Voiced her difficulties of managing the side effects	"Building my inner strength"
Session 1	of chemotherapy	
	- Very severe diarrhoea	
	- Experienced feelings of depression	
	- Not feeling very well	
	- Expressed her on going <u>need for</u> acceptance	
P13	- Emotional	"Being at peace within myself"
Session 2	- Felt that the illness was taking control of her	, v
	- Felt drained and tired	
	- Feeling particularly emotionally low due to a sense	
	of loss of dignity due to the nature of the diarrhoea	
	- Very difficult to manage this and even considered	
	staying home until there was improvement (Loss of	
	control)	
P13	- Emotional	"Experiencing release"
Session 3	- Her need for on-going acceptance	
	- Diarrhoea was not as severe and unpredictable	
	- Staying at home that week was difficult	
	- She has to put on a brave face while feeling	
	emotionally low (school holidays)	
	- Described herself as a spontaneous person who loves	
	being in action	
	- Now she was too tired to participate in social	
D12	occasions.	
P13	- Diarrhoea being better	"Embracing what comes".
Session 4	- Now going through emotional stages with regards to	
	the pending mastectomy	
	- Experiencing loss around losing a valuable body part	
	yet she expressed her gratitude as it may give her	
	recovery	
	- Became emotional as she spoke	



	"O 1 1 1 10 10
· ·	"One step at a time"
very worried and sad	
eded to take one day at a time	
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ing the first person in her family to have cancer	"Letting go"
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eling very tired	"Deeply relax within myself"
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	"Staying strong"
-	Staying strong
·	<b>(7</b>
	"Experiencing comfort"
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	ertiences etting a lot of support from her new group of eds at the home elling very tired eatment is making her very tired das reflecting on images from the previous ions.  quested a shorter session t very tired as sick over the weekend as sore and uncomfortable from the treatment and tired after the treatment (Radiation burns) as hurting inside came emotional as very tired adiation was painful and very uncomfortable ens) flected on time of diagnosis - it was very hard hy me?).  Inerally coping illing to see the process through and just accept brocess.  Try calm Treelings of uncertainty of what lies ahead Tree experience of anxiety as a result.  Pressed her need to have faith in God and being eace with others eling good periencing pain mainly at night the had been reflecting on the inner peace she had wing her family will come and visit her tooking forward to being at home once the ment is done in order to resume her duties of



P15	- Felt very tired	"Experiencing gratitude"
P15 Session 5	<ul> <li>Feeling good</li> <li>Looking forward to going home and seeing her family and friends</li> <li>Hopeful for good results</li> <li>Thinking about home she had to stay positive.</li> </ul>	"Staying positive".
P16 Session 1	<ul> <li>What she went through in finding out about her illness and the questions she was confronted with</li> <li>She explained that it had taken a while to be diagnosed with cancer</li> <li>She had to be strong during the day but couldn't sleep during the night as she lay awake worrying</li> <li>Doctors have helped her realise that she can be healed</li> <li>Her biggest fear is whether she will be able to be with her husband as before</li> </ul>	"Strength to be able to look to the future"
P16 Session 2	<ul> <li>Felt fine and was not really worried about the cancer at all</li> <li>Was tired and still wondered about having enough strength to live her life and be with her husband after all this</li> </ul>	"Finding strength"
P17 Session 1	<ul> <li>- Wanted to know more about her illness and found it scary to go to the doctors.</li> <li>- Mixed up feelings and was questioning whether she was going to live or die.</li> <li>- Demonstrated concern for her children as she said "What about my children?"</li> <li>- She had the support of her family and that she was going to do all she can to stay alive.</li> </ul>	"Holding onto life"
P17 Session 2	- Upset as her sister in law had passed away - Very deeply upset as she was close to her - Difficult for her to be away from her family at this time.	"Being held"
7.10		
P18 Session 1	<ul> <li>Spoke of her departed husband.</li> <li>Her three children and the challenges she is experiencing together with them</li> <li>Worried about them</li> <li>Felt alone without her husband and the cancer too added to her worries</li> </ul>	"Support to carry the load"
P18 Session 2	<ul> <li>Was tired but continued with the session Found the current radiation treatment better than chemotherapy</li> <li>Feel tired and dizzy sometimes.</li> <li>Saw her grandchild over the weekend which was good</li> <li>Looking forward to the future and wanted to focus on strength</li> </ul>	"Strength for what the future holds".



P18 Session 3	- Burnt badly - Very large sore/wound on her breast - Feeling much - It was okay and saw it as something that needed to happen for her to be healed - Very excited to go home - But a little uncertain of how everything will be and how her family will receive her	"Being at peace always"
P19 Session 1	<ul> <li>Glad that she was at the centre and on the road to recovery</li> <li>Had been hectic</li> <li>Last few weeks had been incredibly difficult and over whelming</li> <li>Feet had been swollen and the radiation had caused her a lot of pain</li> <li>Had to be hospitalised</li> <li>Difficult as every week she experienced something new in symptoms and never knows what to expect.</li> <li>Felt happy that she was getting better</li> <li>Wanted to make the best of being at the centre and to not allow it to get her down.</li> <li>Feels that in her sickness she is losing the 'T' (mentioned her name) she really is.</li> <li>Missed her family a lot-large family who were very supportive</li> </ul>	"Finding peace to take me through"
P20	No sessions done	
120	TVO SESSIONS WORK	
P21	No sessions done	
P22 Session 1	<ul> <li>Felt very tired but was okay to do the session</li> <li>Felt alone and felt that she was going through this whole process alone</li> <li>Expressed the need for moral support.</li> </ul>	"Experiencing inner strength"
P22 Session 2	<ul> <li>Feeling very tired.</li> <li>Okay to do the session</li> <li>Energy level 4 out of 10</li> <li>Feeling okay with herself today but did have an off day two days ago</li> <li>Expressed her need for upliftment and her need to be with her close friend</li> <li>Needs someone to encourage her to go on.</li> </ul>	'Experiencing encouragement'
P23 Session 1	<ul> <li>Strong place emotionally</li> <li>No real concerns or problems</li> <li>Financial concerns</li> <li>He had good family and other support</li> <li>He was concentrating on physical condition and getting well</li> <li>Main need he said was to relax with his current set of circumstances</li> </ul>	"Experiencing relaxation"



P23	- He was feeling very tired	"Experiencing relaxation"
Session 2	- He was struggling with diarrhoea	
	- Agreed to a shorter session	
	- He enjoyed the weekend at home with his five	
	children	
	- In a good place emotionally	
	- Feels strong and positive	
	- He would like to experience relaxation again	
P24	No sessions done	

### ANNEXURE L

### PATIENTS' RESPONSE TO THE MUSIC TRAVEL





# PATIENTS' RESPONSE TO THE MUSIC TRAVEL

PARTICIPANT	VISUAL	EMOTIONAL	KINAESTHETIC	SENSORY	OTHER
D1	Elvin a	Cuind		Faaling	Remembered
P1 Session 1	Flying Dancing	Cried Laughed		Feeling freedom	a smell
Session 1	Family	Laugheu		needom	a silicii
	Colours			Being held	
	Dark clouds			and released	
	Orange sun			and rereased	
	Angels				
P1	Kite & Balloons	Laughed		Felt free &	Moved hands
Session 2	Blowing wind	Light,		light	while
	Water	surprised,			describing
	People	playful		Felt presence	imagery
	Light clouds	response		of the people	
	Church	Smiled			
	Dove			Felt presence	
	Light			of Jesus Christ	
				Christ	
				Heard voices	
				of people and	
				choir	
P1	Dancing	Smiled		Very restful	Moved hands
Session 3	Water	Sighed – when			while
	Wind	alone (relief)			describing
	Drifting clouds				imagery
	Garden				
	Sitting on a				
	bench reading				
	Table with coffee &				
	coffee & cookies				
	Wall				
P1	Sitting in a field	Smiled		Smell sea,	Used her
Session 4	of flowers,	Simica		kelp, fish	hands to
	Looking at the			r,	describe
	sea, Walking on			Feel the wind	
	the sand,			blowing	
	Sitting on a rock				
	watching the sea			Feel sand	
	and seeing the			between the	
	flowers,			toes	
	Walking her dog			X7	
	on the sand			Very restful	
	Field of pink and				
	white flowers,				
	Blue mountains, birds and				
	Clouds				
	The tornado and				
	heavy seas				
L	neary seas	l	l	<u> </u>	



P1 Session 5	Physical activity: Hop, skip, jump Playing ball Skipping Jogging Playing tennis Cycling Birds – flying in circle				
P2 Session 1	Trees Farmhouse Children Open veld Church Windmill Mountains		Eyes flickering	Felt 'rustig' [calmness]	
P2 Session 2	Imagery was misty, unclear, Children Old man Red car				
P3	Bird	Anvious to set		Ductic	
Session 1	Dark passage Angel Garden	Anxious to get out of passage Annoyed couldn't get to angel Annoyed couldn't find something in garden		Rustig [calmness] "Dit het my kalmeer" [it calmed me]	
7.4	XX				
P4	No session done				
P5 Session 1	Recalled her family in earlier year: Waterfall River Her children Husband Family house Evening routine	Sadness		Restful	Expressed discomfort with the music when reminded of husband's death
P6	No session done				
- 0	_ to session done				
P7 Session 1	Her children and grandchildren			"Rustig" [calmness]	
P8 Session 1	Nature and weather of Scotland:				Did not like the 2 <sup>nd</sup> piece of music.

	1			
	Birds,			Said that
	Hills,			there was a
	Forest,			sharpness in
	Mountains,			the music
	Rivers and			
	The rainy			
	weather.			
	Reminded her of			
	home			
	(Scotland).			
	Gardens and			
	colourful			
	flowers.			
	Sitting on a			
	bench reading			
	Enjoying the			
	sunshine.			
	Walking and			
	looking at the			
	sky and			
	Dancing on ice			
P8	Flowers opening		Felt deeply	
Session 2	up		relaxed	
Dession 2	Nature of the		TOTALCU	
	woods during			
	the spring time,			
	A colourful fish			
	swimming,			
	A waterfall,			
	An angel and			
	A cave			
	Different			
	colours; blue,			
	lilac, pink, green			
	and white and a			
	rainbow.			
	Light			
	Yellow			
	fluffiness with a			
	dark shape or			
	dark snape of dark around			
Do	it.(x4)			Music
P8	Ginger Rogers			Music
Session 3	and Fred			reminded her
	Astaire, -			of praise, the
	dancing.			beauty of
	Images of			Earth
	nature:			
	Clouds, blue			
	sky, trees,			
	waterfall and the			
	country side			
	A tunnel			
	Tall buildings.			
	ran bunungs.			

	The country side was seen from above from an aeroplane.				
P9 Session 1	The movie 'The mission' Fairies Yellow, bright sun	Felt uplifted & comforted	During the travel she became aware of herself feeling stressed (in her chest) and feeling that the music was too loud. She then felt more peace (also in the chest	Feeling that the music was too loud	She had a feeling she either wanted to just go or get better.  She was also aware of her son, felt scary.
P9 Session 2	Forest Sun was shining through the leaves Brightly coloured birds. There River Lady singing & instruments	Experienced a deep sense of enjoyment Felt happy Happy space			
P9 Session 3	No imagery noted	Feeling of incompleteness Peace & comfort with additional piece of music			
P10 Session 1	Did not speak during the session	Deep sadness but not distress	Tears in eyes Cried briefly		
P10 Session 2	Did not speak during the session		Feeling of floating, being pulled downwards but able to still float above darkness (kinaesthetic or sensory)	Music very calming	
P11 Session 1	Her grandchildren Clouds – Grey, dark, very sad Alone in a meadow Beautiful: river, bluebirds, blue flowers, green grass	Anxious when she did not recognise a place	Tears in her eyes when the clouds came		
P11 Session 2	Sees her son, daughter and her	Deeply emotional	Tears in her eyes		



P11 Session 3	family, her partner, looking after the whole family, supporting them  Sees a bright yellow, warm light — protection for the family  Beautiful field full of flowers	response to the journey  Felt sad as she wasn't anywhere in the images  Felt a strong sense of strength	Felt warm in her body	Flowers smelt so	
	Family amongst the flowers			smelt so beautiful	
P11 Session 5	Mountains Streams Hot air balloon Sitting quietly at a fire	Face showed such joy and serenity	Vivid sense of smells and colour at the fire  Detailed pictures and sounds around her		
D12	Elemine sizes	A11 : £.1	Ealthan direction	Vii.d: 1	
P12 Session1	Flowing river Sunset Green fields Dancing like a ballet dancer Sitting and walking	All images felt peaceful  Felt secure  Happy and light while dancing	Felt legs tingling at the beginning  Felt a sensation of floating  Felt tense for a few moments	Vivid visual images	
P12 Session 2	Sitting on a bench in Vienna  Waterfall-flowing down  Boat out to sea Big waves	Sense of fear and excitement while in the boat at sea	Body a little tense		
P12 Session 3	Light clouds Darker clouds Deep blue sea Shafts of light on the water	Dark clouds made him feel tense  Peaceful with the shafts of light on water	After session – entire body less tense and he spoke more gently		
P12 Session 4	Standing high up, seeing the clouds below Clouds light and fluffy, moving in the wind	Peaceful	Relaxed Whole body appeared calm and peaceful		

P12 Session 5	Rolling green hills No obstacles River flowing Walking to the top of the hill	Deep sense of calm and peace			
D12	** 1 1 1		0 1 1 1 11	D 1 1	
P13 Session 1	Very big church Angels Herself as ballerina dancing on the roof Very big theatre Music concert - choir Choir master Dancing	mixed emotions of ecstasy and scariness as she was able to dance whilst not falling  Serenity and peace  Excitement dancing	Smiled while drawing the mandala	Brought her peace she had not experienced before	
P13 Session 2	Outer space Desert Sunset Herself dancing Others joining her dance	Experienced the music as relaxing in the beginning  Felt amazing while watching the sunset  Felt excited during the dancing  Felt very good about herself during the dance	Experienced the music as relaxing		When the music changed she said it brings different emotions
P13 Session 3	Saw herself as a child Saw herself as a dancer A holy place, not a church Herself in a musical theatre Herself in a large hall	Mixture of excitement and sadness  In the holy place happiness and sadness  Felt good dancing		Excited overcoming the shyness of being bored  Theatre had a calming effect	
P13 Session 4	Vast plantation of flowers Birds Person performing on an instrument and dancing	Initially experienced music as calming and peaceful "a moment with yourself"			

P13 Session 5	Post-talk - Narrated a story: Horse Fire Mountainous place Huge palace Tea & plate of scones	Feeling happy listening to beautiful music Afraid to cross the river then relaxed		Still and peaceful during music listening Felt fresh, crisp air	Distressed sound of the horses made her think about her fear, anxiety and uncertainty
P14 Session 1	Her children Herself dancing Church River	Felt happy during the journey  Happy during the imagery of dance	Heart beating faster when music changed from 1st to 2nd piece	Deeply relaxed at the end of the journey  Heard the church bells	
P14 Session 2	Her home Herself walking			Experienced the music as soothing while she was walking  Deeply relaxed  Experienced her body being pain free	Experienced herself walking
P14	Conversation	Sadness		Deeply	
Session 3	with her daughter	experienced during the Swan piece. Feeling of worry about her daughter		relaxed	
P14	Mist	She said	Inhaled in air	Relaxed	Remembered
Session 4	Mountains	"The pain is gone. I'm relaxed"		Felt calm Experienced cool air	her mother words (message)
P14		Felt no pain		Felt calm	Sighed
Session 5		Able to rest Deeply relaxed		Felt peaceful	occasionally as the music played



D15	F11	F1:		T1- /1	
P15	Family – who	Feeling of		Towards the	
Session 1	were no more	sadness and		end the	100/100
	Herself in a	emotional		music made	37/
	church			her feel	
	Saw herself	Felt alone when		comfortable	5//
	crying	thinking of			
	Blue sky	family who are			
	Trees –moving,	no more			
	branches			///	
	shaking	Felt safer in the		100	
	Clouds – rolling	church – spirit			
	away	had been			
	away	uplifted		1	
		upinted		$\Delta$	and the second
P15	Family who are	Initially sad			
Session 2	far away at the	when she		2000	
Session 2	7	remembers			
	moment				
		family			
	Memories of				
	them together	Lighter mood			
		towards the end	J47503		
		of the music			
			67 E m		
		Felt good to			
		remember them		/	
P15	Family and	Mood was light			
Session 3	friends	and hopeful			
Session 5	celebrating	and noperar			
	Family trip to	Felt good to			
	Durban	have family and			
	Duiban	friends with her			
		menus with her			
		T 1.			
		Felt happy			
		when family			
		and friends	3/		
		encouraged her			
P15		Felt good			
Session 4		Gratitude for			
		home,			
		grandchildren,			
	1007° pa	church			
P15	Herself going	Felt good	Smiled during the	Felt strong	
Session 5	home		journey when she	_ 510 50 511 5	
50001011 5	Church	19 1	talked about her		
	Community		family and friends		
	Community		ranning and mends		
P16	A family				
Session 1	wedding at a				
Dession 1	church				
	A group of				
	pastors were				
	inside the				
	church				



P16	People were dancing. Her daughters' new house and her daughter, granddaughter and son  A beautiful		Radiant smile		
Session 2	rainbow with stars around it. A fountain and a stream with a basket like the one Moses was carried in. Stepping stones which she walked on to cross the river. People watched her from a mountain				
P17 Session 1	Trees Park Women Soldiers Children Very old man – Grandfather River  Dark purple oval surrounded by black Family Sister-in-law	Strong emotional response to being held by grandfather  Deep sadness throughout	She smiled when she saw her sister-in-law smiling  Felt her body more relaxed when she saw the purple oval again		
			идин		
P18 Session 1	Beach Green mountains Blue sea A man – as if an angel Birds – flew away together Mother	Experienced deep pain when the man dressed in white turned away  Deep pain experienced in the session	Tears in eyes when experiencing pain and holding hands with mother	Felt strengthened by the image of holding her mother's hand	
P18 Session 2	Eating white mielies People watched her	Expressed anger when her car windscreen was missing			



P18 Session 3	One person stayed Her car In her house — darkness & light Daughter Candle  House her daughter is building — filled with light One room — dark Daughter — beautiful Grandchildren Huge tree & green grass People Sister & family	Afraid when the home was dark  Felt good when the candle lit up the house  Felt pity for the person who watched her eat  Seemed cheerful at the end of post-talk  Beauty throughout the journey - Happy	Tears in her eyes  Tapping hand by her side when uncertain or confused about imagery		
P19 Session 1	A very big space Her children Big house, pool, tall trees People Herself looking beautiful Father of her younger child	Sadness, uncertainty, confusion with spouse "this is how things are between them"  Admiration for the space that she is in – expansive space	The smell of rain The smell of sand.	The therapist noted that she did not stop smiling during and after the session.  Said that she felt no pain  Didn't feel ill at all	
P20	No session done				
1 20	TAO SESSION GONE				
P21	No session done				
P22 Session 1	Nature: trees, water, shade, sitting with her feet in water,	Calm and relaxed. During the imagery of snow she felt			

	Snow - stark white Someone coming towards her Park 'Someone is with me, dogs, content, as if my picture is complete'	experienced tranquillity			
P22	Nature	Calm			
Session 2	Sitting in a coffee shop				
P23 Session 1	Resting under a tree Fresh air, a river and sun in the afternoon Morning seeing the sunrise, walking in a nice place, green grass and summer. A river, water falling, fishing and him sitting under a tree looking.		He smiles often		Gestured a lot to describe images and seemed to live the experience.
P23 Session 2		Felt very good Felt positive picturing himself	Smiled	Deeply relaxed	Seemed to have been taken somewhere
P24	No session done				

### **ANNEXURE M**

# PERMISSION LETTERS FOR QUESTIONNAIRES



# Yale school of nursing

Acute Care/Health Systems Division Yale University West Campus PO Box 27399 West Haven CT 06516-7399 T 203 785-2389 F 203 737-4480 nursing.yale.edu

office 400 West Campus Drive Orange CT 06477

April 28, 2014

Varshika Bhana University of Pretoria South Africa

Dear Ms. Bhana:

You have my permission to use our symptom distress scale in your study "Implementation of Bonny Method of Guided Imagery and Music (BMGIM)". My understanding is you hope the guided imagery and music will complement care provided in selected cancer interim homes in Gauteng Province. Please let me know if you have any additional questions.

Best wishes with your study.

Rute Melaker

Sincerely,

Ruth McCorkle, PhD, FAAN, FAPOS

The Florence S. Wald Professor of Nursing

Professor of Epidemiology

Director of Psychosocial Oncology, Smilow Cancer Center





#### User agreement

#### **Special Terms**

Mapi Research Trust, a non-for-profit organisation subject to the terms of the French law of 1st July 1901, registered in Carpentras under number 453 979 346, whose business address is 27 rue de la Villette, 69003 Lyon, France, hereafter referred to as "Mapi" and the User, as defined herein, (each referred to singularly as a "Party" and/or collectively as the "Parties"), do hereby agree to the following User Agreement Special and General Terms:

Mapi Research Trust Information Support Unit 27 rue de la Villette 69003 Lyon France Telephone: +33 (0)4 72 13 65 75

Fax: +33 (0)4 72 13 65 75

Email: PROinformation@mapi-trust.org

#### Recitals

The User acknowledges that it is subject to these Special Terms and to the General Terms of the Agreement, which are included in Appendix 1 to these Special Terms and fully incorporated herein by reference. Under the Agreement, the Questionnaire referenced herein is licensed, not sold, to the User by Mapi for use only in accordance with the terms and conditions defined herein. Mapi reserves all rights not expressly granted to the User

The Parties, in these Special Terms, intend to detail the special conditions of their partnership.

The Parties intend that all capitalized terms in the Special Terms have the same definitions as those given in article 1 of the General Terms included in Appendix 1.

In this respect, the Parties have agreed as follows:

#### Article 1. Conditions Specific to the User

#### Section 1.01 Identification of the User

User name	Varshika Manilal Bhana
Legal Form	PhD Student
Address	227 Crimson Street Laudium, Pretoria, Gauteng
Country	South Africa
Name of the contact in charge of the Agreement	Varshika Manilal Bhana
Telephone number	0027784121540
Fax number	0027123541490
Email address	varshika.bhana@up.ac.za
if different:	
Legal Form	
Address	
Country	

### Section 1.02 Identification of the Questionnaire

Title	Psychological General Well-Being Index (PGWBI)
Author(s)	Dupuy Harold J
Owner	Dupuy Harold





Copyright	PGWBI © 1984 Harold J. Dupuy, All rights reserved
Original bibliograhic references	Dupuy HJ. The Psychological general Well-Being (PGWB) Index. In: Assessment of Quality of
	Life in clinical trials of cardiovascular therapies. Edited by Wenger NK, Mattson ME, Furberg CD. Elinson J. Le Jacq Publishing 1984: Chap 9:170-183

#### Article 2. Rights to Use

#### Section 2.01 Context of the Use of the Questionnaire

The User undertakes to only use the Questionnaire in the context of the Study as defined hereafter.

Context of use	Clinical project or study
Title	Implementation of Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng Province
Disease or condition	Cancer
Type of research	Other: Prospective Intervention study
Number of patient expected	50
Number of submission to the Questionnaire for each patient	4
Term of clinical follow-up for each patient	No follow up
Mode of administration	Paper

#### Section 2.02 Conditions for Use

The User undertakes to use the Questionnaire in accordance with the conditions for use defined hereafter.

#### (a) Rights transferred

Acting in the Author's name, Mapi transfers the following limited, non-exclusive rights, to the User (the "Limited Rights")

- (i) to use the Questionnaire, only as part of the Study; this right is made up exclusively of the right to communicate it to the Beneficiaries only, free of charge, by any means of communication and by any means of remote distribution known or unknown to date, subject to respecting the conditions for use described hereafter; and
- (ii) to reproduce the Questionnaire, only as part of the Study; this right is made up exclusively of the right to physically establish the Questionnaire or to have it physically established, on any paper, electronic, analog or digital medium, and in particular documents, articles, studies, observations, medical publications, websites whether or not protected by restricted access, CD, DVD, CD-ROM, hard disk, USB flash drive, for the Beneficiaries only and subject to respecting the conditions for use described hereafter; and
- (iii) Should the Questionnaire not already have been translated into the language requested, the User is entitled to translate the Questionnaire or have it translated in this language, subject to informing Mapi of the same beforehand by the signature of a Translation Agreement and to providing a copy of the translation thus obtained as soon as possible to Mapi.

The User acknowledges and accepts that it is not entitled to amend, condense, adapt, reorganise the Questionnaire on any medium whatsoever, in any way whatsoever, even minor, without Mapi's prior specific written consent.

- (b) Specific conditions for the Questionnaire
  - Use in Individual clinical practice or Research study / project

The User undertakes never to duplicate, transfer or publish the Questionnaire without indicating the Copyright Notice.

Use in a publication or on a website with unrestricted access:

In the case of a publication, article, study or observation on paper or electronic format of the Questionnaire, the User undertakes to respect the following special obligations:

- not to include any full copy of the Questionnaire, but a protected version with the indication "sample copy, do not use without permission"
- to indicate the name and copyright notice of the author
- to include the reference publications of the Questionnaire
- to indicate the details of Mapi Research Trust for any information on the Questionnaire as follows: contact information and permission to use: Mapi Research Trust, Lyon, France. E-mail: <a href="mailto:pROinformation@mapi-trust.org">PROinformation@mapi-trust.org</a> Internet: <a href="mailto:www.progolid.org">www.progolid.org</a>
  - to provide Mapi, as soon as possible, with a copy of any publication regarding the Questionnaire, for information purposes.
  - Use for dissemination:
- On a website with restricted access:





In the case of publication on a website with restricted access, the User may include a clean version of the Questionnaire, subject to this version being protected by a sufficiently secure access to only allow the Beneficiaries to access it.

The User undertakes to also respect the following special obligations:

- to indicate the name and copyright notice of the author
- to include the reference publications of the Questionnaire
- to indicate the details of Mapi Research Trust for any information on the Questionnaire as follows: contact information and permission to use: Mapi Research Trust, Lyon, France. E-mail: <a href="mailto:pROinformation@mapi-trust.org">PROinformation@mapi-trust.org</a> Internet: <a href="mailto:www.progolid.org">www.progolid.org</a>
- On promotional / marketing documents

In the case of publication on promotional/marketing documents, the User undertakes to respect the following special obligations:

- to indicate the name and copyright notice of the author
- to include the reference publications of the Questionnaire
- to indicate the details of Mapi Research Trust for any information on the Questionnaire as follows: contact information and permission to use: Mapi Research Trust, Lyon, France. E-mail: <a href="mailto:pROinformation@mapi-trust.org">PROinformation@mapi-trust.org</a> Internet: <a href="mailto:www.progolid.org">www.progolid.org</a>
  - to provide Mapi, as soon as possible, with a copy of any publication regarding the Questionnaire, for information purposes

For any other use not defined herein, please contact Mapi for the specific conditions of use and access fees (if applicable).

#### Article 3. Term

Mapi transfers the Limited Rights to use the Questionnaire as from the date of delivery of the Questionnaire to the User and for the whole period of the Study.

#### Article 4. Beneficiaries

The Parties agree that the User may communicate the Questionnaire in accordance with the conditions defined above to the Beneficiaries involved in the Study only, in relation to the Study defined in section 2.01.

#### Article 5. Territories and Languages

Mapi transfers the Limited Rights to use the Questionnaire on the following territories and in the languages indicated in the table below:

Language			
English for the USA			

#### Article 6. Price and Payment Terms

The User undertakes in relation to Mapi to pay the price owed in return for the availability of the Questionnaire, according to the prices set out below, depending on the languages requested and the costs of using the Questionnaire, in accordance with the terms and conditions described in section 6.02 of the General Terms included in Appendix 1.

ROYALTY FEES *	Commercial users	Cost per study	Free
		Cost per language	Free
	Funded academic research	Cost per study	Free
		Cost per language	Free
	Not funded academic users	Cost per study	Free
		Cost per language	Free
DISTRIBUTION FEES *	Commercial users	Cost per study	700 €
		Cost per language	300 €
	Funded academic research	Cost per study	300 €
		Cost per language	50 €
	Not funded academic users	Cost per study	Free
		Cost per language	Free

<sup>\*</sup> Excluding VAT





- Commercial users: Industry, CRO, any for-profit companies
   Funded Academic research: Projects receiving funding from commerce, government, EU or registered charity. Funded academic
- research—sponsored by industry fits the "commercial users" category.

  Not funded academic users, individual medical practice: Projects are not explicitly funded, but funding comes from overall departmental funds or from the University or individual funds

Agreed and acknowledged by

User's name: Varshika Manilal Bhana

Date: 26/04/2014 From:

"Daaleman, Tim" <tim\_daaleman@med.unc.edu> 'Varshika Bhana' <Varshika.Bhana@up.ac.za>

To: Date:

2014/04/29 07:21 PM

Subject:

RE: Permission to use Spirituality Index of Well Being

Dear Varshika,

Please consider this email correspondence as permission to use the Spirituality Index of Well Being scale for your research studies.

Best wishes, Tim Daaleman

----Original Message----

From: Varshika Bhana [mailto:Varshika.Bhana@up.ac.za]

Sent: Sunday, April 27, 2014 2:03 AM

To: Daaleman, Tim

Subject: Permission to use Spirituality Index of Well Being

Good morning Professor Daalman

My name is Varshika Bhana, Phd student at the University of Pretoria, South Africa. You may recall that I have emailed you previously regarding permission to use the Spirituality Index of Well Being for my Phd titled:

Implementation of Bonny Method of Guided Imagery and Music (BMGIM) to complement care provided in selected cancer interim homes in Gauteng Province

With the use of the scale I would like to investigate the effect of this music intervention on the spiritual well being of the participants. Permission was given by you. However, I have lost some information from my computer when software had to be re-loaded.

I hereby request permission to use the Spirituality Index of Well Being. Should you find it acceptable for me to utilize this scale, may you please provide me with a formal letter granting me permission to use the scale.

Thank you.

Kind Regards Varshika Bhana