

Title of thesis:

**THE MANAGEMENT OF EQUITY IN MEDICAL SCHOOLS  
IN SOUTH AFRICA**

**Key terms:**

Affirmative action

Equal Opportunities

Equity

Health professions training

Higher education

MBChB

Medical schools

Postgraduate studies

Public health

Transformation

## DECLARATION

I declare that The Management of Equity in Medical Schools in South Africa is my own work and that all sources that I have used or quoted have been indicated and acknowledged by means of complete references.

Kethamonie Naidoo

01 January 2002

## TABLE OF CONTENTS

	<b>Page</b>
<b>TABLE OF CONTENTS</b>	i
<b>LIST OF TABLES</b>	vii
<b>LIST OF ABBREVIATIONS AND ACRONYMS</b>	x
<b>CHAPTER 1: BACKGROUND TO STUDY, PROBLEM FORMULATION AND AIMS</b>	
1.1 Background	1
1.2 Need for research	4
1.3 Literature review	7
1.4 Problem statement	10
1.5 Aims of the study	12
1.6 Research design	13
1.6.1 Statistical data	13
1.6.1.1 Previous statistical findings	13
1.6.1.2 Primary statistical data	14
1.6.2 Qualitative inquiry	14
1.6.2.1 Pilot study	15
1.6.2.2 Sampling institutions	16
1.6.2.3 Sampling participants	16
1.6.2.4 Conducting the interviews	18
1.6.2.5 Documentary data	18
1.6.3 Analysis of data	19
1.7 Chapter outline	19
1.8 Conclusion	21

## **CHAPTER 2            CONCEPTUAL FRAMEWORK**

2.1	Introduction to equity and social theory	23
2.2	Social transformation in South Africa	24
2.2.1	Transforming higher education	26
2.2.2	Transforming public health	30
2.2.3	Transforming the education and training of medical professionals	32
2.3	Models of equity	34
2.3.1	Model of Equal Opportunities or Good Faith	36
2.3.2	Specific Affirmative Action model	39
2.3.3	Equity model in higher education in South Africa	41
2.4	Equity of access	43
2.4.1	HDI and HAI	47
2.5	Redress	51
2.6	Equity of outcomes	53
2.7	Equity-related concerns	56
2.7.1	Deconstruction of disadvantage	56
2.7.2	Changes in resistance	58
2.7.3	Academic discourse: a right to freedom of expression	61
2.8	Conclusion	64

## **CHAPTER 3            MEDICAL EDUCATION AND TRAINING IN THE SOUTH AFRICAN CONTEXT**

3.1	Introduction	66
3.2	Historical legacy	68
3.2.1	Historical shaping of higher education	70
3.2.2	Historical shaping of medical education and training	73
3.3	National legislative and policy frameworks	77
3.3.1	Legislative and policy framework of public health	80
3.3.2	Legislative and policy framework of higher education	82

3.4	Trends in South African HEIs and medical schools	88
3.4.1	Student enrolment trends in medical schools and universities	89
3.4.1.1	Student enrolment trends by race	89
3.4.1.2	Student enrolment trends by gender and race	105
3.4.1.3	Trends in postgraduate training in medical schools	111
3.4.2	Staff employment trends in medical schools and universities	115
3.4.2.1	Staff trends by race	116
3.4.2.2	Gender trends in staff profiles	120
3.4.2.3	Profiles of medical practitioners by race and gender	129
3.4.3	Programme trends in medical schools and universities	136
3.5	Clarifying shifts, trends and transformation initiatives	138
3.6	Conclusion	143

## **CHAPTER 4            RESEARCH DESIGN**

4.1	Introduction	147
4.2	Value of combining qualitative and quantitative research methodologies	148
4.3	Designing the research study (Planning phase)	151
4.3.1	Topic selection	151
4.3.2	Qualitative research methods	151
4.3.2.1	Interviews	151
4.3.2.2	Document analysis	153
4.3.2.3	Personal field notes	153
4.3.3	Quantitative research method	154
4.3.4	Selection of sample of institutions	155
4.3.5	Selection of participants	156
4.4	Organising the research study (Organisation phase)	158
4.4.1	Access	158
4.4.2	Constructing the interview grid	159

4.5	Conducting the research (Implementation phase)	160
4.5.1	Conducting the pilot	160
4.5.2	Conducting the interviews	160
4.6	Analysis of findings	162
4.6.1	Description	163
4.6.2	Analysis	163
4.6.3	Interpretation	164
4.7	Reliability and validity	165
4.8	Conclusion	168

## **CHAPTER 5                    PRESENTATION AND DISCUSSION OF FINDINGS**

5.1	Introduction	170
5.2	National – level issues	171
5.2.1	Structural arrangements	171
5.2.2	Economic constraints	172
5.2.3	Academic training complexes	175
5.2.4	Government responsibility vs. institutional autonomy	176
5.3	Equity issues: institutional and faculty level	178
5.3.1	Management approach	179
5.3.1.1	Good management practices	181
5.3.2	Managing staff equity	186
5.3.2.1	Joint appointees	186
5.3.2.2	Recruitment and selection	188
5.3.2.3	Staff development and retention	192
5.3.2.4	Private work	199
5.3.2.5	National Health Laboratory Services	201
5.3.2.6	Staff nationality	202
5.3.2.7	Gender stereotypes and trends	203
5.3.3	Managing student equity	208
5.3.3.1	Transformation of medical school student profiles	210
5.3.3.2	Demand for limited available spaces	212
5.3.3.3	Admission requirements	214

5.3.3.4	Selection procedures	219
5.3.3.4.1	Social class	222
5.3.3.4.2	Identifying potential	225
5.3.3.5	Student support	229
5.3.3.5.1	Academic support	229
5.3.2.5.2	Financial support	232
5.3.2.5.3	Social support	235
5.3.2.5.4	A challenge: understanding and integrating student support	236
5.3.3.6	Medical students: gender and race trends	237
5.3.4	Postgraduate training	238
5.3.4.1	Inequities in registrar training	239
5.3.4.2	Creation of registrar training posts	241
5.3.4.3	Recruitment and selection for registrar posts	242
5.3.4.4	Training programmes for registrars	243
5.3.4.5	College of medicine and M.Med. examinations	243
5.3.5	Curriculum development	245
5.3.5.1	Philosophy of curriculum design	246
5.3.5.2	OBE and equity	249
5.3.5.3	Length of curriculum	253
5.3.5.4	Curriculum content and presentation issues	255
5.3.5.4.1	Shifting the mindset	255
5.3.5.4.2	Language of instruction	257
5.3.5.4.3	Core and faculty specific modules	259
5.3.5.4.4	The case of Anatomy	260
5.3.5.4.5	Cultural sensitivity	261
5.3.5.4.6	Attitudes and values	262
5.3.5.5	General observations	263
5.3.6	Research output	265
5.3.7	Institutional climate	267
5.3.7.1	Quality and quality assurance	268
5.3.7.2	Role of the HPCSA	272
5.3.7.3	Language policy	273
5.4	Conclusion	274

## **CHAPTER 6            SYNTHESIS OF FINDINGS, RECOMMENDATIONS AND CONCLUSION**

6.1	Introduction	279
6.2	Overview of investigation	280
6.3	Summary of emerging themes	281
6.3.1	Historical determinism	281
6.3.2	Power dynamics	282
6.3.3	Economic determinism	283
6.3.4	Differing ideologies	284
6.3.5	Management practices	284
6.4	Recommendations	285
6.4.1	Financing and managing medical service, teaching, training and research in academic health complexes	285
6.4.2	Defining and managing equity in medical schools	286
6.4.3	Maintaining a comprehensive and accurate Management Information System	286
6.4.4	Adopting a framework for policies and practices in medical schools	287
6.5	Further research	288
6.6	Limitations of study	289
6.7	Conclusion	289
	<b>BIBLIOGRAPHY</b>	292

## **APPENDICES**



## LIST OF TABLES

	<b>Page</b>	
TABLE 1.1	TABULATED SUMMARY OF INSTITUTIONS AND PARTICIPANTS IN THIS STUDY BY RACE AND GENDER	17
TABLE 3.1:	AFRICAN HEADCOUNTS - STUDENT ENROLMENT AT UNIVERSITIES SUB-TYPES FOR 1988, 1993 and 1998	90
TABLE 3.2:	STUDENT HEADCOUNT ENROLMENT BY RACE FOR 1988, 1993 AND 1998 FOR UNIVERSITIES WITH MEDICAL SCHOOLS	92
TABLE 3.3:	ADMISSION HEADCOUNTS BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001	93
TABLE 3.4:	ADMISSION HEADCOUNT PERCENTAGES BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001	93
TABLE 3.5:	FINAL YEAR STUDENT HEADCOUNT BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001	93
TABLE 3.6:	FINAL YEAR STUDENT HEADCOUNT PERCENTAGES BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001	94
TABLE 3.7:	COMPARISON OF 1996 FACULTY OF MEDICINE ADMISSIONS BY RACE TO 2001 FACULTY OF MEDICINE FINAL YEAR STUDENT ENROLMENT	95
TABLE 3.8:	ADMISSION AND FINAL YEAR HEADCOUNT ENROLMENTS IN MEDICAL SCHOOLS BY RACE FOR 1994, 1998 AND 2001	98
TABLE 3.9:	HEADCOUNT AND PERCENTAGE DISTRIBUTION OF AFRICAN ADMISSIONS TO MEDICAL SCHOOLS FOR 2001	101
TABLE 3.10:	COMPARISON BETWEEN INSTITUTIONAL AND FACULTY OF MEDICINE PERCENTAGE STUDENT PROFILES BY RACE FOR 1998	103

TABLE 3.11:	UNIVERSITY STUDENT HEADCOUNTS BY RACE AND GENDER FOR 1988, 1994 AND 1998	106
TABLE 3.12:	PERCENTAGE STUDENT HEADCOUNT ENROLMENT BY RACE AND GENDER FOR 1998 FOR UNIVERSITIES WITH MEDICAL SCHOOLS	107
TABLE 3.13:	ADMISSION OF FIRST YEAR FEMALE MEDICAL STUDENTS FOR 1996 AND 2000	108
TABLE 3.14:	TOTAL HEADCOUNT ENROLMENT FOR MEDICAL FACULTIES BY GENDER FOR 1996 AND 2000	109
TABLE 3.15:	PERCENTAGE HEADCOUNT ENROLMENTS BY RACE AND GENDER IN MEDICAL FACULTIES FOR 2000	110
TABLE 3.16:	ENROLMENT OF FEMALE REGISTRARS BY RACE FOR 1996	114
TABLE 3.17:	HEADCOUNTS OF REGISTRARS IN MEDICAL SCHOOLS BY RACE AND GENDER IN 2001	114
TABLE 3.18:	HEADCOUNT OF REGISTRARS IN SAMPLE OF ACADEMIC HOSPITALS BY RACE AND GENDER FOR 2001	115
TABLE 3.19:	UNIVERSITY INSTRUCTIONAL/RESEARCH STAFF: PROPORTIONAL COMPOSITION BY RACE IN 1998	118
TABLE 3.20:	HEADCOUNT OF UNIVERSITY INSTRUCTION/ RESEARCH AND EXECUTIVE/MANAGEMENT PROFESSIONALS WITH PERMANENT APPOINTMENT BY RACE AND RANK FOR 1996 AND 1999 IN INSTITUTIONS WITH MEDICAL SCHOOLS	119
TABLE 3.21:	HEADCOUNT OF FACULTY OF MEDICINE INSTRUCTION/ RESEARCH STAFF WITH PERMANENT APPOINTMENT BY RACE AND RANK FOR 2001	120

TABLE 3.22:	HEADCOUNT OF UNIVERSITY INSTRUCTION/ RESEARCH PROFESSIONALS WITH PERMANENT APPOINTMENT BY GENDER AND RANK FOR 1997 IN INSTITUTIONS WITH MEDICAL SCHOOLS	122
TABLE 3.23	HEADCOUNT OF INSTRUCTION/ RESEARCH PROFESSIONALS WITH PERMANENT APPOINTMENT BY GENDER AND RANK FOR 2001 IN MEDICAL SCHOOLS	123
TABLE 3.24:	HEADCOUNT OF INSTRUCTION/ RESEARCH PROFESSIONALS WITH PERMANENT APPOINTMENT BY RACE, GENDER AND RANK FOR 2001 IN MEDICAL SCHOOLS	124
TABLE 3.25:	HEADCOUNTS OF FULL-TIME STAFF IN ACADEMIC HOSPITALS BY RACE AND GENDER FOR 2001 IN THE SAMPLE OF INSTITUTIONS	125
TABLE 3.26:	HEADCOUNTS OF FULL-TIME STAFF IN 2001 IN ACADEMIC HOSPITALS BY BROAD AREAS OF SPECIALISATION, RACE AND GENDER	127
TABLE 3.27:	MEDICAL PRACTITIONERS (MPs) BY RACE AND GENDER FOR 2001 IN REGISTRATION CATEGORIES OF THE HPCSA	132
TABLE 4.1	SELECTED CHARACTERISTICS OF THE SAMPLE OF INSTITUTIONS AND FACULTIES OF MEDICINE	156
TABLE 4.2:	OVERVIEW OF PARTICIPANTS SELECTED	157

## LIST OF ABBREVIATIONS AND ACRONYMS

<b>ASAHDI</b>	Association of Vice-Chancellors of Historically Disadvantaged Institutions of South Africa
<b>CHE</b>	Council on Higher Education
<b>CHEPS</b>	Centre for Higher Education Policy Studies
<b>CPD</b>	Continuous Professional Development
<b>DoE</b>	Department of Education
<b>DoH</b>	Department of Health
<b>DoL</b>	Department of Labour
<b>ENT</b>	Otorhinolaryngology (Ear, Nose and Throat specialisation)
<b>ETQA</b>	Education and Training Quality Assurance
<b>FETC</b>	Further Education and Training Certificate
<b>FOTIM</b>	Foundation of Tertiary Institutions of the Northern Metropolis
<b>FTE</b>	Full-time equivalents
<b>GDP</b>	Gross Domestic Product
<b>GEAR</b>	Growth, Employment and Redistribution

<b>HAI</b>	Historically Advantaged Institution
<b>HBU</b>	Historically Black University
<b>HDI</b>	Historically Disadvantaged Institution
<b>HEI</b>	Higher Education Institution
<b>HEQC</b>	Higher Education Quality Committee
<b>HEMIS</b>	Higher Education Management Information System
<b>HIV/AIDS</b>	Human Immunodeficiency Virus/ Acquired Immuno Deficiency Syndrome
<b>HOD</b>	Head of Department
<b>HPCSA</b>	Health Professions Council of South Africa
<b>ILO</b>	International Labour Organisation
<b>ITC</b>	Information Technology Communication
<b>INMDC</b>	Interim National Medical and Dental Council
<b>MBChB</b>	Bachelor of Medicine, and Bachelor of Surgery
<b>MCQ</b>	Multiple Choice Question

<b>MDPB</b>	Medical and Dental Professional Board
<b>Medunsa</b>	Medical University of Southern Africa
<b>MESAB</b>	Medical Education for South African Blacks
<b>M-score</b>	Matriculation score
<b>NCHE</b>	National Commission on Higher Education
<b>NHLS</b>	National Health Laboratory Services
<b>NITER</b>	National Increment for Teaching and Research
<b>NQF</b>	National Qualifications Framework
<b>NPHE</b>	National Plan on Higher Education
<b>NSFAS</b>	National Student Financial Aid Scheme
<b>NUSAS</b>	National Union of South African Students
<b>OBE</b>	Outcomes-based Education
<b>PBL</b>	Problem-based Learning
<b>PHC</b>	Public Health Care
<b>Ph.D</b>	Doctorate in Philosophy
<b>RPL</b>	Recognition of Prior Learning

<b>RWOPS</b>	Remunerative Work Outside Public Service
<b>SADC</b>	Southern African Development Community
<b>SAQA</b>	South African Qualifications Authority
<b>SAMA</b>	South African Medical Association
<b>SAPSE</b>	South African Post-Secondary Education
<b>SAUVCA</b>	South African Universities Vice-Chancellors' Association
<b>SGB</b>	Standards Generating Body
<b>SWOT</b>	Strengths, Weaknesses, Opportunities, Threats
<b>TBVC</b>	Transkei, Bophuthatswana, Venda, Ciskei
<b>UCT</b>	University of Cape Town
<b>UDW</b>	University of Durban-Westville
<b>UFS</b>	University of Free State
<b>UP</b>	University of Pretoria
<b>Unisa</b>	University of South Africa
<b>UWC</b>	University of Western Cape
<b>Wits</b>	University of the Witwatersrand

# CHAPTER 1

## BACKGROUND TO STUDY, PROBLEM FORMULATION AND AIMS

### 1.1 BACKGROUND

There are complex distortions in the supply, production, distribution and development of medical doctors in South Africa, particularly in terms of race and socio-economic class due to the protracted imposition of legalised racism. The need to attract and retain students and staff who are members of previously disadvantaged groups in medical education and training is recognised, given the increasing demand for health care services but the challenge lies in redressing historic inequities in the training of medical doctors within a climate of serious fiscal constraints (Pick 2001:i;xiii).

Health care is currently an area of critical social importance in South Africa because of high and increasing mortality and morbidity rates due to factors such as HIV/AIDS and tuberculosis. For example, the projected increase in HIV/AIDS infections is from 3,75 million in 1999 to 5,5 million in 2004, the projected death rate is from 175 000 in 1999 to 750 000 in 2004 and the demand from 1999 to 2004 for hospital beds in Gauteng alone, is from 2000 to 8000 (DoH n.d.:10). These statistics provide an indication of the extent of the growing demand for health care.

Given the macroeconomic policy framework, Growth, Employment and Redistribution [GEAR], aimed at deficit reduction and progressive reduction in the tax burden, and the current high expenditure of 8,5% of the Gross Domestic Product [GDP] on health services (DoH n.d.:9-10), the challenge is to find a way of increasing effectiveness and efficiency of the service within current fiscal constraints. The Department of Health [DoH] has outlined a five-year health sector strategic framework (DoH n.d.:12-33) to meet national public health care demands and an important element of this



strategy is human resources development for health, which includes the training of medical doctors. According to McIntyre, Baba and Makan (1998:31), the two government departments with the largest share of the budget are education (over 21% of the 1997/98 budget) and health (approximately 11% of the 1997/98 budget).

The training of medical doctors is located not within health, but within eight medical schools in universities under the auspices of the Department of Education [DoE]. These are the University of Stellenbosch, University of Pretoria, University of Free State, University of Witwatersrand, University of Cape Town, University of Natal, University of Transkei and the Medical University of Southern Africa (Medunsa). During the period of apartheid, Black students were subjected to quotas and required ministerial permission to study medicine but currently all universities have implemented affirmative action policies to redress historic inequities but by 1998, the previously White universities of Witwatersrand, Pretoria, Stellenbosch, Free State and Cape Town were still predominantly White. A primary concern is the admission of Black African students, which in the University of Witwatersrand and the University of Natal had decreased from 1994 to 1998. However, the historically Black medical schools of Medunsa, Transkei and Natal continue to admit the largest number of Black students into medicine (Moomal & Edwards-Miller 1998:46-47).

From the population of these eight medical schools, three are selected in a purpose sample representative of the different historic types found within a single province, namely Gauteng and therefore subject to a more similar set of arrangements with the provincial DoH than if the sample of medical schools had been randomly selected from the various provinces. Medical schools in the sample in this study are the University of Pretoria, which is a historically White Afrikaans-medium institution, the University of Witwatersrand which is a historically White English-medium university and Medunsa which is a historically Black university.

The use of ethnographic categories is necessary in terms of the nature of the study. The term *Black* encompasses those groups historically oppressed through apartheid and classified as African, Indian or Coloured. This categorisation is also used in current legislation, such as the *Employment Equity Act No. 55 of 1988* (S.A.1998a:8) in which the need for equity and redress is explained in terms of the prejudice and discrimination that Blacks, women and people with disabilities were differentially subjected to in the apartheid era.

The achievement of greater equity and the redress of historic inequities caused by apartheid is a fundamental national goal for all government departments. Transformation initiatives of both the DoH and the DoE impact on the provision of medical education and training in medical schools. This study focuses on the management of equity in the training of a specific group of human resources, namely, medical doctors and specialists in medical schools. Historic inequities characterise medical schools, such as student and staff profiles that are not reflective of the population demographics (Blackwell 1987:97-106), and medical schools in South Africa are in the process of redressing such inequities (Kane-Berman 2000:5-7; Lehmann, Andrews & Sanders 2000:1-3; SAMJ 1997:1513). There are unique and specific dynamics within training in this discipline (DoH n.d.:31; DoH 2000b:17-20), and the implications and impact of current change initiatives on the achievement of equity, from a management perspective, is the subject of this study. Medical schools are affected by the simultaneous transformation of health care services and higher education at a national level, internal restructuring of university faculties, departments and policies at an institutional level, and programme redesigning in terms of curriculum content, methodologies and modes of delivery at a faculty level (DoH 2000b:7).

This study endeavours to contribute to current discussions and decisions about changes in medical education and training by identifying specific complexities, challenges and good practices in managing equity, through a holistic, integrated and critical conceptual analysis of intended and

unintended outcomes of changes implemented and proposed by management at various levels.

## 1.2 NEED FOR RESEARCH

Equity is a fundamental principle for social transformation, as entrenched in, *inter alia*, *The Constitution* (SA 1996), *A Policy Framework for Education and Training* (ANC 1994), the *White Paper for the Transformation of Health Systems in South Africa* (DoH 2000a), *A Framework for Transformation* (NCHE 1996a) and the *Higher Education Act 101 of 1997* (S.A.1997b). However, given competing priorities, such as efficiency and quality, in a fiscally constrained climate, equity often gets relegated to a lower priority, despite its emphasis in policy pronouncements. This study isolates and problematises the issue of equity in medical schools in South Africa, drawing it onto the centre-stage of current higher education and public health transformation rhetoric.

The concept of equity in higher education, and specifically within medical education and training, has multiple and layered meanings, linked to different philosophies, experiences and positions within diverse visions and missions of national ministries of education and health, higher education institutions (HEIs) and their dynamically changing contexts (Meek 2001:9). Research facilitates an unpacking of such dynamics and a greater common understanding of the complex interconnections and conceptual tensions among often competing contextual realities.

The selection of this topic was precipitated by the researcher's personal understanding, as a practitioner involved in management discussions in a university with a medical school, of the need for deeper insight both at the national level in health and education, and at an institutional level - of the particular arrangements, agendas, complexities and nuances that characterise the training of medical doctors and specialists in the faculty of medicine, as compared to other programmes offered by the same faculty or other faculties in the university. Involvement in academic staff training confirmed a similar

need for understanding among staff, particularly in levels below those of management of the University and the Faculty of Medicine. Such an understanding is a prerequisite for all levels of staff involved in medical training as it provides the justification for proposed or implemented changes, such as redesigning the curricula in accordance with the *South African Qualifications Authority [SAQA] Act No.58 of 1995* (S.A.1995a) and the Primary Health Care [PHC] approach of the DoH (DoH n.d.:6).

Such changes are grounded in national social transformation imperatives, yet equity discourse in academia is clouded by reticence and political sensitivity (Kuran 1993:61). There is an uncomfortable silence and lack of vigorous academic debate and critical interrogation of issues such as specific affirmative action policies relating to student access and staff appointments. This study directly confronts the issue of equity in medical schools within conceptual and contextual frameworks of identifying the complexities of managing equity in this specific field from a holistic perspective and an integrated class, gender and race analysis. Current higher education transformation strategies, such as the National Plan on Higher Education [NPHE] (DoE 2001a) and the proposed new funding formula to increase overall student participation rates (DoE 2001a:39), including postgraduate participation rates, could have different outcomes in field of medical education and training due to the unique dynamics in this field of professional training and these need to be considered seriously by DoE in its funding and reshaping of the higher education sector (DoE 2001a:23;69-70;78-83).

Some of these dynamics within the field of medical training of doctors, particularly in South Africa, that differ significantly from the training of professionals in other fields within the university sector relate to the regulation of the number of undergraduate and postgraduate training posts by the DoH, and the partnership arrangement between the DoE and DoH. For example, the majority of the academic staff in medical schools is on joint appointment by the provincial DoH and the university, with the salary of the staff paid by the provincial DoH, yet the manner in which medical doctors

are trained is determined predominantly by the universities, under the auspices of the DoE. Current transformation initiatives by the DoH, the DoE and by each university with a medical school have an impact on the training of medical doctors. Research provides information about the nature of such impact, thus providing a more objective and informed basis for decision-making in this sector.

Rapid and simultaneous changes are being implemented in the areas of higher education and health, and institutions of higher education and their faculties of medicine are responding to such transformation initiatives by implementing institutional and programme level changes with a sense of urgency (DoH 2000b:7). Among such transformation initiatives are proposed changes in the length of community service and the length of the MBChB programme in some medical schools (DoH 2001b:2-3). Research affords stakeholders the opportunity to glean an overall perspective by taking a snapshot view and stocktaking of the situation through reflection about the effectiveness and efficiency of processes, implemented across diverse contextual realities, in meeting common national goals.

The particular value of this research lies in its independence in examination from a holistic, integrated perspective rather than a commission to investigate an explicit issue for a specific purpose by a particular stakeholder. Given the described significance and increasing need for health care in South Africa (DoH n.d.:10), research provides the empirical basis for policy formulation in an area of current, critical social importance in South Africa.

Strategies and policies relating to transformation of higher education (DoE 2001a) have been informed by various investigations but these have been largely statistical, broad overviews of shifts and trends across HEIs in South Africa (Cooper & Subotzky 2001; Cloete & Bunting 2000; CHE 2000). The value of this research is in its extremely narrow and in-depth focus on specifically professional education and training of medical doctors and specialists. It uses previous findings as a backdrop for demonstrating the

differences in this particular field of education and training within the broader higher education landscape. Further, this study aims to move the debate beyond the statistical paradigm by seeking explanations for the manifested statistical trends and exploring alternative management strategies that could result in an improvement in the current equity position. Equity involves human agency and it is therefore important to capture the perceptions, depth and richness of information that qualitative data provides. Examining the policies and practices, and attempting to understand through research the personal perspectives and perceptions of managers of institutions and faculties of medicine, and in relevant government departments, is a legitimate manner for identifying good equity management practices aligned to national goals (Anderson & Williams 2001:5).

The trends and shifts in medical education are significantly different to those in other sectors in higher education and the transformation trajectories of higher education and health care services in South Africa are different in many respects from those in other countries, due to particular historic contexts (WHO 2001:8-12; SADHS 1998:1; DoH 2000a:4-5). Therefore, although international comparative studies may provide useful information about experiences and outcomes, research on local experiences is an important and relevant means of collecting and analysing information as a basis for effective management and policy formulation.

### **1.3 LITERATURE REVIEW**

Studies pertaining to equity in higher education relate to issues of access and success of historically disadvantaged groups and there are many similarities between the South African and international experience. A few general studies are cited in this section but the relevant literature sources reviewed are integrated into the discussions in Chapter 2 and Chapter 3.

Current systems of higher education are “exceedingly complex, multi-faceted and constantly changing”, and it is the complexity, increased goals and the related responsibilities that result in critical areas of tension for policy makers

(Meek 2001:9). The number of Blacks and women as staff and students has increased in higher education over the past few decades but the increase has been uneven and related to historical, political, economic, cultural and patriarchal factors at various levels (Elam, J.C. 1989:84-85). The number of Blacks who complete graduate training are affected by factors such as variations in federal, state and private-sector intervention; structural considerations resulting from economic deprivation; as well as motivational, that is "depending on the individuals' own determination to surmount apparently insurmountable barriers in order to obtain educational goals". However, the majority of the Black population view higher education as the primary route to upward mobility and Black students are more likely than White students to support their professional graduate programmes through loans especially in fields such as medicine, engineering, dentistry and law (Blackwell 1987:15;73).

The literature also suggests that there are differences between the trends in particular disciplines such as medical education and training and higher education generally, due to factors such as the status of the medical profession, the admission requirements, the length of training and the high demand for medical doctors and specialists. Equity trends in the field of medical education and training are significantly different in many ways. For example, Prater and Miller (1989:60) found that although the number of Blacks graduating as medical doctors had increased, the number judged qualified to attend medical school, as a percentage of the total had declined. Medical surveys reveal substantial gender differences in the professional achievements of medical graduates, with the career paths of female doctors being more circumscribed than those of their male colleagues by the interaction of their personal and professional commitments (Dennerstein, Ewing & Lehert 1990:100).

Broader equity concerns in higher education, such as socio-economic class and people with disabilities, although emerging as priorities in international equity discourse is not yet a common item on the equity agenda of higher education.

Research serves an important function in making explicit the nature and severity of social inequities in higher education, but Dunne (1996:175) identifies the need to develop statistical methodologies that can effectively explore the intersections of class, race and gender in a sophisticated, integrated and sensitive analysis. Current understandings of inequities in higher education in South Africa are based largely on broad statistical overviews and thus an attempt is made in this study to combine both quantitative and qualitative methods in a discipline-specific field of education and training.

In a country such as South Africa, where the effects of racism have been exacerbated by the protracted systematised application of a policy of apartheid that has resulted in the majority of the population of the country being severely disadvantaged in terms of participation in higher education and particularly in fields such as medicine, policy makers at all levels confront deep tensions regarding the appropriate balance between government regulation and academic freedom (Rohrs 1987:21), application of affirmative action policies and ensuring equal opportunities (Caldwell 1992:62), and promoting global competitiveness whilst establishing local relevance (Kraak 1997:52-53). These tensions are also described by Fleming, Gill & Swinton (1978:85) in a comprehensive study entitled *The Case for Affirmative Action for Blacks in Higher Education*, and by James Blackwell (1987:65) in *Mainstreaming Outsiders: The Production of Black Outsiders*. For example, Fleming et. al. (1978:24-25) describe how White universities failed in the United States to respond to the needs of Black students, graduating only 51 Black graduates prior to 1929, and that most Black Ph.D. graduates complete their undergraduate training in historically Black universities but go on to White universities to complete their postgraduate studies.



Clark (2000:36) describes a problem of governance in higher education:

National and state legislatures, executive departments, commissions, and councils can announce broad policies, but implementation lies squarely in the hands of the constituent universities and colleges...

The institutions have trajectories of their own; they of their own, of which governmental dictates are only a part. It is important analytically to pursue the ways that higher education operates as a self-guiding society as well as to see it as composed of institutions dependent on certain main patrons.

This study explores the need for government to intervene in educational policies at all levels to monitor whether institutions are fulfilling their commitment to realise equity in medical schools, at both staff and student levels. The American experience proves that legislative changes are a necessary but insufficient means for changing attitudes and behaviour, as HEIs vacillate in response to public opinion, where most HEIs “failed to move beyond token levels in the admission, enrolment and graduation of black Americans”, with some universities admitting a few and others, no Black students in a decade. Medicine is used as an example to show how three historically Black medical schools had admitted the majority of Black students for more than a decade (Blackwell 1987: 348-350).

#### **1.4 PROBLEM STATEMENT**

Current inequities in higher education in terms of access, redress, opportunities and outcomes have developed for over a century in South Africa and are therefore deep-seated and pervasive. The government in attempting to address historic inequities, both within and outside higher education, has introduced various forms of legislation that Higher Education Institutions (HEIs) have to comply with. Thus, higher education is operating within particular national legislative and policy frameworks, intended to achieve specific inextricably linked outcomes, such as equity, access, redress, quality, efficiency and effectiveness. Such legislation includes the

*Higher Education Act 101 of 1997 (S.A.1997b), the SAQA Act 58 of 1995 (S.A. 1995a), the Employment Equity Act 55 of 1998 (S.A. 1998a) and the NPHE (DoE 2001a).*

At no other period in the history of higher education in South Africa have such radical changes been introduced in such rapid succession. Faculties of Medicine have to simultaneously manage the development of new curricula, staff and student equity within limited human and financial resources and particular structural partnerships between the DoH and DoE that have different strategic priorities (DoH n.d.:12-16).

This study poses the following research question within the current context of medical schools in South Africa: *How can equity in medical schools be more effectively managed in order to promote the achievement of the national equity goals of higher education and health?*

In seeking an answer to the above research problem, the following questions need to be answered in this study:

- What are the conceptual complexities regarding equity in relation to the particular socio-political history of medical education and training in South Africa?
- What are the main equity challenges facing medical schools within the specific contextual framework of medical schools and the broader national transformation frameworks of health and higher education in South Africa?
- What are the prevalent assumptions and perceptions about equity in medical schools that are held by key managers at national, institutional and faculty of medicine levels?

- Which are current good practices aimed at improving equity that are employed in the sample of medical schools?
- Is there a set of core generic issues that should be managed to enhance the management of equity in a more holistic and integrated manner in medical schools?

### **1.5 AIMS OF THE STUDY**

This study is restricted in focus to five key areas relating to equity in medical schools, namely, staff, students, curriculum, research, and policies and practices. Within an integrated class, race, and gender analysis, this study aims to:

- Explore the conceptual complexities regarding equity in relation to the particular socio-political history of medical education and training in South Africa
- Describe and analyse the main equity challenges facing medical schools within the specific contextual framework of medical schools and the broader national transformation frameworks of health and higher education in South Africa
- Articulate the prevalent assumptions and perceptions about equity in medical schools that are held by key managers at national, institutional and faculty of medicine levels
- Identify current good practices aimed at improving equity that are employed in the sample of medical schools
- Develop a set of core generic issues that should be managed to enhance the management of equity in a more holistic and integrated manner in medical schools

## **1.6 RESEARCH DESIGN**

A literature search was used to identify studies, policies, articles and reports relating to equity in higher education, especially in South Africa, and a literature review was undertaken to identify key equity issues and gain insight into how disparate historic provision of education, on the basis of race, gender and class, has resulted in current inequities. In addition, articles published since 1997 in the national press about equity in higher education in South Africa were reviewed, as they serve both as a constructor and reflector of public perceptions and reactions to changes in higher education.

### **1.6.1 Statistical data**

Statistics in this study provide valuable insight into the nature of inequities, generally in higher education and more specifically in medical education and training. They are useful tools in monitoring change, establishing benchmarks and providing information that could form the basis for decision-making.

In most instances in the study, comparisons are drawn in the statistical tables between White and African group profiles, as they mark the extremities on the equity continuum and constitute the two largest population groups in South Africa.

Two kinds of statistical data are presented in this study, namely data derived from previous studies and primary data collected during the course of this investigation.

#### ***1.6.1.1 Previous statistical findings***

Statistical data for universities in South Africa, particularly those with faculties of medicine are derived from comprehensive studies (Cooper & Subotzky 2001; Cloete & Bunting 2000; NPHE 2001a) and used as the basis for comparing student profiles in faculties of medicine with those of the

institutions. Student profiles are derived from information presented by the DoH to the Health Portfolio Committee (DoH 2001b). Findings of relevant previous statistical studies are integrated into the discussions in Chapter 3 and are used to corroborate findings in Chapter 5.

#### ***1.6.1.2 Primary statistical data***

The literature review pointed to serious gaps in the statistical information on staff and postgraduate students in medical schools, as well as in professional practice. No analysis, by race and gender, of the pool of resources in terms of medical specialists registered with the Health Professions Council of South Africa (HPCSA), staff profiles in medical schools or in postgraduate training could be located and an attempt is made in this study to fill some of these statistical gaps, thereby establishing baseline data to ascertain the nature and extent of the inequities in medical schools prior to the discussion of the qualitative findings on the management of equity in Chapter 5. For purposes of coherence, these findings are included in the discussion of the contextual framework in Chapter 3 (cf.3.4.2.3) but are important primary data for further discussion.

#### **1.6.2 Qualitative inquiry**

A qualitative inquiry was conducted at three universities in Gauteng, each having a medical school, namely the University of Witwatersrand (Wits), the University of Pretoria (UP) and the Medical University of Southern Africa (Medunsa) and the University of the Free State was used for the pilot study.

Personal, largely unstructured interviews were conducted with a total of 49 individuals in management positions in the faculties of medicine and the universities, and from structures external to the university, namely, the DoH, DoE, Department of Labour (DoL) and the HPCSA, as these structures influence medical training within the institution.



Through an examination of mainly qualitative data complemented and supplemented by quantitative data, documentary evidence and personal observations, the position of equity in the medical schools is described. In addition, the challenges relating to equity and best practices in improving equity are identified and discussed within conceptual and contextual frameworks of equity in higher education and public health in the training of medical doctors in South Africa.

#### ***1.6.2.1 Pilot study***

The pilot study was conducted at the University of the Free State (UFS). Reasons for the choice of this particular institution are discussed in Chapter 4 (cf. 4.5.1). In-depth interviews were conducted with 12 senior members of the Faculty of Medicine and the University. Necessary refinement of the research methodology was based on the pilot study.

#### ***1.6.2.2 Sampling institutions***

This is an exploratory, predominantly qualitative study aimed at constructing substantive theory on the management of equity in medical schools, based on findings in the medical schools of the Universities of the Witwatersrand, Pretoria and Medunsa, and to a limited extent informed by the findings in UFS. Gauteng has the largest number of medical schools in a single province and they are broadly representative of the diversity of universities in South Africa. As all three institutions are in the same province, they are all linked to the Gauteng provincial DoH and are therefore more likely to experience similar opportunities and challenges than medical schools randomly drawn from the national population of eight universities having medical faculties, but possibly more diverse agreements with their provincial departments of health. The close proximity of these institutions is likely to result in greater control of extraneous variables in exploring best practices within these institutions. The limitation of this sampling procedure is that the findings of this study cannot, with confidence, be generalised to all medical schools in South Africa. However, as this is an exploratory study aimed at constructing

substantive theory, generalisability is sacrificed in favour of the in-depth insights that this narrower focus is likely to yield.

### *1.6.2.3 Sampling participants*

A request for permission to conduct the study was addressed to the Vice-Chancellor of each university. In-depth personal interviews were conducted with executive and senior members of the management of the universities and the faculties of medicine. Interviewees ranged from the Vice-Chancellor, Deputy Vice-Chancellor/s, Vice-Principal/s, Registrar, Dean of the Faculty of Medicine, Deputy-Dean/s of the Faculty of Medicine, Heads of portfolios such as Academic Development, Institutional Planning, Financial Aid, Quality Assurance, Human Resources and Student Support. This is explained in detail in Chapter 4 (cf. 4.3.5-4.4).

The selection of interviewees differed according to the structural arrangements within each institution. Six interviews were conducted with persons external to the institutions but associated directly with higher education, medical education or health care in the public service. These individuals were from the DoH, DoE, DoL and the HPCSA.

An analysis of the participants revealed that of the 49 interviewees in the study, 30 were male and 19 female. Of the 30 male participants, 11 were Black and of the 19 female participants, only seven were Black. The number of African respondents in this study is even lower, pointing to their low representation at senior levels of management. The race and gender profile of the interviewees could influence the nature and prioritization of equity issues that emerge in Chapter 5 and this needs to be considered during the analysis of the findings. A description of the institutions and participants selected for this study are summarised in Table 1.1:

**TABLE 1.1 TABULATED SUMMARY OF INSTITUTIONS AND PARTICIPANTS IN THIS STUDY BY RACE AND GENDER**

Name	Classi- fication	Medium of Instruction	(N)	(N)	(N)	(N)	TOTAL
			Black Females	Black Males	White Females	White Males	
Free State (pilot)	HAI	Parallel Medium	2	1	3	6	12
UP	HAI	Optional Medium	-	2	3	5	10
Wits	HAI	English	1	2	3	5	11
Medunsa	HDI	English	2	5	-	3	10
National Structures			2	1	3	-	6
<b>TOTAL</b>			<b>7</b>	<b>11</b>	<b>12</b>	<b>19</b>	<b>49</b>

#### **1.6.2.4 Conducting the interviews**

Available statistical and documentary data was collected and analysed prior to conducting the interviews in each institution. This facilitated the researcher's understanding of the context of the institution and provided directions to the areas of focus for the interviews.

Interviews were unstructured and the researcher was guided by an interview grid (cf. Appendix 2) based on the portfolio position of each interviewee within the particular institutional and faculty context. Permission was sought for interviews to be taped. Anonymity of individual respondents was guaranteed and individual institutions are named only in specific instances where the information constitutes public knowledge, such as statistical profiles and curriculum development plans.

The interview grid was influenced by the strategic plans of the DoH and the National Plan on Higher Education (DoE 2001a:32) that informs the aspects that could be included in strategic plans of Faculties of Medicine and institutional three-year rolling plans. During the introduction, the principle of equity, based on the definition in the *White Paper 3: A Programme for the*



*Transformation of Higher Education* (DoE 1997) was provided. The principle of equity requires fair opportunity both to enter higher education and to succeed as students in the programmes they have selected to study, or as employees in their occupations. During the interview, the focus was restricted to the impact and influence of policies and practices on medical schools. As outlined in the NPHE (2001a), the various interview grids address, *inter alia*, the following issues:

- Identification of inequities
- Areas for improving student and staff equity
- Effective/successful strategies that have improved equity
- Contextual realities and challenges that inhibit the achievement of equity
- Management of equity (policies, practices, planning, organizing, leading and controlling)
- Student recruitment, selection and support
- Student academic success and equity
- Curriculum development and equity
- Quality and equity
- Employment equity
- Staff development and equity

#### **1.6.2.5 Documentary data**

Evidence in the form of policies and procedures, reports and other documents relating to equity in medical schools was sought for both the institutions and the faculties of medicine. Available planning documents, such as institutional strategic plans, equity plans, three-year rolling plans and

HPCSA accreditation reports were examined in terms of race and gender for both staff and students profiles in medical schools.

Other institutional and faculty of medicine policy documents, such as student selection and staff appointment procedures, student academic support and staff development, financial aid, curriculum development, recognition of prior learning, research and postgraduate studies were examined. It is acknowledged that excellent policy documents do not automatically translate into effective practice and effective equity practices are not necessarily underpinned by formal policies as they are influenced by factors such as individual and institutional commitment to social transformation.

### **1.6.3 Analysis of data**

Analysis of data commenced after a few initial interviews had been completed. In this cyclic process of data collection and analysis, data was coded and categorised. Initial data guided hypotheses (in a qualitative research paradigm) that often shifted and were discarded as subsequent interviews were analysed. Codes provided signals for relevant phenomena, which when analysed, suggested commonalities, differences, patterns and structures (Seidel & Kelle 1995:52-56). Statistics and documents are unobtrusive methods of data collection that increase the validity of the study through the use of different methods of data collection and analysis in a single study, that is, through a process of triangulation.

## **1.7 CHAPTER OUTLINE**

This chapter provides a background for the study. The need for this study is explained and the problem statement and aims of the study are identified. An overview of the research method employed is provided with a fair amount of detail as it provides an understanding of the research methods necessary to achieve the purpose and aims of this study.

A conceptual framework is developed in Chapter 2, based on the literature review conducted. The principle of social equity and associated terms such as access, redress, outcomes, equal opportunities and affirmative action are examined and some of the contradictions and tensions involved in achieving equity for social justice are raised, particularly in terms of medical education and training in medical schools in South Africa.

Based on previous studies conducted and statistical data collected and analysed in this study, the context of higher education in terms of the historic unequal provision for education due to apartheid and the resulting trends, broadly in higher education and more specifically in terms of medical education and training, is explored in Chapter 3. The implications of the legislative and policy frameworks influencing the transformation of higher education and health care services are discussed. Previous studies providing statistical overviews of student and staff profiles of universities with medical faculties and the medical faculties themselves are described as they provide reliable benchmarks for this study (Cooper & Subotzky 2001; Kane-Berman 2000; Cloete & Bunting 2000).

Chapter 4 describes the research methodology selected for this study. It includes a detailed description of the research method selected and the manner in which the research was organised, undertaken, analysed and presented. Reasons for the choice of this method are discussed.

Chapter 5 presents an integrated analysis of the qualitative findings supported by statements from personal interviews, statistical analyses and documentary evidence, against the background of international and national literature relevant to this study.

Chapter 6 forms the concluding chapter of the study, in which findings are synthesized and five major interconnected themes that emerged from the study are discussed. Based on the findings of this study, four encompassing recommendations that could improve the management of equity in medical schools are presented and discussed.

## 1.8 CONCLUSION

Equity is a politically charged and controversial issue, especially if it involves the implementation of affirmative action. Even where there is general consensus on the need for equity, particularly in the case of South Africa, given its legacy of apartheid and the resultant entrenched, severe and pervasive inequities in the systems of higher education and public health care services, there is little agreement on how historic inequities should be redressed. Legislation is a necessary enabling but insufficient factor for social transformation, but people are important in making change happen. The rate and success of the radical and rapid transformation initiatives in higher education and health depend, to a large extent, on the personal commitment of policy makers and managers at all levels to the social transformation agenda (Cloete, Kulati & Phala 1999:33-35).

However, reliable measurement of such commitment is difficult. During a transformation process, dominant discourses shift and change together with shifting and changing personal ideologies which could be towards greater support, less resistance or greater resistance to the change process. Responses to change are often covert, especially if the nature of the issue is one such as equity where responses in an interview may be shaped by the popular discourse (Kuran 1993:60-61).

Training of medical doctors to effectively meet the national equity goals is of critical importance in South Africa at the current time, due to the increasing demand for health care services arising from factors such as the increasing incidence of HIV/AIDS (DoH 2001a:27). However, the historic inequities of both the provision of health care services and the training of human resources for health in a milieu of fiscal constraints require a more collaborative, common and realigned strategy by both the DoE and DoH (DoH n.d.:31).

The problem is complex and the intention of this study is to provide insight into the complexities, tensions and challenges associated with the

management of equity in medical education and training in South Africa as a basis for wider discussion and debate on this issue. To do this, it is necessary to develop a frame of reference for equity in higher education. Due to ambiguity, controversy and ambivalence associated with the notion of social equity, it is necessary to explore the concept of equity and related terminology within the contexts of higher education and health care services, specifically medical education and training in South Africa. Conceptual and contextual understandings are inextricably linked, but for purposes of manageability these are separated into different chapters. The conceptual framework is developed in Chapter 2 and the contextual framework is the subject of Chapter 3.

## CHAPTER 2

### CONCEPTUAL FRAMEWORK

#### 2.1 INTRODUCTION TO EQUITY AND SOCIAL THEORY

Classical to postmodern social theories are concerned with the same fundamental problem, that is, the unequal relations of domination and oppression among individuals and groups, resulting in an inequitable distribution of resources, power and privilege in society. Power is not monolithic and social theorists continue to seek explanations for social inequities in, *inter alia*, historical materialism, ideology, language and psychoanalysis (Jordan & Weedon 1995; Habermas 1974; Polity 1994; Freire 1994; Taylor 1993; Kanpol 1994).

The discussion in this chapter is based on the acknowledgement that manifested inequities in South Africa are due to multiple, interacting factors, such as apartheid, capitalism, patriarchy, ethnicity, age and disability. It is also recognised that individuals hold diverse perceptions about the causes, nature and solutions to prevailing inequities, based on their personal theoretical frameworks due to differences in personal experiences, socialisation and ideological conditioning (Weedon 1987:111-113; Foucault 1981:100-101).

This study takes the view that dominant and alternate equity discourses are in a state of constant tension and contestation within particular contexts and are therefore constantly shifting over time and with changing circumstances (Weedon 1987:16-19; Jordan & Weedon 1995:6-11). It is within such an understanding that the fluidity and nuanced meaning of the concept equity is explored, both from a broad perspective of higher education and specific focus on managing equity in medical schools in South Africa. This chapter provides

a brief discussion of the models of equity and the issues and challenges associated with their application internationally, within the transformation frameworks and related redress strategies of higher education and public health in South Africa.

## **2.2 SOCIAL TRANSFORMATION IN SOUTH AFRICA**

Acknowledgement of the causes of social oppression led the first democratically elected government in 1994 to enshrine equity as a fundamental human right in the *Constitution of South Africa*, (S.A. 1996:3-5). The Equality Clause in Section 8 states that:

No person shall be unfairly discriminated against, directly or indirectly, and, without derogating from the generality of this provision, on one or more of the following grounds, in particular: race, gender, sex, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture or language

It is this ideal of equity that serves as the basis for proposed and enacted legislative initiatives aimed at social transformation. The Equality Clause in the Constitution makes provision for the application of affirmative action as a mechanism for redress and increased access to opportunities for previously disadvantaged groups:

This section shall not preclude measures designed to achieve the adequate protection and advancement of persons or groups or categories of persons disadvantaged by unfair discrimination in order to enable their full and equal enjoyment of all rights and freedoms

“Equality”, as a theme to be pursued in the building of a democratic and just society, permeates the concerns of the new government and its administration, (S.A. 1997b:3). The DoH and the DoE are among the administrative



departments that have implemented policy and procedural changes aimed at social transformation. Yet seven years after the election of the new government, transformation in higher education, and more particularly in medical education and training, is unacceptably slow (DoE 2001a:6). Entrenched in diverse cultures are strong, differing patriarchal norms and marked socio-economic differences (Budlender 1998). Exploring the reasons for the slow transformation – the tensions, complexities and challenges within a broad conceptual understanding forms part of this study.

The concept *equity* is in constant and strong social contestation within changing cultural contexts (Jordan & Weedon 1995:6-7). The dominant discourse on equity is often produced, reinforced and underpinned by the legislative and policy imperatives that are derived from the political, social and economic goals in a society. Therefore, the legislative and policy frameworks regulating and influencing equity impact on the processes of transformation in higher education, medical education and training, and public health.

However, there is no hegemonic, static or common understanding of equity among government sectors, institutional and faculty governance and management structures. There are instead shifting positions within economic and political frameworks that determine the degree of convergence or divergence of individuals, institutions and government on different issues relating to equity. One example is some differences between the CHE and the DoE on the size and shape, or the landscape of the higher education system (Jones 2000c:7-8; Naidu 2000:7). Another example is the current debacle between the Minister of Education, Professor Asmal and the Council of Unisa over the appointment of Mr. Barney Pityana as vice-chancellor, and the announced merger of Unisa, the Technikon South Africa and Vista University's Distance Education Campus (Monare 2002:1; Macfarlane & Majola 2002:5).



Thus, although the notion of strategic planning underpins many of the transformation initiatives in higher education and public health (Marcus 1999:46; DoH n.d.; DoE 2001a; DoE 2001b), there is according to Keller (1993:148) a constant interplay between rational and economic analysis, political maneuvering and psychological factors. However, many of the dynamics reported in this study relate to cooperative or conflictual actions at a micro-political level. According to Joseph Blasé (1998:545):

Micropolitics refers to the use of formal and informal power by individuals and groups to achieve their goals in organizations. In large part political actions result from perceived differences between individuals and groups coupled with the motivation to use power to influence and/or protect. Although such actions are consciously or unconsciously motivated, any action, consciously or unconsciously motivated, may have political significance in a given situation.

### **2.2.1 Transforming higher education**

Transformation of the South African higher education system is even more difficult to manage. It has not evolved naturally in response to the economy and society but has been deliberately structured and developed to produce and reproduce the social order of apartheid. While the particular trajectory of higher education in South Africa shattered it into discrete segments so that students of different races had unequal educational opportunities and career prospects (Beale 1994:1), education simultaneously served as a catalyst for liberation from apartheid and the birth of an egalitarian and democratic future.

Central to this discussion is the future role of higher education in social transformation in South Africa and whether the intended outcomes of current transformation initiatives are being achieved. A question that this raises is whether it is necessary or desirable for government to use or intervene in

higher education for reasons of social transformation. One view supporting academic freedom and autonomy is that HEIs have two major functions, namely, to teach established academic disciplines and to revise and refine such disciplines through scholarship and research, partly in response to changing political, social and industrial demands (Jaques & Richardson 1985:xix). However, others, such as Purpel (1999:19), believe that “in addition to knowledge and critical reflection, there must be compassion, wisdom, moral commitment and political will”.

The South African government prior to 1994 used education as a tool of social oppression and maintenance of social privilege, the liberation struggle is grounded in education and this discussion forms part of the debate (Teichler 1998:25; Escobar 1994:xvi-xix) on using higher education for purposes of social transformation. The potential of education to serve as an agent of social transformation has been the theme of many reports (NCHE 1996a; DoE 1997) and is a principle underpinning the NPHE (DoE 2001a:5). The Minister of Education stated in his speech at the launch of the NPHE that:

... it marks the beginning of a new phase of delivery quality higher education system that will truly contribute to the social, economic and political changes that face our country (Asmal 2001:1)

Such a sentiment follows earlier calls, such as that by Dr. Blade Nzimande, Chairperson of the Parliamentary Committee on Education in 1997, for the Africanisation of the higher education system that would involve increasing the representation of Black students, academics and administrators, and at the same time redressing the inequalities between HDIs [Historically Disadvantaged Institutions] and HAIs [Historically Advantaged Institutions] (Cape Argus 1997:6). Africanisation opposes the traditional idea of the liberal university standing beyond politics and society, and supports a higher education system that is able to play an active role in the process of national social reconstruction.

Wolpe and Unterhalter (1991:15) warn that educational provision preoccupied with skills development and a failure to incorporate a clear developmental strategy aimed at restructuring the social and institutional order could result in education playing a reproductive rather than transformatory role, but Wolpe (1991:6) also alludes to the mutual exclusivity of the provision and functions of education and questions the possibility of reconciling these contradictory notions.

The NPHE (DoE 2001a) is an ambitious plan that combines both skills development and social reconstruction functions. It aims at producing more people skilled in those areas of greatest need in the nation, such as science and technology (DoE 2001a:18-20). An emancipation role of higher education necessitates stronger government intervention, regulation and systematisation of the sector, encouraging compliance, conformity and uniformity rather than differentiation, independent and critical academic regulation and determination of outcomes.

The desirability and responsibility of government to interfere with institutional autonomy and academic freedom and to use higher education as a political instrument is a contentious issue and this is exacerbated by the need to maintain global competitiveness and relative quality and excellence within traditional, international academic norms of reference (Cloete, Muller, Makgoba & Ekong 1997:19). However, the challenge in terms of reality is to formulate an effective strategy that would ameliorate the inequities that prevail in school and higher education, as well as in the skewed pool of qualified professionals through an appropriate balance between institutional integrity and public accountability.

Boyer (1985:23-25) points out that demands for accountability by government agencies threaten to erode the integrity of HEIs through the cumulative impact of “one regulation added to another”, and believes that “a rebirth of leadership in higher education” is required to lead HEIs to define

their own academic standards and social obligations instead of waiting for standards to be imposed on them. Cloete et. al. (1999:2.10) argue that many of the transformation initiatives in HEIs have been incidental and even “rudderless” due to the lack of strategic leadership and effective management due to the culture of administration.

Although apartheid has, through systematic structuring, determined the severity of the inequities in higher education in South Africa, there are great similarities between the nature of local concerns about inequities in higher education and international experience. Fiscal constraints have demanded structural and functional changes to HEIs (Jaques & Richardson 1985:xv; Beckham 2000:73-75).

Peters (1996:88-89) describes the tensions and shifts in higher education as the creation of a meta-narrative based on the notion of an enterprise culture designed for the post-industrialist economy of 90’s. It does not involve any attempt to rewrite the past or redress power imbalances or socio-economic inequalities, and unlike the social-democratic alternative, it does not adopt the language of equality of opportunities or multiculturalism. Questions of equity and social justice have receded under the economic imperative and the language used to sustain this vision is one of “excellence, innovation, improvement and upgrading, achieving more with less, technological literature, information and telecommunications revolutions, international marketing and management, skills training, performance, efficiency and enterprise”.

According to Peters (1996:99), restructuring education is part of the economy and overshadows workplace and labour market reform and is no longer viewed as a universal welfare right so much as a form of investment in the development of skills that would enhance global competitiveness. Universities, as social institutions, often reinforce and reproduce, through their organization and modes of functioning, different contesting ideologies in a transforming society.

Gramsci provides a view that could explain the divergence of views expressed in this study. Gramsci criticises the decontextualisation of intellectuals “*to exist independently of issues of class, culture, power and politics*” (Aronowitz & Giroux 1985:35). Intellectuals align themselves with either the interests of labour or capital. Organic intellectuals associated with working class interests serve to articulate those interests in the domain of problems of culture while traditional intellectuals reflect their dominant class position together with its control over the institutions of culture, serving to reproduce their class hegemony.

### **2.2.2 Transforming public health**

Apartheid resulted in a public health care system characterised by racial and geographic disparities, fragmentation, duplication and hospital-centricism (DoH n.d.:5). Historically, the unequal distribution of public health care facilities led to the majority of the population in rural communities having either no or poor access to health care facilities (DoH 2001a:4-7):

South Africa, in 1998, remains a land of stark contrasts, between those that have and those that have not. A land where some people have amongst the best standards of living, and good health services and care, and where some have very poor living standards, a great deal of ill health and poor access to health care (HST 1998:1)

The dichotomy of health care in South Africa is between private and public provision, the former utilised by individuals in employment who contribute to medical aid schemes and can afford the high costs of private health care, and the latter by the majority of the population, who are mainly Black and reliant on the state for health care (HST 1998:2-4; cf. 5.2.3).

The DoH in redressing historic inequities has embarked on a five-year strategy of establishing new and strengthening existing means of health care

provision in rural and peri-urban environments through a process of redistribution of resources away from urban areas (SADHS 1998:39; DoH n.d.). These moves have various implications for academic health complexes in terms of training of medical students, the main being that there is a decrease in the number of patients coming to academic hospitals for treatment and hence a decrease in the available teaching material for medical students. The emphasis on community-based education in MBChB curricula (Lehmann et. al. 2000:1;20) necessitates students and staff moving to peripheral or satellite locations for medical training purposes, but this is problematic due to the additional transport and residence costs incurred by institutions and not additionally funded through government subsidy.

Further, various unsatisfactory conditions in the public health sector are reported and they impact on staff retention, with remunerative benefits for graduates being greater in the private sector or overseas employment and inferior treatment conditions in terms of treatment environment, equipment and access (DoH n.d.:32). Moomal and Edwards-Miller (1998:45) found that 30% of new registrations with the Interim National Medical and Dental Council (INMDC) in 1997 were from foreign doctors but the researchers express uncertainty as to whether additional South African doctors would be willing to fill the rural medical positions that many foreign doctors currently fill. The social acceptability of this, or of high emigration of medical doctors (Weiner, Mitchell & Price 1998:59), in view of high costs to the state of training medical doctors, in a climate of serious financial constraints and high national health care needs, requires serious consideration by government.

These realities raise particular issues in terms of social equity, the main concerns in this study being the following:

- What is the responsibility of government in redressing the inequities between private and public health care in a society in which socio-economic class divisions are a direct result of the apartheid legacy?

- Are transformation initiatives in medical schools aligned to the public health transformation strategy (DoH n.d.), in terms of curriculum content, locales and modes of training?
- If the primary health care strategy of the DoH is to be facilitated by training more doctors from those particular communities in which health services infrastructure are to be developed, what then is the responsibility of the DoE regarding subsidising medical student training and what is the social responsibility of institutions in terms of their admission criteria, selection and support of students from such communities?

### **2.2.3 Transforming the education and training of medical professionals**

Late access into training as medical doctors and specialists has resulted in a skewed profile of medical practitioners in South Africa, in terms of race and gender and the strong patriarchal culture in South Africa has an adverse effect on the career mobility of women in academic medicine. There are no recent studies in South Africa on this issue but Brink, Bradshaw, Benade & Heath (1991:561-566) found that although women were entering some faculties of medicine in larger numbers, about one-third are employed part-time and nearly one-third reported an interruption of their careers for periods of more than five years. The major reasons identified for these trends were women's dual responsibilities in the home and work, the previous joint taxation system and discrimination in the workplace, for example, with regard to housing loans. The study reports that few women specialise (18,5%), although 68,2% of respondents indicated that they had wanted to specialise, but that home responsibilities, structure of the curriculum, lack of part-time training and the geographical location of training facilities posed obstacles.

There are many accounts in the literature of differential access into medicine, on account of gender and because the examination of equity in terms of gender is a primary area of focus in this study, women's access into the medical profession is briefly discussed as it provides some understanding of the prevalent gender stereotypes reported in this study (Pringle 1998:109-121; Kvaerner, Aasland & Botten 1999:91-94).

According to Oakley (1976:24), the healing powers of Europe's wise-women were often superior to those of physicians, as they had for over centuries developed a pharmacology of pain killers, digestive herbs and anti-inflammatory drugs, delivered babies and cared for women after childbirth (Hurd Mead 1979:513). Such experience is purported to have given them some knowledge of anatomy and psychotherapists. Unterhalter (1985:1253) describes how, from the 14<sup>th</sup> century, European cities insisted that doctors possess a university licence to practice medicine and in 1518, the Royal College of Physicians gained entitlement to supervise and licence physicians, all of whom were university trained men, practicing within a seven-mile radius of London. There are some points made by Unterhalter (1985:1253-1254) that are of direct relevance to this study:

- Only the gentry could afford to use the physicians as they were too few and too expensive, and the poor continued to use the wise-women
- The current high status of medical doctors in western society began with this higher demand than supply of physicians between the 16<sup>th</sup> and 17<sup>th</sup> centuries
- Women were considered unsuitable to be doctors because menstruation and pregnancy made "women unfit to be trusted with the life of a fellow creature", and "female purity would inevitably be destroyed in women learning anatomy and physiology alongside male medical students", although nursing was considered a highly



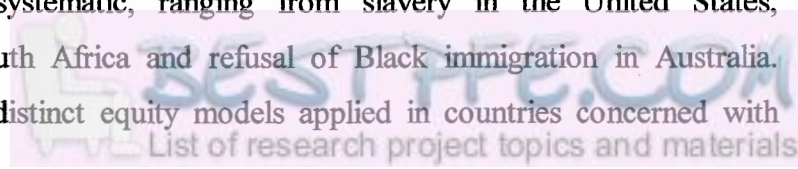
suitable profession for women as “it furnishes an outlet for the tender power and skill of good women of almost every class”

- “What makes a profession male or female is not the nature of the work itself but the power relations that exist within that society”. In societies where medicine has a private entrepreneurial function, the profession is male dominated whereas in socialist countries there are large numbers of female doctors, such as in Poland (46%) and Russia (74%)
- Even prior to the establishment of a formal system of scientific medicine, the medical profession had already established monopolistic practices along class and sex lines

A United States study by Lillemore, Ahrendt, Yeo, Herlong & Cameron (1994:255) found that although more than 40% of first year medical students were female, less than 20% of those entering surgical disciplines were women. The study concluded that female medical students perceived a gender bias in surgical services, suggesting that an “old boys” attitude may still exist in surgery. There were significant differences in the perceptions of males and females, with 34% of men and 13% of women reflecting surgery as a career choice. None of the men believed that surgery was unfavourable towards their gender, whereas 96% of women believed that surgery was unfavourable. Fifty percent of women felt out of place in clinical service compared to only 9% of men. In a strongly patriarchal and racially divided society like South Africa, it is important that postgraduate trends be scrutinised.

### **2.3 MODELS OF EQUITY**

Discrimination and oppression of people on account of race have been pervasive and systematic, ranging from slavery in the United States, apartheid in South Africa and refusal of Black immigration in Australia. There are two distinct equity models applied in countries concerned with



achieving a more egalitarian society. These are the equal opportunities model, also known as the unspecific affirmative action or good faith model practiced in the United Kingdom and Australia, and the specific affirmative action model applied in the United States and South Africa (Bram 1991:86; West 1998:287-290).

According to the *Promotion of Equality and Prevention of Unfair Discrimination Act* (S.A. 2000:4), equality “includes the full and equal enjoyment of rights and freedoms as contemplated in the Constitution and includes *de jure* and *de facto* equality and also equality in terms of outcomes”. The terms equity and equality are often used synonymously in the literature and legislation, but the term equity is preferred in this study as it accommodates the notion of difference, especially related to gender and disability needs. A distinction is made in this study with equity referring to “fair, just and impartial treatment and having recourse to the general principles of justice”, while equality refers to “being equal in amount or quantity”(Oxford English Dictionary 1973).

The definition of equity provided in the *White Paper 3: Transformation of Higher Education* (DoE 1997:1.18) that emphasises the need for redress, not limited to access to enter higher education, but including successful throughput and output rates is used as the basis of the investigation in this study. The use of the term equity is appropriate as it is the intention in this study to move the discussion beyond equality dimensions of statistical comparisons to a qualitative exploration seeking explanations for the manifested inequities suggested by statistical analyses. For example, although Black students of all groups are entering institutions and programmes, such as medicine, in higher education in increasing numbers, there is wide variance among institutions of the number of Black students admitted and the proportion of African and Coloured students constituting this group, the throughput and attrition rates of African students. For example, Moolmal & Edwards-Miller (1998:48) cite one medical school where only 13% of the first year students are African, yet 56% of those who failed were African while in another medical school, 70% of all African students fail on academic merit. Similarly, statistical overviews of staff

profiles suggest no significant change in comparison to the shifts in the student profiles and reports indicate a skewed pool of human resources and difficulties in staff retention. Race and gender inequities in HEIs are more severe in the field of medical education and training (Lehmann et. al 2000:1-2; 5-6).

### **2.3.1 Model of Equal Opportunities or Good Faith**

The model used in the United Kingdom and Australia is Equal Opportunities or Good Faith. Equal opportunity theory is based on the assumption that all individuals deserve a fair chance in life and that any disadvantage is due to their failure to take advantage of the opportunity available to all (Mithaug 1996:3). Collins (1992:4) defines equal opportunities as “the fair treatment of everyone on the basis of individual need”. According to Collins, equal opportunities involve changing people’s prejudices and enabling every single member of the organisation to reach her or his full potential. Prejudice refers to “a pre-judgement based on feeling rather than fact”, and is often biased and one-sided and leads to both the formation and reinforcement of stereotypes. Discrimination, either direct or indirect, has acquired a negative connotation and “results from treating individuals or groups unfairly based on prejudice” (Collins 1992:6-7).

According to Blakemore and Drake (1996:10), equality refers to treating everyone in the same way, irrespective of differences such as gender, race and religion. They believe that due to the fact that no human society can be perfectly equal, equal opportunities policies aim to reduce the amount or degree of inequality and/or change the bases for justifications for such inequalities, as there is consensus that it is unjust to allow certain characteristics such as gender, race, ethnicity or sexual orientation to affect individuals’ chances of employment or educational prospects (Blakemore & Drake 1996:44).

Even under conditions of fairness and equality of opportunities, disproportion often still occurs because policies that aim to treat individuals in a like-manner take little or no account of the historic patterns of inequities. Opportunities available to individuals are determined largely by race, gender and class, three of the most common interacting variables of social inequity. Social inequities that characterise all societies generally result from the competition among groups of people for power and authority rather than from individuals' free choices not to utilise the opportunities available to them. As children and adolescents, the class position of parents and families strongly affect educational opportunities, material advantage, aspirations and cultural capital, and as adults, inherited class positions often continue to affect career expectations, mastery of middle-class patterns of communicating and access to financial resources (Anderson & Williams 2001:6). These substantive inequities almost always result in the historically advantaged gaining the most merit, as conventionally measured by educational qualifications and communication skills in an interview, and, according to Blakemore and Drake (1996:52-53), there needs to be consideration of how to level the playing fields.

Burgess (1989:1) points out that even in a more open system there may be large numbers who do not take opportunities available to them, such as entry into higher education. They are excluded "not by the barriers put in their way but by their understanding of their own best interests". In the South African context, this may relate to the lack of role models, pressure to be economically active as soon as possible and the lack of cultural capital on account of severe historic inequities as a result of apartheid .

In the equal opportunities model, discrimination based on race, among other factors, is prohibited by legislation and the focus is on promoting "like-treatment" through positive action. Positive action entails wider advertising of opportunities, scrutiny of selection procedures and provision of additional training and career training opportunities, such as career break schemes that encourage parents to resume their careers after absences to look after

children or dependant relatives. Although positive action focuses on group outcomes by attempting to achieve representative proportions of groups, such as Blacks and women, the emphasis is still upon individual merit and capabilities. Critics of the “like-treatment” model of equal opportunities maintain that its individualised focus limits its effectiveness. According to this model, anti-discrimination laws may help individuals gain redress if they are mistreated or suffer injustice, but each successive generation of disadvantaged groups, such as women, Black people and older workers, continue to fight the same battles to win their places in society (Blakemore & Drake 1996:11).

According to this model, a person who alleges discrimination has recourse through the law. Awareness of historic discrimination and social inequity is created and the good faith of people is relied upon to recruit members of previously disadvantaged groups without setting numerical goals and timetables (Ezorsky 1991:33-34). The rate of progress using the good faith approach to achieve social equity is slow. This is because policies of non-discrimination are neutral and do not accommodate for historical patterns of inequities, such as social class, on choices and opportunities available to individuals, thus disadvantaging them in seeking educational and job opportunities (Fleming et. al.1978:5).

In a society such as South Africa, that has experienced prolonged social injustice in the form of systematic oppression of the majority of its population through apartheid, a policy of equal opportunities alone has little effect in redressing prevailing inequities due to protracted historic social injustice. According to Price Waterhouse (1996:2), “equal opportunity policies aimed at eliminating obstacles to black advancement are favoured by puritans who do not view this as compromising liberal democratic values”. There are extreme differences between Blacks and Whites in South Africa on social indicators such as wealth, income, housing, health care, educational attainments and job opportunities (Budlender 1998). The

government has therefore opted for a specific affirmative action approach to redress such inequities as in a society in which the majority of its people have for such a long time suffered severe oppression and one in which economic resources are insufficient, redress measures relying solely on good faith cannot have the desired effect.

### **2.3.2 Specific affirmative action model**

In the United States the focus has been on affirmative action as a means of creating a more level platform for equal opportunities. Specific affirmative action is a model for redress in which dated numerical targets are set for employment or admission of designated groups. This approach has been selected in both the United States and South Africa after the good faith approach had failed. In the United States, companies that hold government contracts are required to set dated numerical targets for hiring, training and promoting previously disadvantaged groups. If they are unable to meet their targets, they are required to provide evidence of measures of good faith in order to retain such contracts (Ezorsky 1991:34-37). In South Africa, the promulgation of the *Employment Equity Act 55 of 1998* (S.A. 1998a) requires employers to set dated numerical targets for members of designated groups in all levels of the organizational hierarchy to facilitate the attainment of staff profiles that resemble the demographic profile of the population.

Affirmative action is a form of preferential treatment or positive discrimination that is outcomes-driven and aimed at procedural justice (Caldwell 1992:62). Bergman (1996:7) defines affirmative action as “the planning and acting to end the absence of certain kinds of people – those who belong to groups that have been subordinated or left out – from certain jobs and schools”. Adele Thomas’s (1996:6) defines affirmative action as:

A means of correcting historical injustices and as an attempt to work from there to eventually creating level playing fields where everyone

can compete, based upon equal access to education, training and other opportunities formally restricted to the white minority population

Affirmative action, defined as “the preferential treatment and accelerated development and advancement of those groups that have been disadvantaged by past injustice” (DoL 1997:7), presents an opposition to the principle of equality of opportunities. During the period of application of affirmative action, members of previously advantaged groups have fewer opportunities, such as employment opportunities and access into higher education, which accounts for the common accusation of affirmative action being a form of reverse discrimination.

However, affirmative action is not just committed to proportionality by ensuring that disadvantaged groups are represented in institutions in proportion to their numbers in the population. The key goal of preferential treatment is to give back to the disadvantaged the power to choose and if individuals from these groups freely choose to confine themselves to certain areas of social life, including those devoid of power and prestige, then no further intervention is necessary, as this respects individual autonomy and human diversity (Blakemore & Drake 1996:59).

The significant difference between the American and South African situations is whereas in America affirmative action is used as a redress mechanism in terms of a minority population group that was racially oppressed, in South Africa racial oppression on account of apartheid was experienced by approximately 80% of the country’s population. Although there are severe sanctions attached to non-compliance of the *Employment Equity Act 55 of 1998* (S.A.1998a), these have not been enforced due to the nature of the substantive inequities and the difficulties associated with redressing them, such as the limited number of members of designated groups in the pool of human resources in particular fields. Although there is

constitutional and legislative provision for affirmative action in South Africa, affirmative action has not been applied as a consistent and preferred practice in higher education and this view requires brief exposition.

### **2.3.3 Equity model in higher education in South Africa**

In South Africa, the three main and interacting causes of current social inequities are apartheid, patriarchy and capitalism, and they have resulted in differentially severe and pervasive inequities along lines of race, gender and class in higher education (Bird 1994: 226-227). The human resources skills pool, the formal qualification levels and the management profiles of HEIs have been shaped by the historic legacy of higher education in South Africa (Shapiro & Jacobs 1999). Redressing historic social inequities in order to build a more egalitarian and socially just higher education sector is complex because equity is a moral issue relating to individual and group rights, affected by equal opportunities policies and compensation for previous injury or injustice suffered. Therefore, although there may be general consensus that it is morally wrong to deny individuals access to higher education or health care on the basis of their race, if granting of such access includes denying or decreasing access opportunities to individuals or groups that previously enjoyed access, there is often overt and/or covert resistance encountered at a micropolitical level (cf.2.2).

Transformation agendas of higher education and public health emphasise issues of equity, access and redress and the constitutional provision for affirmative action legitimates governmental and institutional policies aimed at achieving equity (DoE 2001a; DoH n.d). However, in terms of the Constitution, all citizens have the right to equal opportunities (S.A. 1996:3) but as pointed out, during the application of affirmative action, members of previously advantaged groups do not enjoy equal opportunities. There is thus an inherent contradiction in juxtaposing the principles of equal opportunities and affirmative action in the Constitution and in the mission statements of some institutions that claim *we are an equal opportunities and affirmative action employer*.



It is necessary to explore in greater detail, the meanings of equity and its associated terminology, and in particular the dialectical tension between affirmative action and equal opportunities that underpins management and policy decisions relating to equity within particular contextual realities. In many HEIs, adoption of affirmative action strategies would potentially reduce the privileges and opportunities for their management, staff and students who may predominantly be members of non-designated groups.

The NPHE (DoE 2001a:37) states that the achievement of equity will not be at the expense of White students and that the Ministry of Education is committed to ensuring that all students, Black and White have access to higher education and contribute to the social and economic development of South Africa. However, given that the number of students admitted to specific programmes is limited and that there is an imperative to ensure greater equity, some White students will have to be denied places in favour of Black students with lower grades, if the inequities are to be redressed in the immediate future. However, if redress is reduced to a numbers-crunching exercise, the output in terms of the number and quality of the graduates to effectively meet the increasing health care needs may be compromised. The inherent contradiction between the principles of equal opportunities and affirmative action need to be considered when deciding on the most effective strategy for redress.

The challenge in South Africa is to find a way of granting preferential treatment to individuals from designated groups based on the degree of severity of the oppression experienced by these individuals due to historic social injustice and how this has impacted on their abilities to successfully enter and progress in their chosen fields of study and work. This view takes into account class, race and gender differences, in that not all Blacks or women have been equally disadvantaged.

Admission that is limited, in a field such as medical education and training, is probably more likely to be gained by children of middle-class Black

parents who could afford to send their children to historically advantaged schools, such as private and Model C schools, where they have the opportunity to achieve results on par with their White counterparts, given the significantly higher average matriculation results of these schools in comparison to schools in rural areas. Students from poor, rural communities, having had an inferior quality of formal schooling, are less likely to gain admission into such a field due to the lower matriculation grades they are likely to obtain. For example, research studies show that African women from poor rural communities continue to be the most severely disadvantaged group in South Africa (Budlender 1998:5; 27). The ideal would be for a strategy that will counteract the historic combined effects of apartheid, capitalism and patriarchy but, as will be discussed in this study, redress is highly complex and difficult to achieve, and yet a necessary prerequisite for equal opportunities and competition on a more level playing field.

HEIs appear to mediate the tension between equal opportunities and affirmative action by vacillating between affirmative action and good faith models, but often demonstrating greater propensity towards the good faith model within the traditional academic frameworks and institutional autonomy. In this study, various related situations are discussed, such as the implications of matriculation grades being used as the primary determinant of access into medical schools, given the historic and continuing inequities in the quality of formal schooling, and the antithetical dualism of gender stereotypes of womanhood and intellectual power in terms of their access into certain areas of postgraduate training, such as Orthopaedics or levels of management, such as Chief Specialist (cf. 2.2.3).

## **2.4 EQUITY OF ACCESS**

Historically, entry into higher education in South Africa was either restricted or denied to individuals and groups on grounds of race, and more covertly on account of gender, particularly in fields such as medicine (Lehmann et. al. 2000:5-6). Various examples of these are provided in Chapter 3, indicating

the low participation rates of Blacks and women, both as students and staff at certain universities (cf. Tables 3.2 & 3.19), and in certain disciplines, such as medicine (cf. Table 3.10), and in particular fields of specialisation (cf. Tables 3.26 & 3.27).

The election of a new democratic government in 1994, committed to redressing historic inequities and to creating a more socially just and egalitarian society, has, and continues to put in place a complex, integrated legislative framework to achieve these goals. Higher education plays a significant role in the support it provides to national transformation imperatives (DoE 2001a:39). For example, the DoL through the *Employment Equity Act 55 of 1998* (S.A.1998a) requires employers, including the DoH, to set dated numerical targets and introduce workplace strategies to ensure that members of designated groups are represented in all levels of the organisational infrastructure, broadly in accordance with the democratic profile of the population. Thus, components of the higher education system, such as medical schools, located within autonomous universities, are providers of skilled labour for the health sector and are of common interest to the DoE, DoH and DoL.

Reports and surveys on the transformation in higher education are often based on statistics, signalling the changes that have occurred (NCHE1996a; DoE 2001). Some former White, historically advantaged institutions (HAIs) are at times criticised for the limited access they provide to potential students and staff who are members of designated groups. Similarly, many former Black, historically disadvantaged institutions (HDIs) are commonly criticised for not admitting more White students to diversify their student profiles, for lack of growth and poor management of resources.

The number of African students in contact HAIs, particularly the Afrikaans HAIs, has increased significantly (cf. Table 3.2). However, many equity concerns about the participation of African students continue to be raised,

such as the programmes in which students are distributed, high attrition and failure rates, and although statistics may show an increase in Black enrolments, these do not necessarily refer to a proportional representation of Black students across ethnic, economic, geographic and gender divides. For example, although statistics show an increase in the enrolment of women in certain programmes, such as MBChB, this does not necessarily reflect the position of African women (cf. Table 3.15 & 3.17). These same concerns may be extended to staff as well, except that the staff composition in HAIs has not changed in line with the changes in student population. Blacks and women remain under-represented in academic and professional positions, especially at senior levels (DoE 2001a: 6).

Various recommendations have been made in the NPHE (DoE 2001a:5-8) to improve equity in higher education. One example is for a central admissions office that would distribute qualifying applicants more equitably across HEIs (DoE 2001a:40), but the NPHE (DoE 2001a:42-43) offers no suggestions on how inequities in the staff profiles could be redressed, except to “encourage institutions to recruit academics actively from the rest of Africa”. Various factors impacting negatively on equity in higher education are acknowledged in the NPHE, such as the need for greater financial assistance and academic development programmes for students from educationally disadvantaged backgrounds (FOTIM 2001), and greater financial support for these areas are planned (DoE 2001a:40-43).

In a new democratic social order, challenges of access and redress need to be linked directly to class. Students from remote, rural and poor communities continue to receive the most inferior formal schooling, experience the greatest difficulty in gaining access to higher education, would more commonly gain admission to HDIs than HAIs and would be less likely to gain admission into high demand programmes such as medicine – the reason stated for the government sending students to Cuba to train as medical doctors (DoE 2001:39). There is a need to examine whether the removal of barriers in terms of access will result in the desired increased participation in higher education of previously marginalized and oppressed communities.

In investigating the issue of access in medical schools, emphasis is placed on factors such as admission criteria, academic, financial and social support, and institutional climate. Institutional policies and practices should be reflective of the institution's sensitivity and commitment to equity of access, outcomes and academic success but the best policies have little value if the people implementing the policies and those monitoring their implementation are not committed to equity. The degree to which access may be widened in medical school is multifaceted, depending for example on the extent to which medical facilities are prepared to shift from traditional admission requirements, medical curricula in terms of content, delivery and assessment, and student support mechanisms. If equity is seen as a form of reverse discrimination, or as an added burden to an existing heavy workload, or if there are strong prevailing stereotypes or prejudice about a particular group for whom increased access is necessary, the system may grant the entry of individuals from historically disadvantaged groups but the success of these individuals will not be facilitated within the system.

Anderson and Williams (2001:2) discuss how higher education has traditionally been the preserve of White, middle class, male academics and those who do not possess these racial, class and gender identities are considered 'different' from the norm and constituted as 'other'. They argue that such individuals are more uncertain about whether the system will accept them or that they have a right to enter the institutions making them "outsiders within", where individuals with social identities need to operate in spaces that have historically excluded them. De la Rey (1998:17) in a review of South African women in higher education reports that female academics expressed the experience of "a continuum of outsidersness."

Freeman (1998:179) points out the need for the transformation of institutional cultures and practices to accommodate and support increasing diverse student populations that were historically excluded from participation in higher education. An example provided is that evaluation norms should change to incorporate diversity as a primary concern as

traditional norms of evaluation may be counterproductive to change initiatives.

Although the NPHE (DoE 2001a:34-37) dictates greater access into higher education for students who are Black, female or with disabilities, there are divergent views about what this entails and about the role and future of different historic institutional types. This is best exemplified through a brief discussion on HAIs and HDIs that gives voice to the nature and intensity of some of the fears, perceptions and assumptions underlying widening access to Black students and introduces variables of human agency, resistance and commitment into the discussion on equity and access in HEIs.

#### **2.4.1 HDIs and HAIs**

This discussion on HDIs and HAIs is relevant to this study on the management of equity in medical schools because it demonstrates deep-seated ideological differences about issues of equity, excellence and quality, and because the two medical faculties located in the HDIs of Medunsa and Transkei currently produce the majority of African medical doctors in South Africa. In terms of the 2001 student admissions, 50.3% of African students in the undergraduate MBChB programme are located in these two universities (cf. Table 3.9). Further, a finding of this study is that a significantly larger number of African registrars and specialists in clinical medicine are located in the HDI, that is Medunsa than in the two HAIs of UP and Wits (cf. Table 3.24). Therefore, the imminent announcement of the Minister of Education on the new landscape of higher education, in terms of mergers will have direct consequences for staff and student equity in medical schools.

HDIs were established by the apartheid regime to provide for separate higher education and training for different race groups. Often located in remote, poor and rural areas, HDIs, from their inception were in many ways inferior to HAIs and among the multiple sources of disadvantage were funding, location, physical facilities, teaching and research capacity, and quality of

students (Badat 1994:3), having a negative impact on the productivity levels of these institutions. Given that the majority of the students had received an inferior school education and that the teaching loads of lecturers in HDIs were frequently heavier than those of lecturers in HAIs, teaching appears to have been prioritised over research.

An important understanding about HDIs has been provided by the study, *The Enhancement of Graduate Programmes and Research Capacity at the Historically Black Universities* (Subotzky 1997). The study points to an alarming lack of an academic and research culture at most of the 11 universities that arose from their original apartheid-related missions, political repression and resistance, their original staff, rapidly increasing student numbers, discriminatory funding, ineffective structures and practices, and inadequate resources. The result was an emphasis on undergraduate teaching in a narrow range of fields, low research output, high teaching loads, under-qualified staff, poor teaching, low student success rates and generally ineffective staff and academic development programmes. However, pockets of teaching and research excellence, particularly in fields of community development such as health were identified.

In recent years, most HDIs have encountered serious financial difficulties that arose partially from the high levels of unpaid student debt. A few of the HDIs have been the subjects of investigations arising from claims of maladministration, which included financial irregularities. In a few instances, the Minister of Education found it prudent to appoint administrators to manage the institutions. Proposals of the CHE and decisions in the NPHE, aimed in part at improving the efficiency of the higher education system threaten the continued autonomous existence of many HDIs and these discussions serve to demonstrate the diversity of perceptions, the complexities of the management of equity in higher education due to a particular historic context and raises many of arguments pertinent to this study (Jones 2000b:2).

According to the *Cape Argus* (1999:21), “the wealthier HAIs are not fighting for their survival as are their colleagues at cash-strapped former *bush* institutions”, which according to the article were in many instances set up under apartheid as employment agencies in the homelands. Unlike many of the HAIs, which receive millions of rands in corporate donations and do not rely as much on student numbers, HDIs are facing massive debts and are operating with overdrafts running into millions of rands. The report describes how collectively the 21 universities in the country are owed about R 500 million in unpaid student fees. The article states that five years into democratic rule, HAIs still receive the major slice of the government’s R4,5 billion in subsidies, sharing R3-billion among themselves, while HDIs split the remaining R1,5-billion.

The schism between HAIs and HDIs is evident, even at the very top levels, such as the formation of ASAHDI (Association of Vice-Chancellors of Historically Disadvantaged Institutions). According to the *Cape Argus* (1999: 21), Professor Abrahams, the former Vice-Chancellor of the University of the Western Cape and deputy chairperson of SAUVCA (South African University Vice-Chancellors’ Association) explained that HDIs are not looking for hand-outs, but are trying to be recognised for their worth. Many of them have produced leaders occupying senior positions in government, business and socio-economic sectors. He acknowledged that HDIs were created for the wrong reasons with limited resources, but believes that they have managed to do the job. This was despite their poor infrastructure, lack of science or laboratory facilities, staff that were not qualified for positions and the shortage of qualified personnel. The crisis for HDIs is compounded by the steady decline in government subsidies, exacerbated by the increase in student debt, the unexpected drop in student numbers and the mushrooming of private institutions offering tertiary education

HDIs, amidst perceptions of inferiority in comparison to HAIs face similar challenges as HAIs, such as recruitment in a period of declining student numbers, the need to conduct research and produce more postgraduate students. Perceptions of inferiority need to be linked to notions of quality



and standards, and to the achievement of national goals (Strydom & van der Westhuizen 2001:11). Many studies and comments cited in this study make the fundamental assumption that principles of quality, excellence and efficiency are diametrically opposed to those of equity, access and redress. It is beyond the scope of this study to interrogate this assumption but it is of direct relevance to the discourse of equity and social justice that issues such as what constitutes quality and who defines excellence form part of such an interrogation (Brennen, de Vries & Williams 1988:1-9; Vroiejenstijn 1995:31). Other important considerations are whether a tension exists between the principles of efficiency and access, and whether access is, or should be, a criterion in allocating government funding, evaluating quality and excellence. The importance of such considerations is confirmed by the variance in some of the following responses to the possible closure or mergers of some HEIs.

Divergent perceptions about the role and future of HDIs are clearly demonstrated by views expressed in the Business Day (Jones 2000a:2). Jonathan Jansen, dean of the faculty of education at the University of Pretoria believes that those HDIs that have effectively become dysfunctional due to management and money problems should be closed, as they cannot be revived. His view is that their administrative systems are non-existent and that all they will bring with them in the event of mergers will be their baggage. Similar views are expressed from some political sectors. Mike Ellis of the Democratic Party said that failing to close down some institutions could prolong the mayhem and chaos in higher education while Andre Gaum of the National Party is of the opinion that combinations between institutions would compromise excellence and that institutions of excellence would be forced to become average. However, John Pampallis, an educationist, maintains that the question of access meant that South Africa could not close down its most troubled universities and technikons.

In an interview, the Minister of Education, Professor Kader Asmal said the grading proposed by the CHE team, headed by Professor Mamphela Ramphele, the first female and former, first Black vice-chancellor of the

University of Cape Town, on future size and shape of South Africa's 36 universities and technikons (CHE 2000) contradicted the council's terms of reference, particularly those on equity. Professor Asmal commented (Jones 2000a:2):

Take into account the historically black universities and their position in society. This is advice that may effectively "ghettoise" HBIs. I would find that inconsistent with the terms of reference

There are many divergent public opinions on increasing access to HEIs but individual opinions, not reflective of any general or group view that demonstrate examples of public views unaligned to national goals, are depicted by comments reported by the Education Reporter of the *Cape Argus* (1997:6). One argument is that the influx of Black students will result in lowering of academic standards because low numbers of Black students attain the required admission grades. Another view in the report, also expressed by many participants in the study is that problems relating to access into higher education are a result of poor schooling and therefore the issue needs to be sorted out at a lower level and not at university. A further view expressed is that if academically disadvantaged students continued being accepted at universities and they were unable to cope with the higher level of instruction, they would fail or be pushed through the system to satisfy racial quotas and the desire for social engineering. In line with this thinking, a view expressed was that South Africa will have thousands of Black graduates but its roads will buckle, bridges fall down, medical operations go wrong and telephone services not work. The basis for this was the belief that many African countries that have had affirmative action policies applied for decades, needed to employ contractors from other countries to fix road systems and attend to telecommunications faults.

## **2.5 REDRESS**

Maphai (1994:23) raises the question of whether affirmative action violates the principle of merit, fairness, non-racialism and universal non-

discrimination in the building of a new democratic social order in South Africa and these are precisely the legitimate liberal concerns that are raised by HEIs. The issues that need to be considered, for example in terms of medical education and training, is whether there are alternative mechanisms available to achieve the desired equity outcomes, given the severity and pervasiveness of the inequities in South Africa and what difference would greater equity in the medical profession make to national social transformation goals, particularly in terms of higher education and public health care.

The redress debate needs to include how significantly large numbers of members of designated groups could be admitted to limited spaces in programmes such as medicine, while still providing equal opportunities for all citizens regardless of race, gender or disability. In, for example, the setting of race-based targets how are White minority rights protected and how significant is this in terms of our particular historic legacy and the fact that the majority of students, who are African, have had a poor educational background, without the necessary traditional criteria to gain access into MBChB? A common issue raised in this study concerns the appropriateness of using such traditional criteria as an indicator of academic success in medicine, for redress extends beyond access, to ensuring that students who enter programmes are successful in them and that the nature of the programmes, in terms of their content, delivery and assessment, is conducive to the experiences and expectations of all learners and aligned to the needs of the country as a whole.

One medical faculty in the study sets race targets in line with population demographics for admission of students into the MBChB programme. This necessitates the application of different entry requirements for students of different groups. The constitutionality of such practice in the medical school at the University of Natal has been challenged in court in terms of the Constitution that provides for both equal opportunities and affirmative action (S.A.1996:14). A similar landmark case was that of *Regents of University of California v. Bakke (1978)*, in which the University of California reserved 16

places for minority group applicants as part of their affirmative action plan in the medical school. Allan Bakke, a White applicant who had higher scores than the minority applicants, challenged his denial of admission. The Court held that by setting a quota of places by race, the school had violated Bakke's civil rights (Rosenfeld 1991:1-2; Graglia 1995:40; Graham 1992:51). This ruling, like most others on affirmative action in the United States, was not a unanimous decision, in many instances being won by a single vote (Caplan 1997:vi), reflecting the disunity and deep-seated misunderstandings on the subject of affirmative action.

Inequities in higher education have evolved, to a large extent, through a prolonged and systematic process of oppression through apartheid. The result is that the majority of students in the formal education system may possess the potential but not the necessary skills and knowledge to gain entry into universities and a major challenge facing HEIs is how to identify such potential. Although many institutions are applying alternative criteria for admission, they are still reliant on matriculation grades, as the alternate admission criteria are based on conceptual understandings gained through formal schooling. There is no clarity on how this cultural and academic deficit could be managed in higher education.

There has been a noticeable shift in curriculum development towards greater local relevance whilst continuing to maintain international competitiveness in curriculum content and delivery, as seen for example in the inclusion of a community based education component in new MBChB curricula. There have been calls for Africanisation of the curriculum and the rationale behind curriculum change initiatives in the MBChB programme forms an integral part of this investigation (Cloete et. al.1997:27-28;129-130).

## **2.6 EQUITY OF OUTCOMES**

Outcomes provide a more reliable indicator for achievement of equity than access statistics. Outcomes need to be considered beyond general graduate and throughput rates, so that issues such as the progression rates of students

from educationally disadvantaged backgrounds, the choices made by graduates of where to work - in rural communities or urban environments, in South Africa or overseas, in private or public practice - and how their competencies and attitudes are rated by employers and patients are incorporated into the analysis. Such considerations, linked to the missions of individual institutions, could form part of the internal quality assurance indicators that institutions are in the process of establishing and the alignment of outcomes to national equity goals should be part of the external quality assurance process designed by the Higher Education Quality Committee (HEQC), under the auspices of the Council on Higher Education (CHE), as well as the HPCSA. This would facilitate the construction of the required understanding and monitoring of best practices in increasing access to and success of members of designated groups in higher education within South African contextual realities.

The outcomes of increased access through application of affirmative action principles during admissions to higher education in the United States over the past 20 years continues to be the subject of contrary discussion and debate. Critics include Thomas Sowell (1989), who argues that special treatment encourages lacklustre performance by the favoured and resentment from the spurned, and Dinesh D'Souza (1991) who blames affirmative action for the declining academic standards and the increasing racial tensions. However, proponents of affirmative action argue that it is the only effective available means of redressing historic inequities (Quanta 1995:17-28).

However, in one of the most comprehensive studies conducted on the subject of equity in higher education, William Bowen and Derek Bok conclude in *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions* (1998), that the affirmative action policies applied by some of the top HEIs in the United States created the backbone of the Black middle class and taught White classmates the value of integration. The study is based on the records and experiences of thousands of students at some of the top universities and colleges over 20 years and

examined grades, test scores, graduation rates, careers and attitudes. This major study seeks to broaden the notion of “merit” beyond tests and grades and hails affirmative action less as a means of overcoming past discrimination, and more as a way to insure a healthier future for Blacks and Whites.

The study is based on the problem that Blacks who enter the elite institutions do so with lower test scores and grades than White students. Through college, Black students receive lower grades and graduate at a lower rate but after graduation Black students earned advanced degrees at rates identical to their White classmates. They were slightly more likely than Whites from the same institution to obtain degrees in law, business and medicine and were more active than their White classmates in civic and community activities – reflective of the extension of their influence beyond the workplace. According to the authors, these Black graduates “can serve as strong threads in a fabric that binds their own community together and binds those communities into the larger social fabric as well”.

Bowen & Bok (1998) acknowledge the unanswered problem of White students that Black students have displaced as a clash between a principle and a principle, and not a principle versus expediency. They seek an answer by posing the question of whether society would have been better if White instead of Black students were selected. They compare race-conscious admission policies to parking spaces for the disabled. The policies have a major impact on the minority in question whereas eliminating them would only marginally help members of the majority community. There is a perception that affirmative action used in admissions is unfair, but the researchers question the equation of the fairness of linking admissions to high school grades and point out that fairness needs to be defined in terms of what the institution is legitimately trying to accomplish.

## **2.7 EQUITY-RELATED CONCERNS**

Some of the major problems that have been precipitated by affirmative action, particularly in the United States, are identified from the literature and discussed in relation to the South African experiences regarding equity in higher education and more specifically in medical education and training in South Africa.

### **2.7.1 Deconstruction of disadvantage**

Much of the criticism of affirmative action in the United States stems from the rationale for its application, in that it aims to provide a remedy for past disadvantage, yet in reality, it is race and sex that are used as criteria for preferential treatment instead of disadvantage (Graglia 1995:40). According to Amselle (1996:179), what determines disadvantage is wealth, not race. By defining affirmative action in terms of groups results in a charge of over-inclusivity because not all, or only, Blacks and women have been disadvantaged and often it is members of the middle class who benefit (Edwards 1995:2; Sowell 1989:21; Moens 1985:80). There has therefore in recent years been a shift in emphasis towards individual rights when determining disadvantage (Rosenfeld 1991:4).

However, proponents of affirmative action point out the significant gains that have been made (Bergman 1996:25; Ezorsky 1991:31-37). After more than three decades of application of affirmative action, the Black middle class has grown and Blacks are represented in the most prestigious schools, high government offices, the most lucrative professions and the military command (Kuran 1993:58). Poverty amongst Blacks has decreased from 45% to about 30%, although Kuran warns that families in the bottom quintile of the Black income distribution became 18% poorer from 1973 to 1987. In comparison, families in the top quintile of the Black income distribution gained 33%.

However, Kuran (1993:58) also points out that after almost three decades of the establishment of affirmative action in the United States, the statistics are alarming. A third of all Blacks, as compared to a tenth of all Whites, live below the poverty line. The unemployment rate for Blacks is more than twice that of Whites. A Black child is more than three times as likely to be born into poverty. More than half of all Black children live in single-parent families as compared to one-sixth of White children. A Black man is six times as likely as a White man to be murdered and his murderer is likely to be Black. The Aids epidemic claims a significantly higher number of Black lives annually (Kuran 1993:58).

Yet, as early as 1964, Daniel Patrick Moynihan, the Assistant Secretary of State published a policy paper entitled *The Negro Family: The Case for National Action*, commonly referred to as the Moynihan report, in which he warned that affirmative action on its own was insufficient to redress historic disadvantage among Blacks. He proposed that poverty needed to be eradicated and the breakdown of the Black family required addressing as this was leading to a deprivation of discipline and emotional support. His belief was that the “present pathology is capable of perpetuating itself without assistance from the white world”. However, Moynihan was severely criticised and he was labelled a subtle racist (Kuran 1993:60).

It is contended in this study that social class be included as a fundamental component in an integrated analysis of class, race and gender in equity frameworks in South Africa. In this study, it is pointed that students from the rising Black middle class who have gained access into historically White schools are gaining increasing access into medical schools more easily. The DoH is committed to providing a comprehensive and integrated community health care service to poor rural communities that historically lacked a health infrastructure, and the DoE is also committed to providing greater access to higher education to children from such communities (DoE 2001a:39). However, if medical schools, given the limited available spaces, continue to apply traditional selection criteria that privilege children from urban middle class communities, students from those very communities in which the DoH



is establishing health care services will have no increased opportunities to become medical doctors.

It is important that equity trends in higher education in terms of all sources of historic inequities, such as race, class, gender, disability and geographic location, are carefully monitored. Statistics provide invaluable data that support and guide decisions in research and policy formulation. Both national and institutional policy makers rely heavily on quantitative data, but attention should be given to maintaining objectivity in terms of selection and disaggregation of data. There is a view that data can be objective but its interpretation is always subjective (Spees 1989:7). Sowell (1989:24) demonstrates how the very same raw data can portray not only a different picture, but even an opposite one, depending on how much the data is disaggregated or how many variables are held constant. Qualitative data produced is of value in establishing the reliability of quantitative findings but there needs to be greater focus on developing criteria appropriate for evaluation of equity in relation to medical education and training in South Africa. For example, should student equity be gauged in terms of access rates, attrition rates, throughput rates or graduation rates, and should aspects such as emigration rates be included in the analysis?

### **2.7.2 Changes in resistance**

Reports on the American experience of affirmative action reveal that relations between Black and White Americans are far worse today than they were in the 1960s. According to Kuran (1993:67), there was enormous hope and goodwill on both sides but now there is much fear, mistrust and cynicism. Group polarisation has also increased (Sowell 1989:21). Resistance is becoming more difficult to identify as it is becoming more obscure and covert. There has been increased resistance from backlash groups following the Civil Rights Act of 1964 by groups such as the White Aryan Resistance, Skinheads and Ku Klux Klan, and the membership of such groups has increased. There has appeared to be an increase in racial

incidents and racial violence both in society and on campuses (Williams 1989:36).

In South Africa there are similar examples of increasing covert resistance as noted in the researcher's field notes. During an institutional visit it was observed that despite the university management having a strong commitment to equity and redress and the student population being more than 50% Black, the Student Representative Council election was won by the Freedom Front, a conservative right-wing political party. Another example was of equity targets having been set for departments to change the predominantly White, Afrikaner male profile, and monitoring revealing an emerging trend of employing mainly White women as members of a designated group.

Participation in HEIs is not purely functionalist, where students can acquire a qualification for employment or where staff can derive remuneration benefits. There is a dynamic engagement of individuals within a particular institutional culture. Acquisition of skills, knowledge and attitudes of learners are shaped by factors such as the competencies, commitment and attitudes of the staff, the degree of harmonious relationships among staff and students, and the support and acceptance that they receive at all levels. The effectiveness of staff in terms of their responsibilities of teaching, research and community development is also dependent upon factors such as morale, recognition and support.

The opportunities in a university for students and staff developing to their full potential are directly dependent on the institutional climate. If, as some reports in this study indicate, members of designated groups experience the institution as hostile, alienating and not embracing, the success of Black and female members of staff and student populations is threatened. This may be, as a participant in the study suggested, due to a perception that especially Black members had entered elite universities "on an affirmative action ticket and not on individual merit and should therefore not be there" (Ramphele 1994:18-19).

A criticism of affirmative action in the United States is that preferential programmes, even when explicitly and repeatedly defined as “temporary”, persist and expand (Peron 1992:4; Sowell 1989:21). Proponents argue that such flexibility is necessary, given that targets or goals rather than quotas are used, resulting in insufficient progress being made. Goals may be defined as “legal yardsticks to measure equal opportunity, and not a guarantee of results. They respect merit and hard work, while ensuring that everyone has a chance to participate” (Lee 1996:178). According to Fleming et.al. (1978:6), management should use goals as tools to assess their progress in providing equal opportunities. A related consideration in terms of the severity of the inequities in South Africa is when should preferential treatment policies and practices cease and be replaced by equal opportunities policies. If the current inequities in terms of the staff and student profiles in medical schools are considered (cf. Tables 3.6 & 3.21), would sufficient equity gains be made when these profiles reflect the population demographics or when there is a critical mass of members of designated groups in medical schools, and what would be the benchmark for determining such a critical mass? It is also necessary to reflect on the time such a process would take.

Caplan (1997:v) points out the problem of the wide comprehension gap that exists among American people concerning affirmative action and its implementation, despite widespread political debate and media coverage that tend to simplify and distort reality. The idea of equality in the United States has always been ambiguous and controversial. No consensus exists about whether the Equal Protection Clause of the Fourteenth Amendment guarantees equality of condition, result or treatment and concern under the law, as can be seen from the closely split decisions in related Supreme Court cases (*West's Encyclopaedia of American Law* 1998:289).

Affirmative action has been implemented in the United States for a period of more than thirty years and the American society is even more divided now on the fairness of affirmative action. An Associated Press poll showed that 39% felt that affirmative action was deserved and necessary and that the

benefits are tangible, while 48% believed that affirmative action is harmful and undemocratic. They claim that affirmative action “rewards the wrong people, devalues the idea of merit and punishes White men” (*West’s Encyclopaedia of American Law* 1998:117). Discussions on affirmative action will undoubtedly depend on who is doing the talking and who the listening, but if in South African higher education the majority of the participants, who are still predominantly White and male, believe that affirmative action is harmful and undemocratic, there will be increased covert resistance or lack of commitment to social transformation initiatives. The problem is that with a highly sensitive issue such as equity, it is extremely difficult to elicit sincere perceptions.

Evidence of the slow progress in addressing gender inequities in Europe and the United States suggest that there is a prioritisation of race over gender equity. In South African society, deeply ravaged by the effects of apartheid, Black women are placed in an ambivalent relationship in terms of challenging patriarchy. As suggested by Bell Hooks (1981), there appears to be little hope of a common sisterhood in a society in which race, gender and class have operated as interacting variables having an accumulative effect in social oppression and some Black female staff report gaining greater support from Black male colleagues than from White female colleagues. This raises the issue of how best to match mentors and mentees and whether variables such as race, gender or similarities based on areas of research interest would constitute the most suitable criteria. A study by Julia Elam (1989:36) indicates that individuals in academia prefer mentors of the same sex and gender but it would be necessary to test whether this is true for South Africa as well. However, de la Rey (1998:19) in a South African study reports that female managers in academia receive little support from other women.

### **2.7.3 Academic discourse: a right to freedom of expression**

Affirmative action is a highly sensitive subject, more especially in a society in which the hurt, anger, mistrust, suspicion and climate of fear and racial tension in many instances are increasing between Blacks and Whites due to

the sudden and obligatory integration of different ethnic groups in HEIs. Faculties in HEIs have experienced a change from a generally homogeneous to a more heterogeneous student and staff population in an extremely short period of time (cf. Table 3.1).

Of concern is the reluctance of intellectuals to speak openly and frankly on matters pertaining to race, gender, disability and other sources of social inequity, and this reticence and simulation has, according to Kuran (1993:56), promoted silence and hypocrisy in society. Intellectuals fear being labelled racist, sexist or homophobic and therefore avoid studies in which the results or inferences are likely to be interpreted as a criticism of affirmative action. Pressure has spread to professors teaching courses on race relations being harassed for exposing students to facts that could result in students discrediting currently popular theories. Experiences of academics who have been stigmatised and ostracised by the intellectual community for questioning the principles of affirmative action or stating a personal position about it that is not politically correct, constrains, circumscribes and prescribes the academic debate. This has serious implications for freedom of thought, speech and communication in academia. Intellectual discourse is thus regulated and this influences public discourse (Kuran 1993:60-61).

Stephen Carter (1992) in his book *Reflections of an Affirmative Action Baby* observes that it is hard to hold an honest conversation about affirmative action and that it may be harder still to hold an honest conversation about the reasons why it is hard to hold an honest conversation. It is of concern that some participants in the study may be constrained in articulating their feelings due to an awareness of views that are deemed politically correct as well as the ethnicity of the researcher.

Critical intellectual discourse is a responsibility of universities and there is a need for academics from diverse groups to rigorously interrogate and provide constant critical comment on the social transformation processes in society, HEIs and disciplines. The deafening silence is indicative neither of consensus or commitment. The importance of this is reflected by means of

an example of curriculum change in medical schools. New medical curricula include a substantial emphasis on community-based education, and introduced as a requirement for registration as a medical practitioner with the

HPCSA is the completion of currently one year's compulsory community service, but a possibility in the near future of two years' service (DoH 2001b:3). Yet, in the sample of institutions visited in which the curriculum has been changed, there was no emphasis on engaging the students in a critical examination of such change. In one curriculum, there is a module/section on principles of primary health care, but students need the opportunity to confront controversial changes, especially if such changes are to affect their professional lives, understand the philosophical bases for such transformation and for oppositional ideologies to be encouraged and accommodated.

In line with Purpel's arguments in an American context (1999:58-64) on curriculum theory, socio-economic policy and moral vision, it may be useful for medical curricula in South Africa to include humanities components to promote sensitivity in medical doctors in training of the contextual realities and local needs, if there is to be commitment to national higher education and public health sector goals. This is particularly important where state funding subsidises professional health education and training so that "curricula place greater emphasis on the needs of the community in accordance to health care principles" (NCHE 1996b:5-6). In developing critical thinking in learners, there needs also to be an exploration of the hidden curriculum, which refers to that which is not taught and rendered invisible in academic discourse (Purpel 1999:2).

There is need for the construction of a safe space in academia for the theoretical and empirical interrogation of social transformation in terms of equity, such as redress through application of affirmative action. HEIs and their structures, such as the faculties of medicine's responses to transformation initiatives appears to be more of a passive readjustment and reorganisation of policies and procedures, instead of active engagement,

challenge and joint decision making among DoE, DoH, institutional and faculty managements on all issues relating to medical education and training.

## 2.8 CONCLUSION

In attempting to seek explanations for the deep-seated inequities in higher education that fracture South African society along lines of race, class, gender and other variables, a monocausal link of apartheid to capitalist relations of production is rejected. This is the populist view of many researchers such as Kallaway (1984) and Collins (1992) who provide an explanation for apartheid in higher education as lying in the capitalist demands of economic production, that is, the cheap supply of labour through inferior and unequal education of Blacks. This purely functionalist, determinist or reproductionist view of higher education fails to offer an explanation for other tensions manifested, such as those between the English and Afrikaans language groups, the preservation of racial superiority, the differences in the degree of oppression of different groups of Blacks and the role of patriarchy that accounts for gender inequities.

Education policy is the outcome of struggle and contestation encompassing ideological, political and economic goals. This study focuses on the shifting tensions and conflicting interests at national, institutional and faculty levels, and provides a broad overview of the factors that influence equity in medical schools. It is important to differentiate between and understand the degree to which opportunities of individuals are constrained by external and historic causes beyond their control and the extent to which they remain victims of their own socialisation and ideological conditioning. Paulo Freire points out the liberatory potential of education in *The Pedagogy of the Oppressed* (1994), in which he explains that education should empower the student to conceive an alternate reality capable of changing current circumstances that are experienced as personally oppressive.

Social equity is arguably a utopian ideal in constant contestation that touches individuals and groups on moral, subjective and emotive levels. Contestation is rooted in the inherent ambiguities and contradictions of the notions of social

ERES.T.P.F.E.C.O.A  
List of research project topics and materials

justice. The degree of disadvantage that individuals experience is an accumulative function of the discriminatory variables operating in that society in terms of their relative positioning to such variables. Discrimination resulting in the unequal and unfair treatment of individuals or groups may be systematic and overt, but is often subtle and unconscious, protected by differing ideologies. The purpose in discussing some of the key issues relating to affirmative action is not to debate the morality of this issue but to demonstrate its complexity and the sensitivity that needs to accompany any treatise on the subject.

The principle of equity in higher education is inherently ambiguous, complex, open to multiple interpretations and controversial in its application, and the wide range of opinions on social equity that exist are strongly influenced by multiple subjectivities, cultural, social, economic, regional and political differences. A framing principle in this study is that equity is interwoven with power, which underpins relations among races and between sexes, as well as the distribution of privilege and wealth in society.

Affirmative action is a necessary, yet insufficient measure for achieving equity in society. South Africa needs to examine disadvantage holistically and address the social and economic conditions of Blacks, women and people with disabilities. A process of engineered re-socialisation is necessary as an intervention strategy for changing attitudes, challenging stereotypes and breaking the cycle of psychological disadvantage. It is against this conceptual background that considerations relating to the contextual realities of higher education generally and medical education and training in South Africa needs to be framed and explored.



## CHAPTER 3

# MEDICAL EDUCATION AND TRAINING IN THE SOUTH AFRICAN CONTEXT

### 3.1 INTRODUCTION

The evolving public higher education system in South Africa has been described by Frans van Vught, the former director of the Centre for Higher Education Policy Studies (CHEPS) and the current rector of the University of Twente, as “probably the most ambitious and comprehensive change programme in the world today.” The changes since 1994 have been comprehensive, dramatic and rapid. They have included a changed policy framework, namely the National Plan on Higher Education (DoE 2001a), a National Qualifications Framework (NQF), a new planning approach for HEIs and a proposed new funding formula (Cloete et. al. 1999:2.2).

There is evidence of a strong interventionist approach by government to regulate the size and shape of the higher education system in the pronouncements in the NPHE for merging institutions, amidst claims that such decreed changes are aimed at improving equity, efficiency, effectiveness and quality of the higher education system (DoE 2001a:56-57). According to the *Citizen*, “South African universities have to manage an almost impossible set of forces - a financial squeeze; calls for transformation and the demand for quality” (1999:12).

Medical schools are located within eight universities – three previously Afrikaans medium HAIs, three English medium HAIs and two HDIs. The training of medical doctors is also strongly influenced by the goals and

resources of the DoH (DoH n.d.:17). The contextual realities, complexities and tensions in medical schools are in some ways similar but in most instances significantly different to those faced by other faculties and programmes in universities. The aim of this chapter is to explore these realities, complexities and tensions within the broader national and institutional policy frameworks, shifts and trends. This is therefore a fairly comprehensive and detailed exposé of the history, legislation and statistical shifts and trends in medical education and training in relation to the broader institutional contexts within higher education, aimed at establishing a more in-depth and common understanding of the nature of the issues that need to be considered in managing equity in medical schools.

There is also a lack of empirical data assembled in a single study that would provide a holistic understanding of equity issues in medical schools in relation to equity issues in the broader higher education context. Baseline equity data presented in this chapter is discipline and institution-specific, and may be of use in monitoring equity in medical schools within the different universities.

Understanding the reasons for dominance of particular discourses in equity debates in medical education and training, and the relative silence on others, or the difficulty to draw the links necessary to address equity in medical schools in an integrated and holistic manner in policy, operational and functional frameworks is explored in terms of the unique dynamics and challenges in managing equity in medical schools.

This chapter begins with a discussion of the historical and legislative context of higher education, with specific reference to medical education and training within different institutional types. This includes a literature review, and the primary focus is on the period from 1994, marking the first

democratic election. Comparison of the shifts and trends in students and staff profiles in universities and their medical schools, based on previous investigations is presented and in some instances statistics from 1988 are used as a baseline for comparative purposes. In most cases, comparisons are drawn between African and White profiles as they represent the extremities on the equity continuum to provide an indication of the extent of the inequities that require redress.

### **3.2 HISTORICAL LEGACY**

Any discussion on equity needs to be firmly rooted in a general and specific historical context. In this section, a brief overview is provided of the historic shaping of higher education in South Africa, with emphasis on the establishment and functioning of HDIs and HAIs and, within this overview, the particular development in terms of equity in medical education and training. The purpose of this discussion is to establish some understanding of the nature and severity of the social inequities that need to be managed in the field of medicine.

The fabric of South African society and the quality of life for its people have been shaped by and are linked to the legacy of apartheid, patriarchy and capitalism. Historically, the opportunities available to the citizens of South Africa have been directly related to their individual positioning in terms of variables such as race, class, gender, disability, geographic location, marital status and sexual orientation. These interacting variables determine to a large extent every facet of an individual's social existence. A result of apartheid was that the White minority was privileged in all aspects of social existence, such as access to housing, employment, water, electricity, land ownership, and of particular relevance to this study, access to education - including higher education and training to become medical doctors (Turaki 1992:3).

However, although apartheid has been a severe and primary cause of inequity for the majority of the population of South Africa, the causes of social inequities as they currently prevail cannot be reduced to apartheid (Kallaway 1984; Collins1992). Apartheid has exacerbated other causes of inequity such as patriarchy and capitalism. Further, prejudice about differences such as disability, language and sexual orientation contributes to social inequities. While the consequences of apartheid have been rendered visible through articulation in many policies, studies and debates, the impact of patriarchy in a multicultural, apartheid society has received less attention and there is relative silence on the issue of disability (Howell 2001:12; Naidoo et.al.2001:52-53).

Stereotypes, prejudice and discrimination based on individual and group differences are both overt and covert, but a seriously neglected factor in equity analysis is that of socio-economic class, as manifested for example, in the urban-rural divide (Piper 1981:18-20). Material conditions, such as the availability of laboratories in schools, qualified Mathematics and Science teachers and poverty, are among the primary factors influencing access and academic success in higher education of students from rural communities (Arnott & Kubheka 1997). Other important equity issues, such as disability, access of mature learners and recognition of prior learning (RPL), are yet to be included seriously on the transformation agenda.

This study incorporates race, gender and class as integrated and intersecting variables in the investigation of equity in medical schools within universities and, by means of statistics, provides an indication of the severe impact of historical factors on current inequities in higher education.

### 3.2.1 Historical shaping of higher education

Restricted access of Blacks to higher education generally is one of the primary reasons for current inequities, particularly in the staff profiles of HEIs (cf. Tables 3.19-3.24), as education was used as a repressive tool to perpetuate inferiority of Blacks in accordance with the ideology of apartheid. Prior to the promulgation of the *Extension of University Education Act 45 of 1959* (S.A.1959a), Blacks on academic merit were admitted to study at the Universities of Cape Town, Witwatersrand and Natal and through correspondence at UNISA, but Black enrolment never exceeded more than 5% of the total enrolment at any of these institutions (NUSAS 1954; Beale 1994:2). For example, Africans, while constituting 67% of the population in 1955, constituted only 2.3% of the higher education population (Beale 1994:54). Kgoale (1968:29) points out that due to the low number of Black students who matriculated and because of the high fees charged by the open universities, few students enrolled at these institutions where classes were at times racially segregated, such as at Natal, while others, such as Rhodes University admitted Black students only to postgraduate courses not available at Fort Hare (Horrell 1968:121).

After the *Extension of University Education Act No.45 of 1959* (S.A.1959a) and the *Fort Hare Transfer Act No. 64 of 1959* (S.A. 1959b) were passed, Blacks were no longer, without ministerial consent, admitted to Wits, UCT and Natal, and such consent was very difficult to obtain (Kgoale 1982:6). For example, of 120 applications to study at these universities in 1960, only two students were granted permission (Horrell 1968:115). The increase in the enrolment of Blacks in former White universities has been slow, for example, at UCT in 1970 there was only one African student out of a total enrolment of 7 575 and only 71 African students in 1980 out of a total enrolment of 10 383 (Pavlich & Orkin 1993:1-5). Access of Blacks to higher

education began to increase with the establishment of the HDIs but opportunities were still inequitable.

Bunting (1994:39) describes how by 1991 there were eight technikons and 11 universities for Whites, one technikon and one university each for Indians and Coloureds, and one technikon and four universities for Africans. Statistics for the total higher education enrolments, as a proportion of the population in 1991, in the age group 18 to 22, clearly demonstrate the inequities. The student population of higher education comprised 60% Whites, 33% Indians, 11% Coloureds and only 9% Africans. Statistics for the TBVC states were excluded, but if they were included, the figure for Africans would have dropped to about six percent.

The inferior schooling received by the majority of Black pupils was, and continues to be, a major factor for the low increase of African students into HEIs. This is due to various reasons, such as the racially based disparate expenditure prior to 1994. While Africans constituted 66.29% of the total population in 1960, only 2.07% of the total budget was spent on African schooling (Beale 1994:94). The severity of the inequities may be gauged from the unequal per capita expenditure, which in 1971/2 was R366 per White primary school child and R20.64 per African child, and that the percentage of under-qualified teachers in White schools was zero whereas 52% of African teachers were under-qualified (Pavlich & Orkin 1993:1-3).

Inferior formal schooling for the majority of the population continues to affect opportunities for Blacks to enter higher education. Blankley (1994:54) points out that only 27 of every 10 000 African learners who entered the school system in 1993 attained a matriculation exemption, a university pre-requisite for study for undergraduate degrees. Consideration of the fact that only a proportion of these 27 students had the required entry grades in Mathematics

and Science for admission into an MBChB programme provides some understanding of the low participation rates of African students in medical schools in 1994.

Recent statistical overviews examining the participation rates of students and staff in higher education are provided by Cloete & Bunting (2000). This study shows the decrease in student enrolments from 1998, decline in the number of students obtaining a full matriculation exemption since 1994, an apparent decrease in retention rates and some understanding of the gender inequities in higher education. Of the 98 500 students who obtained a Senior Certificate with endorsement in 1997, that would make them eligible to study at university, 48 000 were male and 50 500 were female. 15 000 male and 11 500 female students passed Mathematics on the higher grade, and 12 000 female, compared to 17 000 male students, passed Physical Science on the higher grade. Although a larger number of female than male students obtained an exemption pass in the matriculation examination, fewer female than male students obtained higher grade passes in Mathematics and Science necessary for admission into MBChB programmes. It would have been useful to have this data disaggregated by race.

However, any discussion on the participation of women in higher education and in particular programmes needs to incorporate the differing patriarchal and cultural attitudes and gender stereotypes associated with educating girls. Meer (1990:90) describes the more intense patriarchal domination among Indian and Coloured communities. There appears a greater reluctance among Blacks to sending their daughters away from home to study and, where finances are limited, sons are often given preference over daughters to study (Pahliney 1991:46).

Entry-level competencies of those applying for entry into higher education programmes are affected by a variety of other factors, such as cultural capital and the availability of role models, and are negatively influenced by factors, including the availability of facilities such as water, electricity, laboratories and qualified teachers. Arnott & Kubheka (1997) found that in 1997 only 19% of Mathematics teachers and 16% of Science teachers nationwide had one or more years of university education in the fields they were teaching. However, the attrition rate of those students deemed by HEIs to have the entry-level competencies is excessively high.

According to Pretorius (2000:15), at least 100 000 students drop out of higher education each year and institutions have poor throughput rates (70% or below) and poor graduation rates (15% or below). It indicates a concern of the CHE that institutions need to become accountable to taxpayers for the R6- billion that the government spent on higher education in 1999, and that they have to answer to the parents who spend their hard-earned money on tuition fees, only to see their children fail, drop out or leave unqualified for the jobs that the economy demands.

### **3.2.2 Historical shaping of medical education and training**

The extent and nature of the current inequities in medical education and training in South Africa are a direct result of the historic legacy of apartheid and prevailing traditions, assumptions and stereotypes. A few examples are cited to demonstrate the severity and pervasiveness of historic discrimination due to apartheid, as well as the resistance offered to oppressive apartheid policies and actions.

The first time that a White student could qualify as a medical doctor in South Africa was in 1920 when the University of Cape Town had sufficient



facilities and qualified staff to offer a complete MBChB degree that was recognised by universities and the Royal Colleges in the United Kingdom (SAMJ 1979:864). In 1922, the late Dr. J.B. McCord and Dr. Alan B. Taylor started a private school in Durban for the training of African male doctors, but as the authorities were not prepared to recognise a qualification perceived as inferior, this initiative was abandoned (Gordon 1957:5). Although Black students had limited access to open universities, they could not train as medical doctors. For example, Black students could not be admitted to study medicine at UCT as the provincial hospitals used for clinical training were for White patients (NUSAS 1957:13). It was only in 1951 when the medical school of the University of Natal that admits primarily Black students opened, with an enrolment of 35 students, that Black students had access to medical education and training (Gordon 1957: 8). This contributes significantly to the skewed profile of medical practitioners in South Africa (cf. Table 3.27).

After the establishment of the medical school at Natal, the five scholarships offered to Black medical students that covered their fees and living expenses at the University of Witwatersrand were terminated. According to Kgoale (1982), the intention of the move to terminate the five scholarships at Wits and to increase them to 15 at Natal, was to decrease the number of Black students at mixed classes at Wits and to encourage them to study in the segregated classes at Natal, as the increase in the number of Black students at Wits was in contradiction to the government's apartheid policy on separate higher education. As a result of this decision by government and the responding resistance, students at Wits set up their own African Medical Scholarships Trust Fund and voluntarily agreed to a R1 annual levy per student, aided by NUSAS (National Union of South African Students) that collected funds internationally. Between 1951 and 1954, 14 students trained through this fund. However, in 1953 Wits announced that only a limited

number of Black students would be admitted to the medical faculty. No reasons were given, but this could have been due to a shortage of clinical facilities to train Black students.

In 1957, the government attempted removing the medical school from the University of Natal with the intention of placing it under the control of the University of South Africa. This would have ensured the government direct control of the management of the medical school. This move was criticised by the national press and vehemently objected to by heads of departments of the University of Natal and other universities, resulting in the government abandoning its plan (Gordon 1957:8). Although it was stated that White students could, under exceptional circumstances, be admitted to the Natal medical school, White students were not admitted for many decades. The faculty was established primarily for African undergraduate training and to provide facilities for research into the vast and complex illnesses and associated problems of sickness in Africa. Approximately 40 students were admitted annually to the medical school at the University of Natal (Kgoale 1982:33-37).

The nature of the racial discrimination that Black medical students endured prior to 1994 was acknowledged through publication of the *Internal Reconciliation Commission* (Wits 2000) report of the medical faculty of Wits University that recommended that the faculty apologise to those affected by discriminatory policies and practices. Among the submissions received from graduate Black doctors were vivid recollections of them being banned from attending a post-mortem conducted on a White corpse, but of all students being permitted to attend the conducting of a post-mortem on a Black corpse; of Black students having to find their own way to local hospitals, even though the majority of them did not own cars, as they were barred from using the shuttle run by the medical school to these hospitals as only White nurses and White medical students were permitted to use this service; and of

not being allowed to borrow photographic slides overnight for study due to a perception that Black students could not be trusted with such valuable items (Sunday Independent 1999:2).

Continuing with its purpose of providing segregated and inferior higher education and professional training for Blacks, the Medical University of Southern Africa (Medunsa) was established in 1976. The intention of the government was to train medical assistants instead of medical doctors to meet the health care needs of the Black population. Strongly opposing this move, Medunsa instituted a fully-fledged MBChB programme, as well as a wide range of other health professional training programmes, primarily for the training of Black medical professionals, and continues to graduate the largest number of African medical doctors in South Africa (cf. Table 3.4). Student admissions at Medunsa are guided by an explicit affirmative action policy that allocates spaces in all programmes according to the demographic profile of the country. The medical faculty of the University of the Transkei trains the smallest number of medical doctors, but students are also predominantly African (cf. Table 3.6).

The number of African medical doctors has increased from, for example, 1972/3 when 90% of South African doctors were White and only 1.2% were African (Retief 1982:98) to 2001 where there is a minimum of 5% of doctors who are African. The 2001 race profile of doctors is based on current registrations with the HPCSA where 19 810 of the total 30 058 registered doctors did not indicate their race group. However, the attrition rate of African students in medical schools is still unacceptably high (Lehmann 2000:9). Dr. Mangaliso Mahlaba, the first Black chairperson of the Junior Doctors' Association, in 1997 called for the more sustained support of Black students and described the pattern among Black students to a *revolving door*. Black students gained admission, entered and then left due to academic and

financial pressures (St Leger 1997:14), corroborating the need for more sophisticated indicators that go beyond admission and enrolment statistics to throughput and graduate statistics and qualitative data, such as student support systems, to monitor equity transformation in higher education.

Universities are primary sites of knowledge production and when the discussion is about equity in higher education, it is necessary to examine who is raising what issue, where and why there is such a divergence of policies, practices and views, and how these will impact on equity in terms of race, gender and class at both an institutional and faculty level. This needs to extend beyond racially-based dichotomies of HDIs and HAIs to diverse and complex equity realities. An example in point is the University of Natal, an HAI, but with a medical faculty mission, policies and student profile more similar to those of HDIs.

This discussion is intended to introduce into current discussions on transformation of higher education an understanding of the contextual differences relating to medical education and training that needs to be incorporated into equity debates.

### **3.3 NATIONAL LEGISLATIVE AND POLICY FRAMEWORK**

The coherence and strong articulation of the legislative framework constructed since 1994 aims at democratization, fairness, protection of human rights and redress of historic inequities in the workplace. This broad national legislative framework is briefly outlined as it prescribes the responses of HEIs and their medical schools in redressing inequities and concurrently contributing to wider social transformation and the national human resources strategy.

The *Basic Conditions of Employment Act* (S.A.1997a) outlines labour practices and basic conditions of employment aimed at establishing fairness in terms of the Constitution (S.A. 1996a) and greater social justice in the work environment in compliance with the International Labour Organisation (ILO). Aspects such as working hours, leave, remuneration, termination of employment, prohibition of employment of children and forced labour, as well as the establishment of the structures and procedures to enforce these regulations, are addressed in this Act. HEIs have had to re-examine issues such as who, in terms of the Act, is a part-time lecturer and the working hours of the full- time staff. In reality, infringements of this Act occur, such as registrars in some surgical disciplines and trauma units often working more than a 40-hour week, without overtime compensation, due to the high demand for services amidst serious staff shortages. Any pressure to conform to the legislated norms of working hours per week would present serious implications for public sector human resource needs.

The *Labour Relations Act 66 of 1995* (S.A. 1995b) provides a framework within which employees and their trade unions, employers and employers' organisations can collectively bargain to determine wages, terms and conditions of employment (Botha 1997:5-10). The Act outlines the procedure to be followed in disputes and the terms of reference of the structures involved in dispute resolution. However, medical doctors in public health care are classified as essential service workers and may not enjoy all the provisions in terms of this Act, such as the right to strike.

In terms of the *Employment Equity Act 55 of 1998*, (S.A 1988a) all organisations employing more than 150 employees were required to submit an equity plan by June 2000 to the Department of Labour, analysing their staff compositions in terms of race, gender and people with disabilities at all levels of the workforce. Institutions are required to set targets, time frames

and strategies, such as skills development plans and succession plans to redress areas of inequities. HEIs, in formulating their plans, would need to take cognisance of the size of the pool of human resources, especially in disciplines such as medicine where there is a serious shortage of doctors of designated groups qualified in certain areas of specialisation (cf. Table 3.27), such as women in the surgical disciplines. However, it emerged in this study that the structural arrangement of the majority of staff in medical schools being on joint appointment between the DoH and university has had a negative effect on the formulation of employment equity plans in terms of staff in academic training complexes.

The Act is silent on the issue of nationality and for many HEIs recruitment of Black staff from other countries is easier than ploughing in resources to grow their own timber. This is also partly due to the difficulty in recruiting and retaining members of designated groups for postgraduate study and employment in academic medicine. HDIs often bear the training and development costs associated with empowerment of members of designated groups, but once qualified they are often lost to HAIs anxious to redress inequities in their staff profiles.

The *Skills Development Act* (S.A. 1998b) requires organisations to appoint a skills development facilitator to design learnerships as a work-based method of empowerment and a route to skills development, recognition of prior learning and acquisition of qualifications that are valid in terms of the NQF. The *Skills Development Levy Act* (S.A. 1998c) compels every organisation to contribute financially to a national skills development fund and offers organisations the opportunity of claiming a part of the levy paid as a rebate for training and development provided on site. Specialists in academic medicine appear unaffected by this Act, although the HPCSA has introduced a compulsory mechanism for continuous professional development (CPD)

that necessitates the accrual of a minimum number of CPD points by those engaged in active clinical practice. The points can be earned through a wide variety of means, such as attendance of conferences, workshops and seminars.

Institutional plans and institutional human resource policies have had to be amended in terms of these recent pieces of legislation.

### ***3.3.1 Legislative and policy framework of public health***

Following the 1994 democratic elections in South Africa, the DoH faced the challenges of redressing severe inequities in the provision of public health care at the national and provincial levels. This necessitated, *inter alia*, changes in health legislation and policies to provide for, according to section 27 of the a health care system where:

- (1) *Everyone has the right to have access to-*
  - (a) *health care services, including reproductive health care*
- (2) *The State must take reasonable legislative and other measures, within its available resources, to achieve the progressive realisation of each of these rights*
- (3) *No one may be refused emergency medical treatment (SA 199a)*

Increasing access to health care services began with the building of approximately 500 clinics, abolishing user fees for clinic services and promoting primary health care. In 1996 the *Choice on Termination of Pregnancy Act* (SA 1996b) was passed, affording women the right to make decisions concerning reproduction. Conditional grants to central hospitals contributed towards operational costs and will be used from 2002 to increase equity in the funding of tertiary care (DoH 2001a:4-5). The high cost of

medicine affects appropriate treatment in the public sector and therefore in 1997, the *Medicines and Related Control Amendment Act 90 of 1997* (SA 1997c) was promulgated to reduce the cost of medicines. The *Medical, Dental and Supplementary Health Service Professions Amendment Act 89 of 1997* (SA 1997d) provided for the establishment of a more representative Health Professions Council to replace the Interim National Medical and Dental Council of South Africa and to expand the powers of the professional boards. Included under this Act is the requirement of one year's community service on first registration (Harrison & Qose 1998:20). The *Tobacco Products Control Amendment Act 33 of 1998* (SA 1998c) exemplifies the DoH strategy of preventative health care.

The DoH has adopted a strategic management approach of an evidence-based identification of needs, explicit statement of objectives and time-frames as part of strategic plans, such as the *Health Sector Strategic Framework: 1999–2004* (DoH n.d.). This change strategy is aimed at providing a comprehensive, integrated health service for all citizens in South Africa, including the indigent and those located in rural communities (DoH n.d.). The mission and vision are explicit about the primacy of equity in this five-year strategy and these are stated as:

*Our VISION is a caring and humane society in which all South Africans have access to affordable, good quality health care*

*Our MISSION is to consolidate and build on the achievements of the past five years in improving access to health care for all and reducing inequity, and to focus on working in partnership with other stakeholders to improve the quality of care of all levels of the health system, especially preventive and promotive health, and to improve the overall efficiency of the health care delivery system (DoE n.d.:2).*



Reference in this study is frequently made to two relevant investigations, namely the *Post Graduate Training of Medical Doctors in South Africa* (DoH 2000b) and *Human Resources for Health: A National Strategy* (Pick, Nevhutalu, Cornwall & Masuku 2001).

Medical schools have had to realign their training with the national legislative framework. This required, for example, re-examining the length of their training programmes, the content of their curricula and their teaching strategies. Medical schools are accountable to and influenced by decisions of both the DoH and the DoE, and they face the challenge of simultaneously meeting the demands of both departments (Lehmann et. al. 2000:1,10-14).

### ***3.3.2 Legislative and policy environment of higher education***

In the period around 1994, various investigations were conducted into the state of higher education. The former President, Nelson Mandela, appointed the National Commission on Higher Education (NCHE) to compile a comprehensive report on higher education. The NCHE report, *A Framework for Transformation* (NCHE 1996a), conceptualised a system of transformed higher education that was consistent with the ideals of the Constitution (SA 1996a) and was aimed at realising the policy goals for the sector. The NCHE report served as the basis for further discussion and in 1997 the Department of Education published the *Education White Paper 3: A Programme for the Transformation of Higher Education* (DoE 1997) that clearly articulated the challenges, vision, principles, structure, growth, governance and funding for a transformed higher education system. Equity was a fundamental principle for transformation in all reports and is firmly entrenched in the White Paper, which states that:

*The principle of equity requires fair opportunities both to enter*

*higher education programmes and to succeed in them. Applying the principle of equity implies, on the one hand, a critical identification of existing inequalities which are the product of policies, structures and practices based on racial, gender, disability and other forms of discrimination or disadvantage, and on the other a programme of transformation with a view to redress. Such transformation involves not only abolishing all forms of unjust differentiation, but also measures of empowerment, including financial support to bring about equal opportunity for individuals and institutions (White Paper 1997: 1.18).*

The principles for transformation outlined in the NCHE report and the White Paper, namely equity, quality, efficiency, effectiveness, access and redress, are often placed in opposition and competition through particular transformation initiatives in higher education. Based on the 29% headcount enrolments between 1993 and 1996, the NCHE report predicted an increasing demand for higher education in the decade following the election of a democratic government in 1994 and therefore the need to expand higher education provision to accommodate the anticipated massification of the system. However, due to various factors there was only a 3% increase in headcount enrolment between 1996 and 1998 and a 4% decrease between 1998 and 2000. Institutions have been encouraged to widen access and explore alternate admission routes and this study examines the extent to which equity is a fundamental reorganizing principle in the transformation of medical schools.

In 1995, the *South African Qualifications Authority (SAQA) Act* (S.A.:1995a) was promulgated. The SAQA Act provides for a National Qualifications Framework (NQF) that creates the opportunity for a range of providers, including workplaces, to award qualifications, thus eradicating the artificial

divide between academic and vocational education. In terms of the SAQA Act, all programmes need to be outcomes-based, and learner competence is assessed by the knowledge, skills and attitudes that the learner has acquired that constitute the inherent requirements to perform the specific job (S.A. 1995a). HEIs are in the process of redesigning their curricula in line with the SAQA Act requirements for submission by 2003 and the redesign of medical curricula comprise an important component in this analysis.

Within the ambit of a highly dynamic and unpredictable environment, there is strong intervention from the government to regulate and democratize the higher education sector. This is evident from the promulgation of the *Higher Education Act* (S.A. 1997c) that addresses issues such as the democratization, governance and funding of higher education institutions. There is a growing emphasis on quality assurance linked to accountability and ensuring of standards in a diverse higher education sector. The *Higher Education Act* (DoE 1997c) provides for the establishment of a Higher Education Quality Committee (HEQC), as a sub-committee of the Council on Higher Education (CHE), to assume responsibility for quality promotion and quality assurance in higher education. It is expected that the first external quality audits will be undertaken in 2003.

In response to limited financial resources and the decreasing demand for public higher education, the Minister of Education instructed the CHE in 2000 to recommend a strategy for achieving a quality higher education system that was more effective, efficient and would achieve greater equity. The CHE report, entitled *Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the 21<sup>st</sup> Century* (CHE 2000), served as a basis for further discussion and consultation between the Minister of Education and various stakeholders, and culminated in the release of the *National Plan for Higher*

*Education* (NPHE) by the Minister of Education in March 2001 (DoE 2001a).

The CHE report (CHE 2000) proposed a reconfigured, differentiated and diverse system consisting of bedrock institutions concentrating on undergraduate training and limited postgraduate and research activities; comprehensive postgraduate and research institutions; extensive masters and selective doctoral institutions; and distance education providers. Research at HEIs declined from 1994 with only six institutions producing two-thirds of all publications recognised for subsidy purposes in 1998. The same six produced nearly 70% of all South Africa's masters and doctoral graduates (Pretorius 2000:15). The CHE also recommended an undergraduate four-year degree in which the first two years would provide generic and foundation skills, and discipline-based specialized training would occur in the last two years. A strong emphasis was placed on student enrolment figures and implicit in the proposals was that HDIs that would be affected by the constitution of bedrock institutions. This recommendation of the CHE received strong criticism from the HEIs and was not accepted by the Ministry of Education for incorporation in the NPHE (DoE 2001a).

The NPHE provides a conceptual strategic framework that uses a set of structural levers, such as funding, to actively manipulate the realisation of the policy goals of the White Paper (DoE 2001:39). The NPHE establishes indicative targets for growth and participation rates, institutional and programme mixes, and equity and efficiency goals (DoE 2001:49-51; 34-44). In addition to announcing a few institutional mergers, a National Working Group has been established to investigate and advise the Minister on the development of new regional institutional and organizational structures, including further mergers and combinations (DoE 2001:82-84). A new Higher Education Management Information System (HEMIS) has been

proposed to replace the South African Post-Secondary Education (SAPSE) system. From 2003, institutions will be funded on the basis of their three-year rolling plans that should be aligned to the priorities stated in the NPHE (DoE 2001a:15-16). Thus the context of higher education is in the process of dynamic development and rapid transformation.

The parameters and criteria used in this study are informed by the following imperatives outlined in the NPHE (DoE 2001a:2-5;18-19;43):

- Build in the future generations a critical mass of Black intellectuals and researchers
- Increase the participation rate in higher education from 15% to 20% in the next 10 to 15 years in an equitable manner that addresses the changing human resource and labour needs
- Shift the balance in enrolments between the humanities, business and commerce, science, engineering and technology in line with the national human resource needs
- Increase the throughput and graduate rates and reduce the drop-out rates. Academic development programmes are to be funded to facilitate the achievement of this goal
- Increase diversity and redress inequities by recruiting workers, mature students, women, the disabled and students from the Southern African Development Community (SADC) countries
- Equip graduates with the necessary skills and competencies to function in modern society, such as computer literacy, information

management, communication and analytic skills

- Establish equity targets for programmes in which Blacks and women are under-represented
- Develop employment equity targets for rectifying race and gender inequities, especially in those academic and professional levels in which Blacks and women are under-represented. The plan encourages the recruitment of Blacks and women from the rest of the African continent
- Produce graduates who are both internationally competitive and socially responsible to contribute to national development and social transformation
- Provide financial aid for poor students and resources to institutions to deal with the learning needs of under-prepared institutions. A point is made that the burden of teaching under-prepared students is no longer confined mainly to HDIs
- Build regional collaborations between institutions
- Link improvements in efficiency to improvements in quality
- Establish a National Information and Applications Service that will facilitate access of previously marginalized groups to higher education

Ideological differences about the transformation of higher education became

apparent in the recent responses to the CHE report recommendations and pronouncements in the NPHE about institutional mergers, as reported in the discussion on HDIs and HAIs (cf. 2.4.1). While previous investigations were concerned with policy frameworks and broad principles for transformation (NCHE 1996a; DoE 1997), the CHE report (DoE 2000) and the NPHE (DoE 2001a) address the operational phase of the transformation of higher education at an institutional level and directly confront the cutting edge divide between HDIs and HAIs. Policy changes threaten to change the basic mission of the university, constituting a threat to both institutional autonomy and academic freedom (Peters 1996:180). Although equity is entrenched as a primary goal in transformation of higher education, findings in this study suggest its relegation to a peripheral status at an institutional level in most universities.

### **3.4 TRENDS IN SOUTH AFRICAN HEIs and MEDICAL SCHOOLS**

Statistical reviews serve an important function in identifying trends in higher education, which can then be used as the basis for comparison or as benchmarks for the achievement of set goals. The limitation of statistical reviews is that they do not provide an explanation for manifested trends, and such an understanding is essential for planning strategies and in setting goals.

In this section, student and staff trends and current positions in medical schools are compared and contrasted with sectoral and institutional trends to establish the similarities and differences between medical schools and HEIs generally, and various conclusions are drawn from the available statistical data. Many previous studies are cited and statistical data collected during this study are also analysed and presented.

### **3.4.1 Student enrolment trends in medical schools and universities**

Historically disadvantaged groups, especially Blacks and women, have been admitted in increasing numbers to HEIs. Unfortunately, statistics have not been maintained for people with disabilities and there is an urgent need to focus greater attention on this group (DoE 2001a:38-39; Howell 2001:11). In this discussion, total enrolments by race and gender in higher education are compared to admission and final year headcount data in medical schools due to the difficulty in obtaining reliable total enrolment data by race, from 1994, in medical schools. The limitation of this comparison is that admission figures do not take into account attrition rates while final year enrolment figures do. In presenting both admission and final year enrolment figures for medical schools increases the reliability of comparisons to total enrolment figures in higher education. Due to the historic and current admission philosophy of the medical faculty of the University of Natal (Gordon 1957: 6), it is regarded under the category HDI.

#### ***3.4.1.1 Student enrolment trends by race***

The latest Census data (1996) is used as the benchmark in this study for gauging the degree of inequities in higher education and medical education and training. According to the 1996 Census, 77% of the population is African, 9% Coloured, 3% Indian and 11% White. The percentage headcount student enrolment at universities by race shows an increase in the number of African students from 1988 to 1998, but in terms of the population demographics, African students are still seriously underrepresented in all institutional types in higher education, as shown in Table 3.1.



**TABLE 3.1: AFRICAN HEADCOUNTS - STUDENT ENROLMENT  
AT UNIVERSITIES SUB-TYPES FOR 1988, 1993 and 1998**

African Students						
	1988	%	1993	%	1998	%
African HDIs	27 264	30%	44 778	29%	36 758	20%
Non-African HDIs	2 951	3%	8 985	6%	12 014	7%
Special Purpose HDIs	22 711	25%	32 710	21%	31 114	17%
Afrikaans HAIs	673	1%	4 538	3%	31 004	17%
English HAIs	4 759	5%	10 231	7%	17 533	10%
Unisa	31 962	35%	54 072	35%	53 262	29%
<b>TOTAL</b>	<b>90 320</b>	<b>100%</b>	<b>155 314</b>	<b>100%</b>	<b>181 685</b>	<b>100%</b>

(Cooper & Subotzky 2001:28)

Non-African universities refer to the University of Durban-Westville (UDW) and the University of the Western Cape (UWC), the former historically established to cater for the training of Indian students in Kwazulu-Natal and the latter for the training of Coloured students in the Western Cape. Special Purpose HDIs refer to Medunsa and Vista. Table 3.1 shows that African enrolments have increased in HAIs, especially in Afrikaans HAIs and in Non-African HDIs, but decreased in African HDIs, Special Purpose HDIs and Unisa.

Figures for medical school enrolments prior to 1994 are difficult to obtain, but from 1994 the increase in African student admissions in historically Afrikaans medium HAIs has been steady but is still extremely low, changing from 2% in 1994, to 7% in 1996, to 11% in 1998, and to 17% in 2001. However, the increase in African student admissions in English medium HAIs has been erratic and although the percentage admissions of African students was higher in these medical schools than in the historically Afrikaans medium medical schools, the rate of increase of African student enrolment was lower, from 21% in 1994, to 26% in 1996, to 20% in 1998, and to 30% in 2001 (cf. Tables 3.3 and 3.4). In those medical schools classified in this study as HDIs, namely Medunsa, Transkei and Natal, the

admission of African students remained fairly stable, showing a very slight increase, from 551 in 1994, to 554 in 1998 and to 599 in 2001 (DoH 2001b:1). This may be attributed to the control of the number of training posts in medicine (Pick et.al 2001:67).

Cooper & Subotzky (2001:29-31) identify trends in higher education based on SAPSE data. A finding of their study is that there was an increase of African headcount enrolments and decrease of White headcount enrolments in HAIs from 1994 to 1998, as reflected in Table 3.2, but a decrease in both African and White enrolments in HDIs, with Indian and Coloured headcounts remaining unchanged between 6% to 7% from 1994 to 1998. The most significant increases in African student enrolment from 1988 to 1998 were at two Afrikaans HAIs, namely Free State (from 1% to 36%) and Pretoria (from 0% to 23%), and the lowest significant increase was also at an Afrikaans HAI, namely Stellenbosch (0% to 5%).

Tables 3.3 to 3.10 indicate the significant differences between the student enrolment patterns in medical schools and their universities (cf. Tables 3.2, 3.11 & 3.10). It further provides evidence that equity trends in medical schools are considerably dissimilar to those in higher education generally, suggesting a need to distinguish between the position of medical schools and higher education in equity and transformation discussions, debates and decisions.

**TABLE 3.2: STUDENT HEADCOUNT ENROLMENT BY RACE FOR 1988, 1993 AND 1998 FOR UNIVERSITIES WITH MEDICAL SCHOOLS**

	1988		1993		1998	
	African %	White %	African %	White %	African %	White %
Transkei	4 345 100%	0 0%	6 715 100%	0 0%	5 580 77%	10 0%
Medunsa	1 208 82%	177 12%	2 456 81%	234 7%	2 925 79%	109 3%
HDI %	91%	6%	91%	3,5%	78%	1,5%
Free State	97 1%	8 973 97%	429 5%	8 222 91%	3 549 36%	5 749 59%
U. P.	64 0%	22 811 99%	1 009 4%	21 904 94%	5 765 23%	18 881 74%
Stellenbosch	40 0%	13 269 96%	165 1%	13 122 92%	752 5%	13 080 83%
AfrikHAI%	0,33%	97%	3%	92%	21%	72%
Cape Town	900 7%	10 302 78%	2 421 17%	9 261 65%	4 296 27%	8 292 53%
Natal	1 444 11%	8 942 70%	3 538 23%	7 788 51%	5 735 35%	4 457 27%
Wits	1 938 11%	14 471 80%	3 461 19%	12 368 68%	5 869 35%	8 277 49%
EnglishHAI%	10%	76%	20%	50%	32%	43%
<b>TOTAL</b>	<b>10 036</b>	<b>78 945</b>	<b>20 194</b>	<b>72 899</b>	<b>34 471</b>	<b>58 855</b>

(Source: Cooper & Subotzky 2001: 36-37; 56; 247-251)

**TABLE 3.3: ADMISSION HEADCOUNTS BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001**

	1994					1996					1998					2001				
	A	W	I	C	T	A	W	I	C	T	A	W	I	C	T	A	W	I	C	T
F/State	2	129	0	9	140	13	101	4	10	128	19	71	4	9	103	44	88	3	10	145
Pretoria	9	209	12	7	237	24	184	20	4	232	30	162	7	5	204	34	115	16	12	177
Stellen.	0	159	2	9	170	0	108	8	53	169	4	123	28	32	187	4	123	12	31	170
Afrik. HAIs	11	497	14	25	547	37	393	32	67	529	53	356	39	46	494	82	326	31	53	492
Transkei	32	0	9	0	41	42	1	17	2	62	43	0	20	1	64	75	3	15	3	96
Medunsa	244	0	136	7	387	193	0	18	1	212	231	4	53	4	292	284	6	14	2	306
Natal	64	0	54	5	123	99	5	50	6	160	87	13	93	5	198	128	6	50	13	197
HDIs	340	0	199	12	551	334	6	85	9	434	361	17	166	10	554	487	15	79	18	599
Cape Town	43	88	25	32	188	45	76	28	33	182	55	78	36	32	201	62	60	34	55	211
Wits	41	104	71	4	220	69	78	104	3	254	28	88	90	3	209	82	96	83	4	265
Eng. HAIs	84	192	96	36	408	114	154	132	36	436	83	166	126	35	410	144	156	117	59	476
<b>TOTAL</b>	<b>435</b>	<b>689</b>	<b>309</b>	<b>73</b>	<b>1506</b>	<b>485</b>	<b>553</b>	<b>248</b>	<b>112</b>	<b>1398</b>	<b>497</b>	<b>539</b>	<b>331</b>	<b>91</b>	<b>1458</b>	<b>713</b>	<b>496</b>	<b>235</b>	<b>129</b>	<b>1573</b>

(Source: DoH 2001b:1-2)

**TABLE 3.4: ADMISSION HEADCOUNT PERCENTAGES BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001**

	1994					1996					1998					2001				
	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%
<b>Free State</b>	1	92	0	7	100	10	79	3	8	100	18	69	4	9	100	30	61	2	7	100
<b>Pretoria</b>	4	88	5	3	100	10	79	9	2	100	15	79	3	3	100	19	65	9	7	100
<b>Stellen.</b>	0	94	1	5	100	0	64	5	31	100	2	66	15	17	100	3	72	7	18	100
<b>Afrik. HAIs</b>	2	91	2	5	100	7	74	6	13	100	11	72	8	9	100	17	66	6	11	100
<b>Transkei</b>	78	0	22	0	100	68	2	27	3	100	67	0	31	2	100	78	3	16	3	100
<b>Medunsa</b>	63	0	35	2	100	91	0	8	1	100	79	1,5	18	1,5	100	93	2	4	1	100
<b>Natal</b>	52	0	44	4	100	62	3	31	4	100	44	6	47	3	100	65	3	25	7	100
<b>HDIIs</b>	64	0	34	2	100	74	2	22	2	100	63	3	32	2	100	79	2	15	4	100
<b>Cape Town</b>	23	47	13	17	100	25	42	15	18	100	27	39	18	16	100	29	29	15	27	100
<b>Wits</b>	19	47	32	2	100	27	31	41	1	100	13	42	42	2	100	31	36	31	2	100
<b>Eng. HAIs</b>	21	47	23	9	100	26	37	28	9	100	20	41	30	9	100	30	33	23	14	100
<b>TOTAL</b>	29	46	21	4	100	35	39	18	8	100	34	37	23	6	100	45	32	15	8	100

(Source: DoH 2001b:1-2)

**TABLE 3.5: FINAL YEAR STUDENT HEADCOUNT BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001**

	1994					1996					1998					2001				
	A	W	I	C	T	A	W	I	C	T	A	W	I	C	T	A	W	I	C	T
<b>Free State</b>	0	87	0	1	88	0	87	0	0	87	1	114	0	2	117	13	100	0	11	124
<b>Pretoria</b>	0	163	0	2	165	0	192	1	0	193	0	208	6	3	217	7	187	16	3	213
<b>Stellen.</b>	0	160	17	1	178	0	156	0	17	173	0	133	0	13	146	2	117	1	18	138
<b>Afrik.HAIs</b>	0	410	17	4	431	0	435	1	17	453	1	455	6	18	480	22	404	17	32	475
<b>Transkei</b>	9	0	9	0	18	22	0	4	0	26	25	0	6	0	31	33	0	11	0	44
<b>Medunsa</b>	113	0	0	5	118	161	0	13	4	178	186	0	57	2	245	208	0	53	3	264
<b>Natal</b>	36	0	52	2	90	42	0	57	2	101	45	0	53	6	104	65	3	53	3	124
<b>HDIIs</b>	158	0	61	7	226	225	0	74	6	305	256	0	116	8	380	306	3	117	6	432
<b>CapeTown</b>	13	119	12	23	167	8	100	19	26	153	24	99	26	28	177	44	63	29	28	164
<b>Wits</b>	20	126	46	10	202	12	124	46	8	190	23	112	59	1	195	11	95	91	3	200
<b>Eng. HAIs</b>	33	245	58	33	369	20	224	65	34	343	47	211	85	29	372	55	158	120	31	364
<b>TOTAL</b>	191	655	136	44	1026	245	659	140	57	1101	304	666	207	55	1231	383	254	69	565	1271

(Source: DoH 2001b:3-4)

**TABLE 3.6: FINAL YEAR STUDENT HEADCOUNT PERCENTAGES BY RACE IN MEDICAL SCHOOLS FOR 1994, 1996, 1998 AND 2001**

	1994					1996					1998					2001				
	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%	A%	W%	I%	C%	T%
Free State	0	99	0	1	100	0	100	0	0	100	1	97	0	2	100	10	81	0	9	100
Pretoria	0	99	0	1	100	0	99	1	0	100	0	96	3	1	100	3	88	8	1	100
Stellen.	0	90	9	1	100	0	90	0	10	100	0	91	0	9	100	1	85	1	13	100
Afrik.HAIs	0	95	4	1	100	0	96	0	4	100	0	95	1	4	100	5	85	3	7	100
Transkei	50	0	50	0	100	85	0	15	0	100	81	0	19	0	100	75	0	25	0	100
Medunsa	96	0	0	4	100	90	0	7	3	100	76	0	23	1	100	79	0	20	1	100
Natal	40	0	58	2	100	42	0	56	2	100	43	6	51	0	100	52	3	43	2	100
HDIs	62	0	36	2	100	72	0	26	2	100	67	2	31	0	100	69	1	29	1	100
Cape Town	8	71	7	14	100	5	65	13	17	100	14	56	14	16	100	27	38	18	17	100
Wits	10	62	23	5	100	6	65	24	5	100	12	57	30	1	100	5	47	46	2	100
Eng. HAIs	9	66	15	10	100	5	65	19	11	100	13	56	22	9	100	16	43	32	9	100
TOTAL	19	64	13	4	100	22	60	13	5	100	25	54	17	4	100	30	45	20	5	100

(Source: DoH 2001b:3-4)

While Table 3.3 and Table 3.5 provide an indication of academic success in terms of potential graduation output, they do not indicate throughput rates that are important and require tracking. However, some insight into the attrition rates by race per medical faculty is possible if a comparison is made between the medical school admissions in 1996 and the final year student enrolments for 2001, based on the assumption of students in their final year of a 6-year study, having passed every year of the programme at the first attempt, would have been admitted in 1996.

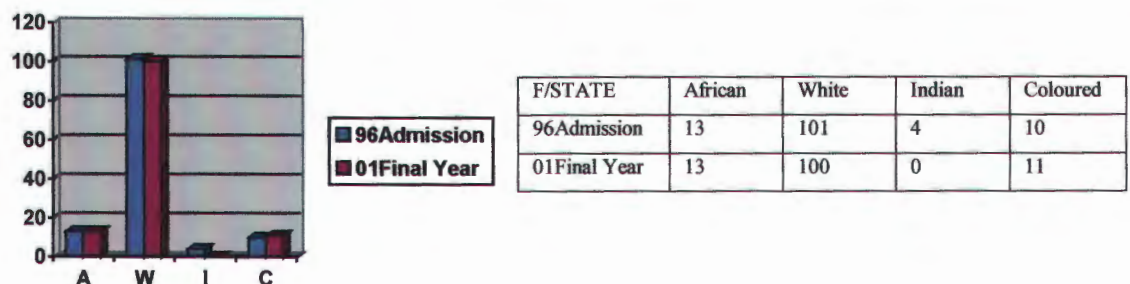
The reliability and validity of this comparison is low due to the fact that the dropout rate in the first two years of study is high and some students are admitted into the MBChB programme after the first year, either as transfers from other medical schools or from other programmes in the institution, but in terms of the definition of equity adopted in this study (cf. 3.3.2) that incorporates the notion of academic success beyond just access into HEIs,

such a comparison, as shown in Table 3.7 (Tables 3.7.1 – 3.7.8), has value, despite its limitations.

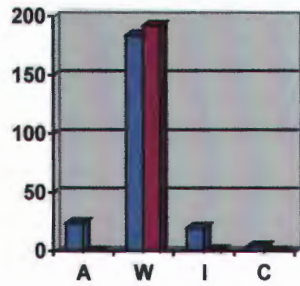
Table 3.7.1 to Table 3.7.8 indicate a high correlation between student intake and anticipated graduation rates for the University of Cape Town, the University of Free State and the Medical University of Southern Africa, signalling possible good practices relating to student admissions and academic support programmes. At the University of Pretoria, the University of Stellenbosch and the University of Witwatersrand, the academic success rates of White students is high but that of African students low, indicating a possible high attrition rate of African students. It appears that the throughput rate of Indian students is higher than that of Coloured students.

**TABLE 3.7: COMPARISON OF 1996 FACULTY OF MEDICINE ADMISSIONS BY RACE TO 2001 FACULTY OF MEDICINE FINAL YEAR STUDENT ENROLMENT (DoH 2001b)**

**TABLE 3.7.1: Comparison of 1996 Faculty of Medicine admissions by race to 2001 Faculty of Medicine final year student enrolment by race for University of Free State**

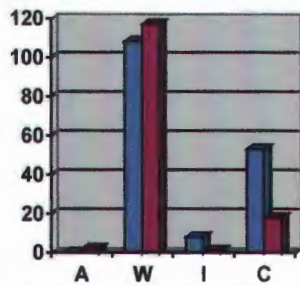


**TABLE 3.7.2: Comparison of 1996 Faculty of Medicine admissions by race to 2001  
Faculty of Medicine final year student enrolment by race for University of Pretoria**



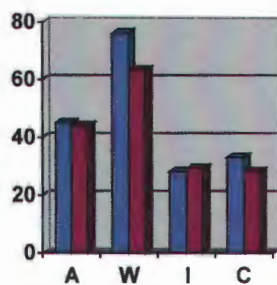
PRETORIA	Africans	Whites	Indians	Coloureds
96Admission	24	184	20	4
01Final Year	0	192	1	0

**TABLE 3.7.3: Comparison of 1996 Faculty of Medicine admissions by race to 2001  
Faculty of Medicine final year student enrolment by race for University of Stellenbosch**



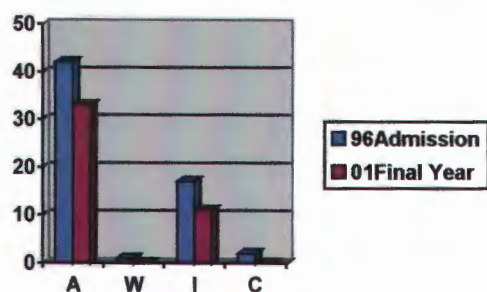
STELLEN.	Africans	Whites	Indians	Coloureds
96Admission	0	108	8	53
01Final Year	2	117	1	18

**TABLE 3.7.4: Comparison of 1996 Faculty of Medicine admissions by race to 2001  
Faculty of Medicine final year student enrolment by race for University of Cape Town**



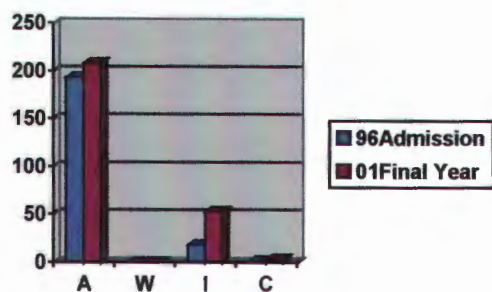
UCT	Africans	Whites	Indians	Coloureds
96Admission	45	76	28	33
01Final Year	44	63	29	28

**TABLE 3.7.5: Comparison of 1996 Faculty of Medicine admissions by race to 2001**  
**Faculty of Medicine final year student enrolment by race for University of Transkei**



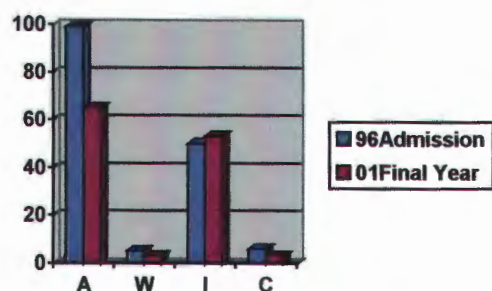
TRANSKEI	Africans	Whites	Indians	Coloureds
96Admission	42	1	17	2
01Final Year	33	0	11	0

**TABLE 3.7.6: Comparison of 1996 Faculty of Medicine admissions by race to 2001**  
**Faculty of Medicine final year student enrolment by race for Medunsa**



MEDUNSA	Africans	Whites	Indians	Coloureds
96Admission	193	0	18	1
01Final Year	208	0	53	3

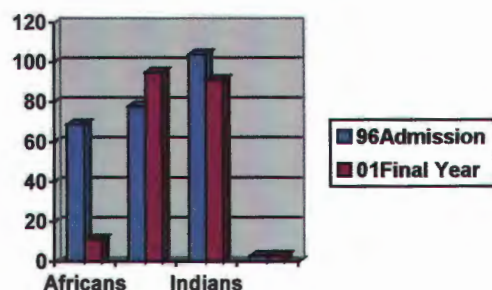
**TABLE 3.7.7: Comparison of 1996 Faculty of Medicine admissions by race to 2001**  
**Faculty of Medicine final year student enrolment by race for University of Natal**



NATAL	Africans	Whites	Indians	Coloureds
96Admission	99	5	50	6
01Final Year	65	3	53	3



**TABLE 3.7.8: Comparison of 1996 Faculty of Medicine admissions by race to 2001 Faculty of Medicine final year student enrolment by race for University of Witwatersrand**



WITS	Africans	Whites	Indians	Coloureds
96Admission	69	78	104	3
01Final Year	11	95	91	3

Table 3.8 presents a summary of the admissions and final headcount enrolments by race in the eight faculties of medicine in South Africa and provides evidence of the deep-seated inequities that prevail and the necessity for proactive management in view of the need for more African doctors in terms of the particular health care demands in this country (cf. Tables 3.24 – 3.27).

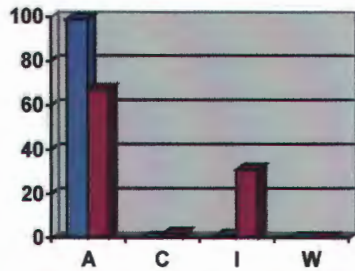
**TABLE 3.8: ADMISSION AND FINAL YEAR HEADCOUNT ENROLMENTS IN MEDICAL SCHOOLS BY RACE FOR 1994, 1998 AND 2001**

	AFRICAN	INDIAN	COLOURED	WHITE	TOTAL
<b>ADMISSIONS</b>					
1994	435	309	73	689	1506
1998	497	331	91	539	1458
2001	713	227	130	497	1567
Total	1645	867	294	1725	4531
%	36.3	19.1	6.5	38.1	100
<b>FINAL YEAR</b>					
1994	191	136	44	655	1026
1998	304	207	55	666	1232
2001	383	254	69	565	1271
Total	878	597	168	1886	3529
%	24.8	16.9	4.8	53.5	100

(Source: DoH 2001b:1-4)

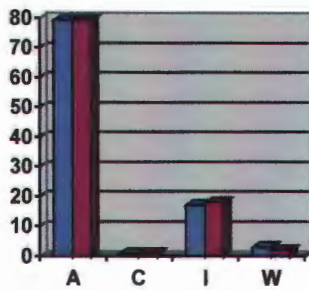
**TABLE 3.10: COMPARISON BETWEEN INSTITUTIONAL AND FACULTY OF MEDICINE PERCENTAGE STUDENT PROFILES BY RACE FOR 1998 (Sources: DoH 2001b:1-6; Cooper & Subotzky 2001:251)**

**Table 3.10.1: Comparison between the student headcount of the University of Transkei with its admissions in the Faculty of Medicine by race for 1998**



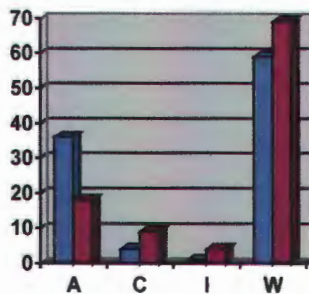
TRANSKEI	Africans	Coloureds	Indians	Whites
University	99	0	1	0
Fac. of Medicine	67	2	31	0

**Table 3.10.2: Comparison between the student headcount of Medunsa with its admissions in the Faculty of Medicine by race for 1998**



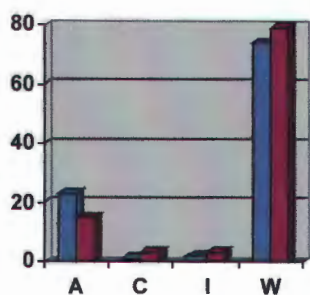
MEDUNSA	Africans	Coloureds	Indians	Whites
University	79	1	17	3
Fac. of Medicine	79	1	18	1

**Table 3.10.3: Comparison between student headcounts of the University of Free State with its admissions in the Faculty of Medicine by race for 1998**



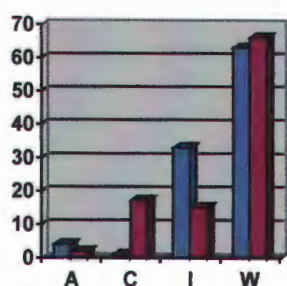
FREE STATE	Africans	Coloureds	Indians	Whites
University	36	4	1	59
Fac. of Medicine	18	9	4	69

**Table 3.10.4: Comparison between the student headcount of the University of Pretoria with its admissions in the Faculty of Medicine by race for 1998**



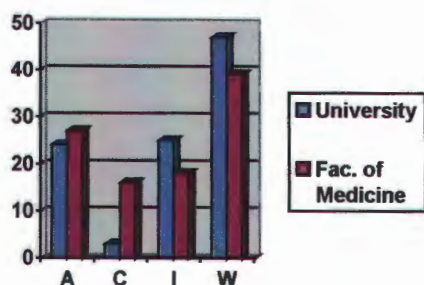
PRETORIA	Africans	Coloureds	Indians	Whites
University	23	1	3	74
Fac. of Medicine	15	2	3	79

**Table 3.10.5: Comparison between the student headcount of the University of Stellenbosch with its admissions in the Faculty of Medicine by race for 1998**



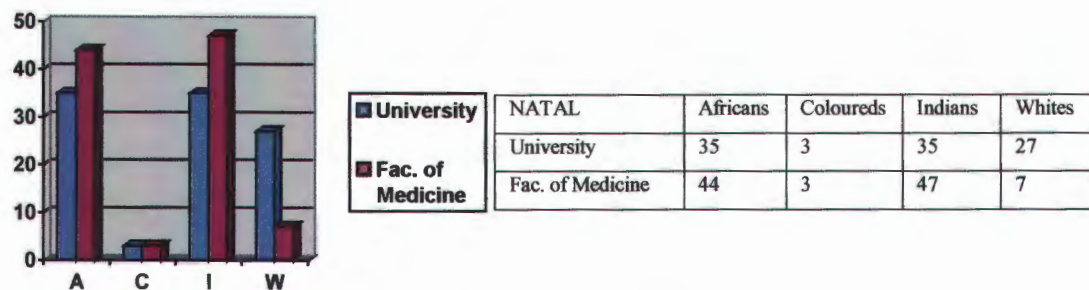
STELLENBOSCH	Africans	Coloureds	Indians	Whites
University	4	1	33	63
Fac. of Medicine	2	17	15	66

**Table 3.10.6: Comparison between the student headcounts of the University of Cape Town with its admissions in the Faculty of Medicine by race for 1998**

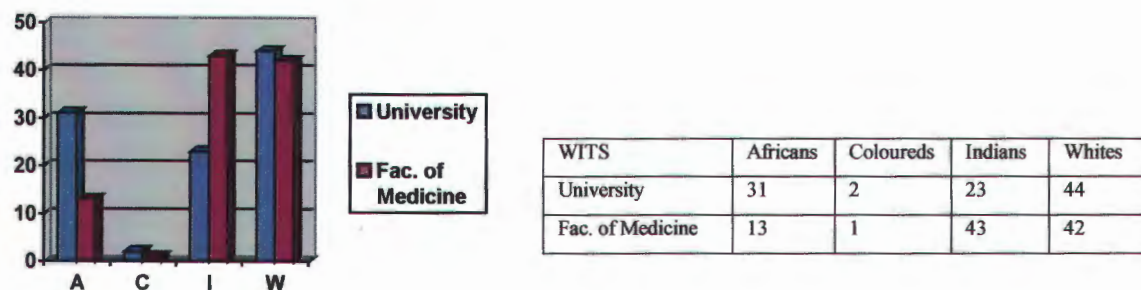


CAPE TOWN	Africans	Coloureds	Indians	Whites
University	24	3	25	47
Fac. of Medicine	27	16	18	39

**Table 3.10.7: Comparison between the student headcounts of the University of Natal with its admissions in the Faculty of Medicine percentage by race for 1998**



**Table 3.10.8: Comparison between the total percentage student profile of the University of Witwatersrand with its Faculty of Medicine percentage student profile by race**



### 3.4.1.2 Student enrolment trends by gender and race

Discussing gender trends in medical schools within the broader context of gender trends in higher education has to be integrated by race because of the differences manifested, as evident from Table 3.11 depicting university student headcount percentages by race and gender for 1988, 1994 and 1998.

**TABLE 3.11: UNIVERSITY STUDENT HEADCOUNTS BY RACE AND GENDER FOR 1988, 1994 AND 1998**

	N	African		Coloured		Indian		White		Totals	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1988	283 330	16%	16%	4%	3%	4%	3%	31%	23%	55%	45%
1994	364 508	21%	26%	3%	3%	3%	4%	21%	19%	48%	52%
1998	351 786	22%	30%	2%	2%	4%	4%	18%	18%	46%	54%

(Cooper & Subotzky 2001:21)

From Table 3.11 it can be seen that from 1988 to 1998 there was an almost equivalent decrease in the number of male students and an increase in the number of female students enrolled at universities. From 1988 to 1998 there was an increase in African male and female enrolments but a decrease in White male and female enrolments, while Indian enrolments remained fairly stable and Coloured enrolments decreased slightly. African female headcount enrolments increased at a more rapid rate than African male headcount enrolments. The African male: female ratio in terms of percentage headcount enrolments was 21:26 in 1994 and changed to 22:30 by 1998. In comparison, White male: female ratios, in terms of percentage headcount enrolments, changed from 22:19 in 1994 to 18:18 in 1998. Currently, African women constitute the largest group in higher education enrolments in terms of race and gender. African female enrolments increased by 8% from 1994 to 1998, while White male headcount enrolments decreased by 8% in the same period.

To examine more closely the race and gender distribution of students in universities with medical faculties, the institutional student enrolment profiles by percentage for 1998 are provided in Table 3.12:

**TABLE 3.12: PERCENTAGE STUDENT HEADCOUNT ENROLMENT BY RACE AND GENDER FOR 1998 FOR UNIVERSITIES WITH MEDICAL SCHOOLS**

1998															
	African %			Coloured %			Indian %			White %			TOTAL %		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Transkei	39	59	99	0,1	0	0	0,5	0,5	1	0,1	0,1	0	40	60	100
Medunsa	43	36	79	0,7	0	1	11	6	17	2	1	3	57	43	100
HDI%	41	48	89	1	0	1	6	3	9	1	0,6	1	49	51	100
Free State	17	20	37	2	2	4	0,4	0,2	1	29	29	58	49	51	100
UP	10	13	23	0,5	0,5	1	1	1	2	38	36	74	48	52	100
Stellenbosch	3	2	5	5	6	11	0,9	0,5	1	44	39	83	53	47	100
Afrik. HAI	10	12	22	3	3	6	1	1	2	37	35	72	51	49	100
Cape Town	17	10	27	6	7	13	4	3	7	29	24	53	56	44	100
Natal	19	16	35	1	1	2	16	19	35	15	12	27	51	49	100
Wits	21	14	35	1	1	2	7	7	14	25	24	49	54	46	100
Eng. HAI	19	13	32	3	3	6	9	10	19	23	20	43	54	46	100
AV. %	21	21	42	2	2	4	5	5	10	23	21	44	51	49	100

(Source: Cooper & Subotzky 2001: 251)

In comparison to the findings presented in Table 3.11, which showed a significant increase in African student enrolment, especially for African female students, and a substantial decrease in the enrolment of White male and female students, Table 3.12 suggests a very different pattern for those universities having medical faculties, namely:

- Similar African and White enrolment figures, with White male enrolments in the majority
- Fewer African female students than African male students in universities other than Transkei, Pretoria and Free State
- White female enrolments less than or equal to White male enrolments at all universities

The gender and gender/race profiles in medical faculties are presented in Tables 3.13 to 3.15 and are compared with the trends discernable from Tables 3.11 and 3.12. Table 3.13 presents the admission of first year female medical students for 1996 and 2000, and Table 3.14 provides the total enrolment of MBChB students by gender for 1996 and 2000. This is important baseline data but it is essential that such statistics be further disaggregated in terms of race as well, as presented in Table 3.15.

From Table 3.13 it can be seen that there was a significant increase from 1996 to 2000 in the number of female students being admitted into all medical schools except Medunsa. In 1996, female admissions were greater by a maximum of approximately 3% in only the three historically English medium HAIs, namely UCT, Natal and Wits but from 1996 to 2000 the average percentage increase in female admissions was from 48.3% to 56.3%. Gender trends are more similar to the broader gender trends for all universities (cf. Table 3.11) than to the gender trends manifested by the very universities in which the medical faculties are located (cf. Table 3.12).

**TABLE 3.13: ADMISSION OF FIRST YEAR FEMALE MEDICAL STUDENTS FOR 1996 AND 2000**

	1996		2000		DIFF. %
	TOTAL	FEMALE%	TOTAL	FEMALE%	
Free State	128	57 (44.5)	90	47 (52.2)	+ 7.7
Pretoria	238	118 (49.6)	179	97 (54.2)	+ 4.6
Stellenbosch	169	80 (47.3)	195	107 (54.9)	+ 7.6
Transkei	62	25 (40.3)	91	60 (66.0)	+ 25.7
Medunsa	207	89 (43.0)	249	97 (39.0)	- 4.0
Cape Town	189	97 (51.3)	203	131 (64.5)	+ 13.2
Natal	160	81 (50.6)	201	126 (62.7)	+ 12.1
Witwatersrand	207	110 (53.1)	248	155 (62.5)	+ 9.4
<b>TOTAL/AVERAGE</b>	<b>1360</b>	<b>657 (48.3)</b>	<b>1456</b>	<b>820 (56.3)</b>	<b>+ 8.0</b>

(Kane-Berman 2000)

Table 3.14 depicts the total headcount enrolment by gender for 1996 and 2000. It can be seen that from 1996 to 2000 there was an increase in the total female enrolment and a decrease in the total male enrolment in all medical schools without exception. The largest increases in female enrolments are at the Universities of Natal and Transkei, both having large numbers of African students in their medical faculties.

**TABLE 3.14: TOTAL HEADCOUNT ENROLMENT FOR MEDICAL FACULTIES BY GENDER FOR 1996 AND 2000**

	TOTAL			FEMALE			MALE		
	1996	2000	Diff.%	1996	2000	Diff.%	1996	2000	Diff.%
				%	%	(+)	%	%	(-)
<b>F/ State</b>	745	659	-11.5	43.2	44.6	1.4	56.8	55.4	1.4
<b>Pretoria</b>	1305	1211	-7.2	47.2	52.4	5.2	52.8	47.6	5.2
<b>Stellen.</b>	960	958	-0.2	45.6	51.9	6.3	54.4	48.1	6.3
<b>Transkei</b>	228	332	+45.6	45.6	54.5	8.9	54.4	45.5	8.9
<b>Medunsa</b>	1590	1663	+4.6	35.0	40.7	5.7	65.0	59.3	5.7
<b>UCT</b>	1046	1066	+1.9	53.0	59	6.5	46.8	40.8	6.0
<b>Natal</b>	716	934	+30.4	45.9	54.7	8.8	54.0	45.3	8.7
<b>Wits</b>	1276	1325	+3.8	51.7	55.3	3.6	48.2	44.7	3.5
<b>Total/Av.</b>	7866	8148	+3.6	45.5	51.1	5.6	54.5	48.9	5.6

(Kane-Berman 2000)



Table 3.15 presents the percentage headcount enrolments by race and gender in medical faculties for 2000:

**TABLE 3.15: PERCENTAGE HEADCOUNT ENROLMENTS BY RACE AND GENDER IN MEDICAL FACULTIES FOR 2000\***

	FEMALE %					MALE %					TOTAL %				
	A	C	I	W	N	A	C	I	W	N	A	C	I	W	N
<b>F/State</b>	43	5	1	81	294	21	7	3	70	365	17	6	2	75	659
<b>Pretoria</b>	13	3	7	77	635	12	3	6	79	576	12	3	6	78	1211
<b>Stellenbosch</b>	1	16	7	76	497	2	18	7	73	461	1	17	7	75	958
<b>AFRIK.HAIs</b>	5	8	5	78	476	11	9	5	74	467	10	9	5	76	942
<b>Transkei</b>	68	2	30	1	181	69	1	30	1	151	68	1	30	1	332
<b>Medunsa</b>	82	1	16	1	677	79	1	19	1	986	80	1	18	1	1663
<b>Natal</b>	40	4	51	4	511	53	3	39	6	423	46	4	46	5	934
<b>HDIs</b>	63	2	33	2	1369	67	2	29	2	1560	65	2	31	2	2929
<b>Cape Town</b>	28	18	14	41	634	34	13	20	33	435	30	16	16	38	1069
<b>Wits</b>	10	2	41	47	733	17	2	41	41	592	13	2	41	45	1325
<b>ENG. HAIs</b>	19	10	28	44	1367	26	7	30	37	1027	22	9	28	41	2394
<b>TOTAL</b>	30	7	21	42	4162	38	5	20	37	3989	34	6	21	39	8151
<b>%</b>					51					49					100

(\*Preliminary data)

**Key to Table 3.15:**

A: African

C: Coloured

I: Indian

W: White

N: Total number

While female students appear to outnumber male students in the White and Coloured population groups and are equal in the Indian population group in medical schools in 2000 (cf. Table 3.15), the number of African female students are lower than the number of African male students in all medical schools, except Medunsa. This is interesting due to the fact that in the admission of first year medical students, Medunsa was the only medical school that admitted fewer female students in 2000 as compared to 1996. This observation is based on preliminary data that requires further verification.

**TABLE 3.19 : UNIVERSITY INSTRUCTIONAL/RESEARCH STAFF:  
PROPORTIONAL COMPOSITION BY RACE IN 1998**

Institutional Type	University	African	White
African HDI	Fort Hare	52%	40%
	North	63%	33%
	Transkei	79%	12%
	Venda	71%	23%
	Zululand	54%	40%
<b>African HDI Total</b>		<b>64%</b>	<b>30%</b>
Non-African HDIs	Durban-Westville	12%	35%
	Western Cape	11%	43%
<b>Non-African HDI Total</b>		<b>12%</b>	<b>39%</b>
Special HDIs	Medunsa	42%	47%
	Vista	27%	69%
<b>Special HDI Total</b>		<b>33%</b>	<b>61%</b>
<b>HDI TOTAL</b>		<b>41%</b>	<b>42%</b>
Afrikaans HAIs	Free State	3%	97%
	Port Elizabeth	3%	94%
	Potchefstroom	2%	98%
	Pretoria	2%	97%
	RAU	1%	98%
	Stellenbosch	0%	98%
	<b>Afrikaans HAI Total</b>		<b>2%</b>
English HAIs	Cape Town	4%	91%
	Natal	8%	82%
	Rhodes	6%	92%
	Witwatersrand	9%	87%
	<b>English HAI Total</b>		<b>7%</b>
	Unisa	10%	87%
<b>TOTAL %</b>		<b>16%</b>	<b>77%</b>

(Cooper 1998: 12)

In 1999, Africans constituted 5% of the total professional category in HAIs and 77% in HDIs. Whites in comparison accounted for 91% of the staff in HAIs and 36% in HDIs. Between 1996 and 1999, African representation increased, but this was relatively slower in HAIs (Subotzky 1999b:3-6). In 1999, in the Instruction/Research category in universities, 19% of the staff was African and 77% White, while in the Executive/Administrative and Managerial category, 18% of the staff was African and 79% was White (cf. Table 3.20). These

imbalances become more pronounced when the composition is examined in terms of historic institutional type.

**TABLE 3.20: HEADCOUNT OF UNIVERSITY INSTRUCTION/ RESEARCH AND EXECUTIVE/MANAGEMENT PROFESSIONALS WITH PERMANENT APPOINTMENT BY RACE AND RANK FOR 1996 AND 1999 IN INSTITUTIONS WITH MEDICAL SCHOOLS**

UNIVERSITY	YEAR	Instruction/Research				Executive/Managerial					
		African		White		Total	African		White		Total
		No.	%	No.	%		No.	%	No.	%	
Pretoria	1996	11	1%	1291	99%	1302	0	0%	123	100%	123
	1999	37	3%	1332	97%	1369	3	2%	120	98%	123
Wits	1996	74	8%	864	88%	958	2	5%	40	91%	42
	1999	101	10%	846	85%	947	2	4%	43	83%	45
Medunsa	1996	103	34%	171	56%	303	4	17%	19	83%	23
	1999	80	43%	82	44%	185	14	40%	18	51%	35
Free State	1996	5	1%	532	99%	537	1	2%	57	98%	58
	1999	21	4%	548	96%	569	1	2%	59	98%	60
Stellenbosch	1996	2	1%	309	99%	311	0	0%	89	100%	89
	1999	4	1%	689	97%	693	0	0%	84	99%	84
Cape Town	1996	29	4%	638	92%	667	2	5%	34	92%	36
	1999	32	5%	607	88%	639	3	7%	40	91%	43
Natal	1996	61	8%	645	83%	706	4	9%	37	80%	41
	1999	72	9%	624	79%	696	2	6%	27	79%	29

(Subotzky 1999: 5-6)

In comparison, the headcounts of Instruction/Research professionals with permanent appointment by race and rank for 2001 in medical schools in the sample of institutions are presented in Table 3.21.

**TABLE 3.21: HEADCOUNT OF FACULTY OF MEDICINE INSTRUCTION/ RESEARCH WITH PERMANENT APPOINTMENT BY RACE AND RANK FOR 2001**

Medical School	Year	Instruction/Research		
		African	White	Total
Pretoria	2001	27 (9%)	282 (91%)	309
Wits	2001	140 (18%)	594 (82%)	734
Medunsa	2001	123 (61%)	80 (39%)	203
<b>Total</b>	<b>2001</b>	<b>290</b>	<b>956</b>	<b>1246</b>

For the sample of institutions depicted in Figure 3.21, the ratio of African:White professionals in the Instruction/Research category for 2001 is 17:83, with more African staff (61%) at Medunsa, and poorly represented at the University of Pretoria (9%) and at the University of Witwatersrand (18%).

### *3.4.2.2 Gender trends in staff profiles*

Gender inequities in higher education are fundamentally historic in nature. Figures for 1995, for those in possession of a matriculation qualification and/or diploma and/or degree, are 16% African women, 20% African men, 63% White women and 71% White men. Figures for Coloureds and Indians lie between these extremities (Budlender 1998:27). These figures to a large extent also account for the under-representation, lower qualifications and lower research output of certain categories of staff. These disparities have a direct impact on the achievement of employment equity in the higher post levels that require a degree or diploma as a minimum entry requirement into positions in institutions of higher education.

SAPSE data does not provide for a cross-tabulation by race and gender. An analysis of the staff profile by gender depicts serious inequities, and although the number of women in academia has increased, it has been extremely slow.

The student profile has changed but not the staff profile – we only have one Black Head of Department. We're only starting with employment equity, but it's just talk. Where there is change you find that it's Black men and White women but not Black women.

The statistics in Table 3.22 confirm that the higher the level in the institutional hierarchy, the lower the representation of women. There are slightly more female than male staff at the level of junior lecturer, but there is a significantly larger number of men than women in the Instruction/Research category.

**TABLE 3.22: HEADCOUNT OF UNIVERSITY INSTRUCTION/ RESEARCH PROFESSIONALS WITH PERMANENT APPOINTMENT BY GENDER AND RANK FOR 1997 IN INSTITUTIONS WITH MEDICAL SCHOOLS**

Type	University	PROFESSOR		ASSOCIATE PROFESSOR		SENIOR LECTURER		LECTURER		JUNIOR LECTURER		TOTAL	
		M	F	M	F	M	F	M	F	M	F	M	F
HDI	Medunsa	45	5	18	5	75	34	92	74	7	7	237	125
	Transkei	28	6	0	0	31	10	52	49	18	23	129	88
HAI	UCT	142	8	139	27	178	56	71	70	9	11	539	172
	Free State	128	10	53	13	108	40	58	72	13	13	360	148
	Pretoria	317	26	111	32	288	152	115	176	5	16	836	400
	Witwatersrand	140	17	67	24	171	71	207	183	58	60	643	5
	Stellenbosch	165	7	66	6	175	58	106	97	5	19	516	187

(Source: 1997 SAPSE Table 3.5. Figures for the University of Natal were not provided)

In this study, statistics of staff in the Instruction/Research category in faculties of medicine are explored according to rank, race and gender to gain greater insight into staff trends in academic medicine, and presented in Table 3.23.

**TABLE 3.23: HEADCOUNT OF INSTRUCTION/ RESEARCH PROFESSIONALS  
WITH PERMANENT APPOINTMENT BY GENDER AND RANK  
FOR 2001 IN MEDICAL SCHOOLS**

University	PROFESSOR		ASSOCIATE PROFESSOR		SENIOR LECTURER		LECTURER		JUNIOR LECTURER		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
Pretoria	32	5	8	10	78	68	52	99	1	18	171	200
Medunsa	26	4	8	4	47	28	66	51	0	0	147	87
Wits	34	5	24	2	89	45	148	123	52	33	347	208
<b>TOTAL</b>	<b>92</b>	<b>14</b>	<b>40</b>	<b>16</b>	<b>214</b>	<b>141</b>	<b>266</b>	<b>273</b>	<b>53</b>	<b>51</b>	<b>665</b>	<b>495</b>

From Table 3.23 it is seen that in the Faculties of Medicine for the sample of institutions:

- There are more males than females at the University of the Witwatersrand and the Medical university of Southern Africa but more women than men at the University of Pretoria, due to their majority at the levels of lecturer and junior lecturer in the Instruction/Research category
- The higher the rank, the greater the inequities in terms of gender

As there are few statistics available of the staff profiles in terms of race and gender in the medical faculties, this study attempts to provide a snapshot view of current staff inequities by presenting statistical data by race and gender of the staff profiles in medical schools in Table 3.24 and presents the headcounts of full-time staff in academic hospitals by rank, race and gender for 2001 in the sample of institutions. Table 3.24 to demonstrate the absolute necessity to analyse gender trends in terms of race, particularly in the South African context.

**TABLE 3.24: HEADCOUNT OF INSTRUCTION/ RESEARCH PROFESSIONALS  
WITH PERMANENT APPOINTMENT BY RACE, GENDER AND  
RANK FOR 2001 IN MEDICAL SCHOOLS**

University/Race	PROFESSOR		ASSOCIATE PROFESSOR		SENIOR LECTURER		LECTURER		JUNIOR LECTURER		TOTAL	
	M	F	M	F	M	F	M	F	M	F	M	F
<b>PRETORIA</b>												
African	3	0	1	0	4	0	4	11	0	6	12	17
White	29	5	7	10	73	67	46	87	0	11	155	180
Indian	0	0	0	0	1	1	2	1	1	0	4	2
Coloured	0	0	0	0	0	0	0	0	0	1	0	1
<b>Sub-total</b>	<b>32</b>	<b>5</b>	<b>8</b>	<b>10</b>	<b>78</b>	<b>68</b>	<b>52</b>	<b>98</b>	<b>1</b>	<b>18</b>	<b>171</b>	<b>200</b>
<b>WITS</b>												
African	0	0	0	0	9	1	22	11	2	30	33	42
White	29	4	18	2	57	37	90	96	21	25	215	164
Indian	4	1	5	0	16	6	33	12	14	3	72	22
Coloured	1	0	0	0	2	1	3	0	2	1	8	2
<b>Sub-total</b>	<b>34</b>	<b>5</b>	<b>23</b>	<b>2</b>	<b>84</b>	<b>45</b>	<b>148</b>	<b>119</b>	<b>39</b>	<b>59</b>	<b>328</b>	<b>230</b>
<b>MEDUNSA</b>												
African	12	3	1	2	15	13	46	31	0	0	74	49
White	12	1	7	2	18	13	12	15	0	0	49	31
Indian	2	0	0	0	13	2	8	5	0	0	23	7
Coloured	0	0	0	0	1	0	0	0	0	0	1	0
<b>Sub-total</b>	<b>26</b>	<b>4</b>	<b>8</b>	<b>4</b>	<b>47</b>	<b>28</b>	<b>66</b>	<b>51</b>	<b>0</b>	<b>0</b>	<b>147</b>	<b>87</b>
<b>TOTAL</b>	<b>92</b>	<b>14</b>	<b>39</b>	<b>16</b>	<b>209</b>	<b>141</b>	<b>266</b>	<b>268</b>	<b>40</b>	<b>77</b>	<b>646</b>	<b>517</b>

From Table 3.24 it can be seen that:

- There are no African women at the level of Professor or Associate Professor at the HAIs but five women in these levels at the HDI. The HDI appears to provide greater access than HAIs to African women in this category in all levels higher than junior lecturer
- The HDI also provides greater access than HAIs to African men in all senior posts but the historically Afrikaans-medium HAI (UP) has four African men at the levels of Professor and Associate Professor

and the English-medium HAI has no African men at these levels

- Women generally are under-represented in all levels higher than a lecturer, the under-representation of Black women is substantially greater

**TABLE 3.25: HEADCOUNTS OF FULL-TIME STAFF IN ACADEMIC HOSPITALS BY RACE AND GENDER FOR 2001 IN THE SAMPLE OF INSTITUTIONS**

Academic Hospital	Rank	African		Indian		Coloured		White		TOTAL	
		M	F	M	F	M	F	M	F	M	F
CHB	Chief Sp.	0	0	1	0	0	0	1	0	2	0
GR		12	1	2	0	1	0	9	0	24	1
PA		0	0	0	0	0	0	12	1	12	1
JG		0	0	3	2	0	0	14	0	17	2
<b>Sub-total</b>		<b>12</b>	<b>1</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>36</b>	<b>1</b>	<b>55</b>	<b>4</b>
CHB	Principal Sp.	0	1	9	2	0	0	6	4	15	7
GR		5	1	2	0	0	0	2	1	9	2
PA		0	0	0	0	0	0	14	1	14	1
JG		0	0	1	0	0	0	4	18	5	18
<b>Sub-total</b>		<b>5</b>	<b>2</b>	<b>12</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>26</b>	<b>24</b>	<b>43</b>	<b>28</b>
CHB	Senior Sp.	3	2	9	3	0	0	28	8	40	13
GR		5	5	5	0	0	0	6	2	16	7
PA		0	0	1	1	0	0	15	14	16	15
JG		2	0	5	0	0	1	26	13	33	14
<b>Sub-total</b>		<b>10</b>	<b>7</b>	<b>20</b>	<b>4</b>	<b>0</b>	<b>1</b>	<b>75</b>	<b>37</b>	<b>83</b>	<b>49</b>
CHB	Sp./CMO	3	2	5	5	1	0	16	15	25	22
GR		22	4	7	2	1	0	6	2	36	8
PA		2	0	1	0	0	0	11	13	14	13
JG		3	2	3	0	0	0	21	11	27	13
<b>Sub-total</b>		<b>30</b>	<b>8</b>	<b>16</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>56</b>	<b>41</b>	<b>104</b>	<b>56</b>
CHB	Pr. MO	2	2	22	3	0	0	23	17	47	22
GR		13	7	5	0	0	0	13	7	31	14
PA		1	0	0	0	0	0	5	11	6	11
JG		7	0	4	1	0	0	13	15	24	16
<b>Sub-total</b>		<b>23</b>	<b>9</b>	<b>31</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>54</b>	<b>50</b>	<b>108</b>	<b>63</b>
CHB	SMO	2	1	5	2	0	0	4	6	11	9
GR		7	1	2	2	0	0	0	1	9	4
PA		1	0	0	1	0	0	4	8	5	9
JG		0	0	1	0	0	0	0	0	1	0
<b>Sub-total</b>		<b>10</b>	<b>2</b>	<b>8</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>15</b>	<b>26</b>	<b>22</b>



**TABLE 3.16: ENROLMENT OF FEMALE REGISTRARS BY RACE FOR 1996**

	TOTAL	MALE	FEMALE (%)	AFRICAN FEMALE(%)	COLOURED FEMALE(%)	INDIAN FEMALE(%)	WHITE FEMALE(%)
UCT	367	266	101 (27.5)	5 (1.4)	3 (0.8)	5 (1.4)	88 (24.0)
Stellenbosch	251	196	55 (22.0)	1 (0.4)	2 (0.8)	1 (0.4)	51 (20.3)
Medunsa	312	252	60 (19.2)	22 (7.0)	1 (0.3)	6 (1.9)	31 (9.9)
Pretoria	290	214	76 (26.2)	1 (0.3)	1 (0.3)	2 (0.6)	72 (24.8)
Natal	284	211	73 (25.7)	9 (3.2)	0	44 (15.5)	14 (4.9)
Free State	183	140	43 (23.5)	0	0	1 (0.5)	42 (23.0)
TOTAL/AV.	1687	1279	408 (24.2)	38 (2.3)	7 (0.4)	59 (3.5)	298 (17.7)

(Kane-Berman 2000:7)

Information on headcounts of registrars by race, gender, nationality and disciplines for 2001 was requested both from medical schools (Table 3.17) and academic hospitals (Table 3.18) to increase the reliability and validity of these findings.

**TABLE 3.17: HEADCOUNTS OF REGISTRARS IN MEDICAL SCHOOLS BY RACE AND GENDER FOR 2001**

University	African		White		Coloured		Indian		Total Male (M)	Total Female (F)	TOTAL
	M	F	M	F	M	F	M	F			
Pretoria	7	7	142	54	0	0	3	2	152	63	215
Wits	50	32	107	101	5	3	70	28	232	164	396
Medunsa	67	56	10	6	0	0	6	5	83	67	150
TOTAL	124	95	259	161	5	3	79	35	467	294	761

Table 3.17 demonstrates clearly that race trends at the postgraduate level are similar to those at the undergraduate level of MBChB (cf. Tables 3.3 –3.6) and that the HDI trains 56% of all African registrars although it has only 19.7% of all training posts, while the HAIs have 80.3% of all training posts and 66% of these posts are occupied by White registrars and 25% of the

registrar posts at the University of the Witwatersrand are occupied by Indian registrars. Females constitute 39% of all registrar posts but it is important that this be analysed in terms of area of specialisation.

Table 3.18 represents the data obtained from the Academic Health Complexes and confirms the trends reflected in Table 3.17.

**TABLE 3.18: HEADCOUNT OF REGISTRARS IN SAMPLE OF ACADEMIC HOSPITALS BY RACE AND GENDER FOR 2001**

Academic Hospital	Medical Faculty	African		Indian		Coloured		White		TOTAL	
		M	F	M	F	M	F	M	F	M	F
Pretoria Academic	<i>Pretoria</i>	3	5	2	2	0	0	94	33	99	40
Ga-Rankuwa	<i>Medunsa</i>	67	56	6	5	0	0	10	6	83	67
Chris Hani Baragwanath	<i>Wits</i>	16	8	25	12	3	1	38	35	82	56
Johannesburg General	<i>Wits</i>	15	6	24	12	0	1	43	28	82	47
<b>TOTAL</b>		101	75	57	31	3	2	185	102	346	210

### 3.4.2 Staff employment trends in medical schools and universities

In comparison to the equity shifts and trends in universities and medical schools, the staff equity position, for various reasons, is transforming at a very slow rate, despite enabling mechanisms, such as the *Employment Equity Act* (S.A. 1998a). This study is confined to the Instruction/Research category. From 1996 to 1998 the headcount of staff in this category remained fairly constant (Cooper & Subotzky 2001:201), although the student population increased dramatically. There are serious imbalances in terms of race and gender in the Instruction/Research category, and there are no available statistics for people with disabilities in these categories.

Colborn et.al. (1995:260) in a study on *The Changing Medical Student Population at the University of Cape Town*, report a lack of congruence

From the statistical data presented in Tables 3.3 to 3.8 the following conclusions are drawn:

- From 1994 to 2001, there has been a steady increase in the enrolment of African students (29% to 45%) and a steady decrease in the enrolment of White students (46% to 32%) in the eight Faculties of Medicine
- From 1994 to 1998, the increase in the number of Indian and Coloured students in medicine has been erratic due to shifts in enrolment patterns in particular institutions
- The final year enrolment figures for African students in the HAIs, except the University of Cape Town are far lower than their admission headcounts, pointing to a high attrition rate of African students in these institutions
- While across all universities there has been a decrease in African student enrolments in HDIs from 1988 to 1998 (cf. Table 3.1), there has been a general increase in African student enrolment in medical schools in HDIs
- HDIs provide the greatest access into medicine to African students and Afrikaans HAIs the least access, although they provide the greatest access to White students into the MBChB programme. For example there were 487 African students in HDIs 2001, as compared to 82 in Afrikaans medium HAIs and 144 in English medium HAIs
- The most dramatic increases in African student enrolment among all universities from 1988 to 1998 has been at the University of Pretoria,

from 0% to 23%, and at the University of the Free State, from 1% to 36%, while the least significant shift for the same period was at the University of Stellenbosch, from 0% to 5% (cf. Table 3.2). Similarly, in medical schools, the most dramatic increases in African student enrolment from 1994 to 2001 has been at the University of Pretoria, from 4% to 19%, and at the University of the Free State, from 2% to 44%, whilst the least change occurred at the University of Stellenbosch, from 0% to 2%, equivalent to an increase from no African students in 1994 to four African students in 2001

- There is a disproportionate increase by race between HAIs and HDIs in final year enrolments, with only 77 African students in both Afrikaans and English medium HAIs in 2001, as compared to 306 African students in HDIs
  
- In terms of overall admissions into medical schools for 2001, there is a large over-representation of White students (45%) and Indian students (32%), a serious under-representation of African students (32%) and a more acceptable representation (8%) of Coloured students
  
- A comparison of Tables 3.3 and 3.4 with Tables 3.5 to 3.8 support the findings by Lehmann et.al. (2000:8-9) who comment on the unreliability of attrition rates and point out that while most universities keep data on student drop-outs, figures include failing of courses, internal or external transfers, financial and other personal reasons. In terms of attrition rates in medical schools, the study concludes that attrition rates in the pre-clinical years are higher than in the clinical years, and that the attrition rates among Black students, particularly among African students, are substantially higher than

among White students and vary dramatically

Enrolment figures in HEIs indicate that HDIs and Unisa continue to provide the greatest access for African students into higher education (cf. Table 3.1) and, historically, English-medium HAIs were generally considered to be more liberal than the Afrikaans-medium HAIs (Mouton & Muller 1998: 9) as they had admitted Black students during the decades that the latter institutions had not (cf. Tables 3.1 and 3.2). However, current figures show that Black enrolment at the Afrikaans-medium HAIs exceeds that of the English-medium HAIs (cf. Table 3.1). Yet the distribution of the 713 African students admitted to medical schools in 2001, as depicted in Table 3.9 indicates that approximately 68% of the African students are in HDIs, 11% in historically Afrikaans medium HAIs and 20% in historically English medium HAIs, and when the distribution by race of medical students in training is compared to this demographic profile, it is evident that the number of African students admitted to medicine by HAIs is extremely low.

**TABLE 3.9: HEADCOUNT AND PERCENTAGE DISTRIBUTION OF AFRICAN ADMISSIONS TO MEDICAL SCHOOLS FOR 2001**

	No. of African Students	% of Total African students admitted
Free State	44	6.17
Pretoria	34	4.77
Stellenbosch	4	0.56
Transkei	75	10.52
Medunsa	284	39.83
Natal	128	17.95
Cape Town	62	8.7
Wits	82	11.5
<b>TOTAL</b>	<b>713</b>	<b>100</b>

(Source: DoH 2001b:1-4)

Tables 3.10.1 – 3.10.8 compare the university student profiles to the Faculty of Medicine profiles by race for each institution. The only institution in which there is a significant correlation between the university and faculty of medicine profiles by race is Medunsa, and this is on account of Medunsa being a specialised health professions training institution having medicine as its largest faculty. The medical faculty of the University of Natal admits large numbers of African and Indian students due to its admissions policy and this accounts for the discrepancy between its institutional and faculty student profiles. At the Faculties of Medicine of the University of Cape Town and the University of Stellenbosch, the numbers of Coloured and Indian students are slightly higher than their representation in the university profiles. However, at the faculties of medicine in the Universities of the Free State and Pretoria, the numbers of White students admitted is significantly higher than their representation in the institutional profiles, and Coloureds and Indians are represented in slightly higher numbers than in the institutional profiles. For all other medical schools there is a low correlation between the racial composition of students admitted to a University and its Faculty of Medicine.

As experienced nationally, feminisation of the medical profession is a growing trend in South African medical schools (SAMJ 1997:1513). It has emerged as a legitimate concern at the level of the Committee of Medical Deans in 2000 that requested a position paper (cf. Kane-Berman 2000) be prepared in response to the increase in first year female enrolments from 48.3% in 1996 to 56.3% in 2000. Questions raised were whether admitting a majority of female students would have an impact on the total number of doctors that need to be trained in South Africa, whether this would impact on the number of people entering different areas of specialisation, what the positive and negative consequences would be, whether the Deans should intervene in a way that would ensure that a minimum proportion of entrants are male, and if so, what should this proportion be, as well as to understand the legal implications and requirements in terms of gender equity. Underpinning these concerns is the constitutional right to access to health care services by increasing the medical workforce in especially peri-urban and rural areas as well as the need to optimise returns on the long and costly investment in training medical doctors.

#### ***3.4.1.3 Trends in postgraduate training in medical schools***

Postgraduate enrolments are particularly important in medical education and training as postgraduate study is a prerequisite for specialisation and employment in clinical disciplines in medical schools. Historically, Blacks had fewer opportunities to train as specialists, and women are for various reasons segregated in particular fields of specialisation (cf. 2.2.3). Market forces play a role in the attractiveness of an area of specialisation and it is anticipated that areas such as radiology, in which there are few Black specialists, will become increasingly popular. There are areas of specialisation, such as plastic surgery, in which Blacks show little interest. Research is needed into specialisation trends as reasons offered during the interviews for this trend ranged from

“shying away from the complications of a Black skin and keloid formations” to the fact that “Black people had not reached that degree of vanity.” Currently, access to registrar training posts is controlled by the DoH through the professional boards of the HPCSA, both as a means of aligning specialisation to the national health care strategy and of assuring quality of postgraduate training.

An investigation into *Postgraduate Training of Medical Doctors in South Africa* (DoH 2000b) provides findings that are of direct relevance to this study, namely:

- Motivations for registrar posts were often based on the service needs in an institution than on the national need for specialists in specific disciplines (DoH 2000b:6)
- Postgraduate education and training should conform to the fundamental principles adopted by government, that is equity, democratisation, representivity, pursuit of quality, capacity development, effectiveness, efficiency and public accountability (DoH 2000b:7)
- Posts are filled by provincial authorities and due to the different agreements between the provinces and the medical schools there is no uniform process. As a result vacant posts differ substantially amongst medical schools (DoH 2000b:10)
- It takes four to five years to qualify as a specialist and the pool is affected by losses through causes such as retirement, death, emigration and career change (DoH 2000b:10)



- Ultimately registrars should represent the demographics of the country, therefore affirmative action appointments should be instituted with faculties actively recruiting Black undergraduate and postgraduate students. It is stated in Phase II of the report that “correction of race and gender discrepancies should receive high priority and reported on annually” (DoH 2000b:6)

The report points out the urgent need address the lack of or scarcity of reliable information that could serve as a basis for decision-making and therefore, “An appeal has already been made to the HPCSA to obtain information regarding race, gender and citizenship of all persons registered with the council, for research purposes and for human resource planning” (DoH 2000b:12). It is important to note the recommendations in this study concerning improving the reliability and validity of information from the HPCSA database (cf. 3.4.2.3). The data presented in Table 3.15 to Table 3.17 contributes to this expressed need for information.

The total number of female registrars by race is presented in Table 3.16 for medical schools, with the exception of the Universities of Transkei and Witwatersrand that did not provide information (Kane-Berman 2000:7). From Table 3.16 it can be seen that for 1996 there were more male (75.8%) than female registrars, despite the fact that in 1996 women constituted 48.3% of admissions (cf. 3.13) and 45.5% of all enrolments (cf. Table 3.14). Table 3.16 also shows a serious under-representation of African female registrars (2.3%) and an over-representation of White female registrars (17.7%). Another international and national concern is that female registrations are not increasing in certain surgical disciplines. This could result in a shortage of specialists in certain areas, such as surgery (cf. Table 3.27).

between the teaching population and the student population in terms of race and gender, where, of the approximately 220 consultant staff at Groote Schuur Teaching Hospital in 1995, 88% were men and 96% were White. Equity in the staff profile has important implications for role models, mentoring and curriculum development (Lehmann et. al. 2000:12).

However, unlike medical school student profiles, analyses of medical school staff profiles by race and gender is not available and forms an important area for investigation in this study. The pool of qualified professionals who are members of designated groups in certain areas of specialisation is extremely low (cf. Table 3.27). It is also difficult to attract and retain staff as many find private practice or international employment more financially lucrative (DoH n.d. 32; Pick et. al. 2001:55). The majority of staff in medical faculties is on joint appointment with both the university and the provincial department of health. In the event of cost cutting by either the province or the institution, vacant posts are commonly frozen (DoH 2000b:16). In addition, recently, the concession granted to members of the academic staff fraternity at medical schools to conduct remunerative work outside the public service was withdrawn when it was found that the provision was being abused. There are currently moves by the DoH to have this concession reinstated as a means of retaining professionals in academic medicine ( DoH 2001b:3).

#### *3.4.2.1 Staff trends by race*

Historically, academic staff in HEIs was predominantly White men, even in the HDIs. For example, in 1976 in HDIs there were 9 of the total of 105 professors and 14 of the 146 senior lecturers who were Black (Badat 1994: 31). By 1997, 55% of academics in HDIs were African but at Vista and Medunsa more than two-thirds of the staff were White. In HAIs, 96% of academics were White (MacGregor 1997:7). Table 3.19 depicts the

proportional composition by race of university Instructional/Research staff in 1998 and shows that only in HDIs is the representation of Africans greater than that of Whites. Data for historic institutional type by language shows that the staff profiles of Afrikaans HEIs show greater race inequities than English HEIs in the Instructional/ Research category in 1998 (cf. Table 3.19).

Statistics for African and White Instruction/Research and Executive/Management Staff for 1996 and 1999, for the sample of institutions in this study, are presented in Table 3.20 and serve as baseline information.

From Table 3.20 it can be seen that there has been generally a small increase in the number of Blacks and a small decrease in the number of Whites from 1996 to 1999 in both the Institutional/Research and Executive Management categories. The representation of Blacks in both the Instruction/Research and Executive/Management categories remains at below 10% for all universities with medical schools, except Medunsa and Wits.

According to Beale (1997), women constituted 3% of all professor posts and 18% of senior and other lecturing posts in 1948. According to the SAPSE data, in 1997 women constituted only 10% of all professor posts, 22% of associate professor posts and 44% of senior and other lecturing posts. The rate of progress in achieving greater gender equity over a period of three decades in academia is very slow in comparison to the achievement of greater race equity.

Based on the 1998 SAPSE data, Subotzky (1999a:8) confirms that the majority of women in higher education are found in those categories traditionally associated with women, such as administration and clerical work, and women are greatly under-represented in the executive management and instruction/research categories. In 1998 in universities, there were 81% men as compared to 19% women in the executive/managerial categories in higher education and women constituted 35% of the instruction/research staff.

According to Subotzky (1999a:8), although there is an increase in the number of women in academia, they lag behind their male colleagues with regard to rank, highest qualifications and research output. In 1997, academic staff in HDIs were less qualified than staff in HAIs and 68% of the academics at HDIs were male (MacGregor 1997:7).

Cloete & Bunting (2000:17) examine recent staff profiles of HEIs and conclude that although there have been some improvements in certain institutions, with more Blacks being appointed to senior and management positions, especially in the HDIs, and a small increase in the number of women appointed in the Instruction/Research category, there has been little change in terms of equity in staff profiles. This view was confirmed by an African female respondent in a Faculty of Medicine:

CHB	MO	9	9	14	7	1	0	11	9	35	25
GR		8	9	0	1	0	0	0	0	8	10
PA		3	6	2	0	1	0	9	19	15	25
JG		3	6	6	7	0	0	6	11	15	24
<b>Sub-total</b>		<b>23</b>	<b>30</b>	<b>22</b>	<b>15</b>	<b>2</b>	<b>0</b>	<b>17</b>	<b>39</b>	<b>64</b>	<b>84</b>

**Key to Table 3.25:**

CHB: Chris Hani Baragwanath

PA: Pretoria Academic

JG: Johannesburg General

GR: Ga-Rankuwa

Sp.: Specialist

CMO: Chief Medical Officer

SMO: Senior Medical Officer

MO: Medical Officer

Pr. MO: Principal Medical Officer

The headcounts of full-time staff in 2001 in academic hospitals by broad areas of specialisation by race and gender is shown in Table 3.25 and represents the available and potential pool of human resources for training medical doctors.

From Table 3.25 it can be seen that:

- Ga-rankuwa Hospital, attached to a predominantly African HDI is the only hospital with Africans in Chief Specialist posts and generally the majority of African men and women in professional posts among the three hospitals
- The number of women and Africans is greater in the lower levels of the hierarchy than in the upper levels. It is only in the most junior category of Medical Officer are the number of females greater than the number of males but even at this level the number of Whites exceeds the number of Africans

- There is similarity in the race trends of academic health complexes with regard to their student profiles, their staff profiles and the staff profiles of the academic hospitals. For example, the Faculty of Medicine of the University of Pretoria has the lowest number of Africans and the largest number of Whites in its student profile, its staff profile and in its training hospital, the medical school of the University of Witwatersrand shows a similar trend in relation to the participation of Indians and the Medical University of Southern Africa displays this trend in relation to Africans (cf. Table 3.4; Table 3.24; Table 3.25)

**TABLE 3.26: HEADCOUNTS OF FULL-TIME STAFF IN 2001 IN SAMPLE OF ACADEMIC HOSPITALS BY BROAD AREAS OF SPECIALISATION AND RACE AND GENDER**

Specialisation	African		Indian		Coloured		White		Total	
	M	F	M	F	M	F	M	F	M	F
Anaesthesiology	11	14	7	2	1		48	36	67	52
Cardiology	6	2					2		8	2
Cardiothoracic Surgery	10		1		1		5		17	
Casualty	3	1					2		5	1
Clinical Pharmacology							2	1	2	1
Community Health	2	3					5		7	3
Dermatology	2	4	1				2	2	5	6
Diagnostic Radiography	6	4		2				3	6	9
Family Medicine	4	3	4					2	8	5
Intensive Care	4	3					2	2	6	5
Internal Medicine	14	13	24	6		1	37	21	75	41
Medical Community Service		1					1	3	1	4
Nephrology			1	1			1		2	1
Neurology	2	1	3				9	2	14	3
Neurosurgery	7		5				7		19	
Nuclear Medicine	1	2	3					3	4	5
Obstetrics & Gynaecology	10	10	4	6			17	11	31	27
Oncology							6	7	6	7
Ophthalmology	2	2	6				14	6	22	8
Orthopaedics	19	3					35	5	54	8

Otorhinolaryngology	4		3				3	3	10	3
Paediatrics	12	17	5	6	1	1	14	28	32	52
Pathology-Anatomical	4	3					4	7	8	10
Pathology-Chemical	1	3	1	1			3	1	5	5
Pathology-Haematological				1			5	2	5	3
Pathology-Microbiological		1	1	2			3	3	4	6
Pathology-Virology							1		1	
Plastic Surgery & Burns	1	1	1				12	1	14	2
Psychiatry	4	5	3	2			1	6	8	13
Radiology	3	1	3	6			9	13	15	20
Surgery	20	6	4				34	4	58	10
Urology	5	2	2		1		7	1	15	3
<b>TOTAL</b>	<b>157</b>	<b>105</b>	<b>82</b>	<b>35</b>	<b>4</b>	<b>2</b>	<b>291</b>	<b>173</b>	<b>534</b>	<b>315</b>

Table 3.26 depicts the full-time staff profile, including Registrars by race, gender and area of specialisation for three academic training hospitals in the sample, namely Ga-Rankuwa, Chris Hani Baragwanath and Pretoria Academic. The information from Johannesburg General was not available at the time of completion of the study.

The data presented in Table 3.26 may be used to verify some of the perceptions of interviewees and international trends discussed in this study, such as:

- Women prefer specialities such as Dermatology and Paediatrics
- There are few women in Surgery and Orthopaedics
- Plastic Surgery is not a popular choice of specialisation among Africans

### ***3.4.2.3 Profiles of medical practitioners by race and gender***

There is a lack of empirical evidence to assess the nature of current race and gender inequities. Statistics provide valuable understanding of shifts, trends and future requirements regarding training of medical doctors at undergraduate and postgraduate levels, and equity management planning by DoH, DoE, universities and their faculties of medicine. For example, the DoH purportedly bases its estimate of the number of students that need to be admitted annually to undergraduate training and to different areas of postgraduate registrar training on projected norms. However, available data is inaccurate and the construction of a central database to provide accurate current data is a strategic priority of the DoH (DoH n.d: 6;12).

Therefore, in this study statistics were collected from a variety of sources, namely the human resources departments of the university, the academic hospitals and the HPCSA.

The HPCSA has a comprehensive database that provides useful information on areas of specialisation, community service and postgraduate training. However, the information in terms of race and gender is incomplete, especially in terms of the category *race* that was, in a large number of cases, not completed. Although in some instances this could have been due to indifference on the part of respondents, it was reported that there is resistance from a significant number of medical doctors, particularly White medical doctors, in providing information about race. Forms received commented on the “irrelevance of race in the new South Africa.” An example of mischievous reporting and covert resistance was described where a person, in the space provided on the form requesting detail about race wrote, “110 metres hurdles.” The HPCSA would need to explicitly state that information about race and gender would be used for statistical and research purposes only.



Other refinements are suggested, such as indicating whether the individual is still in active practice and the location of clinical practice. The current limitation is that non-practicing clinicians or those practicing overseas are included on the register of the HPCSA as medical doctors because they have paid their annual registration fees. There is therefore a lack of understanding of the number of doctors engaged in active clinical practice in South Africa and thus, available data cannot be used to track shifts and trends, such as emigration patterns. Also, the address stated for correspondence does not necessarily indicate the location of practice, either within or outside South Africa.

Despite these limitations, the data analysed in terms of race and gender, based on information received by the HPCSA, provides a useful basis for findings in this study. Total headcount registrations by race and gender in the categories of community service, postgraduate study, general practice and all specialist and sub-specialist categories are presented in Table 3.27. The potential value of these statistics is reduced due to the large number of responses in the *Blank/Unknown* category. Further, the cumulative total includes a category *European*, completed by those medical practitioners probably having emigrated from Europe and not having South African citizenship. This category has not been included as it represents an extremely small number of medical practitioners (MPs), but has been included in the total in Table 3.27. Categories marked as *closed* indicate those in which no new registrations are received.

Despite the unreliability of the data presented in Table 3.27, the information should be of interest to stakeholders in equity considerations. The data does appear to provide some confirmation of the serious inequities in terms of race and gender in various specialisation categories. However, certain important conclusions can be drawn from Table 3.27, namely:

- In all specialities and sub-specialities, except some specialities in Paediatrics and in two closed categories, there are significantly more men than women
- In most specialities and sub-specialities, there appears to be more White men than any other group by race and gender
- In many specialities and sub-specialities, there appears to be more White women than African women or men
- Currently, there appears to be more Whites than Blacks in community service, with White men being in the majority
- Men are entering postgraduate studies in significantly greater numbers than women

ALL MPs	AFRICAN		WHITE		INDIAN		COLOURED		BLANK/UNKNOWN		TOTAL	
	F	M	F	M	F	M	F	M	F	M	F	M
Pathology	0	0	1	20	0	0	0	0	2	43	3	63
Path Anatomical	0	0	18	34	2	3	1	2	46	94	67	133
Path Chemical	0	1	5	12	2	0	0	0	17	44	24	57
Path Clinical	0	0	4	16	0	0	0	1	4	45	8	62
Path Forensic	0	3	6	6	0	6	0	0	6	16	12	31
Path Haematology	0	1	6	8	0	0	0	0	25	24	31	33
Path Microbiological	0	0	5	14	1	1	0	0	20	41	26	56
Path Virology	0	0	2	5	0	0	0	0	7	3	9	8
Physical Medicine (closed)	0	0	3	2	0	0	0	0	3	1	6	3
Plastic & Reconstructive Surgery	0	0	0	35	0	3	0	0	5	100	5	138
Preventative Medicine (closed)	0	0	2	7	0	0	0	0	1	15	3	22
Psychiatry	2	8	27	72	4	12	1	2	112	225	146	319
Radiation Oncology	0	2	9	22	0	1	1	0	30	57	40	82
Surgery	1	12	5	120	1	25	0	0	17	431	24	588
Therapeutic Radiology (closed)	0	0	0	0	0	0	0	0	1	1	1	1
Urology	0	3	0	45	0	4	0	0	2	136	2	188
Subspec Anaesthesiology Critical Care	0	0	0	1	0	0	0	0	2	15	2	16
Subspecial Community Health/Occup H	0	1	2	1	0	0	0	0	2	5	4	7

ALL MPs	AFRICAN		WHITE		INDIAN		COLOURED		BLANK/UNKNOWN		TOTAL	
	F	M	F	M	F	M	F	M	F	M	F	M
Pathology	0	0	1	20	0	0	0	0	2	43	3	63
Path Anatomical	0	0	18	34	2	3	1	2	46	94	67	133
Path Chemical	0	1	5	12	2	0	0	0	17	44	24	57
Path Clinical	0	0	4	16	0	0	0	1	4	45	8	62
Path Forensic	0	3	6	6	0	6	0	0	6	16	12	31
Path Haematology	0	1	6	8	0	0	0	0	25	24	31	33
Path Microbiological	0	0	5	14	1	1	0	0	20	41	26	56
Path Virology	0	0	2	5	0	0	0	0	7	3	9	8
Physical Medicine (closed)	0	0	3	2	0	0	0	0	3	1	6	3
Plastic & Reconstructive Surgery	0	0	0	35	0	3	0	0	5	100	5	138
Preventative Medicine (closed)	0	0	2	7	0	0	0	0	1	15	3	22
Psychiatry	2	8	27	72	4	12	1	2	112	225	146	319
Radiation Oncology	0	2	9	22	0	1	1	0	30	57	40	82
Surgery	1	12	5	120	1	25	0	0	17	431	24	588
Therapeutic Radiology (closed)	0	0	0	0	0	0	0	0	1	1	1	1
Urology	0	3	0	45	0	4	0	0	2	136	2	188
Subspec Anaesthesiology Critical Care	0	0	0	1	0	0	0	0	2	15	2	16
Subspecial Community Health/Occup H	0	1	2	1	0	0	0	0	2	5	4	7
Subsp Medicine/Cardiology	0	2	1	27	0	5	0	0	7	105	8	139

Subsp Medicine Clinical Haematology	0	0	0	1	0	0	0	0	1	7	1	8
Subspec Medicine/Critical Care	0	0	0	0	0	0	0	0	1	4	1	4
Subsp. Medicine/Endocrinology	0	0	2	3	0	2	0	1	3	8	5	14
Subs Medicine Gastroenterology	0	2	0	8	0	3	0	0	2	46	2	59
Subsp Medicine/Geriatric Medicine	0	0	0	0	0	0	0	1	4	4	4	5
Subsp Medicine Medical Genetics	0	0	0	3	0	1	0	0	4	9	4	13
Subsp Medicine Medical Oncology	0	0	0	6	1	3	0	0	5	26	6	35
Subsp Medicine Nephrology	0	1	2	17	0	6	0	0	7	45	9	69
Subsp Medicine Pulmonology	0	1	4	4	2	1	0	0	7	16	13	22
Subsp Medicine/Rheumatology	0	0	1	1	0	0	0	0	4	18	5	19
Subsp Paeds Cardiology	0	0	0	0	0	0	0	0	0	2	0	2
Subsp Paeds Critical Care	0	0	0	0	0	1	0	0	2	3	2	4
Subsp Paeds Develop	0	0	0	1	0	0	0	0	0	2	0	3
Subsp Paeds Endocrinology	0	0	0	0	0	0	0	0	0	6	0	6
Subsp Paeds Medical Genetics	0	0	0	1	0	0	0	0	1	4	1	5
Subsp Paeds Medical Oncology	0	0	1	1	1	0	0	0	4	4	6	5
Subsp Paeds Neonatology	0	0	1	4	1	0	0	0	9	8	11	12
Subsp Paed Nephrology	0	0	0	0	0	1	0	0	0	0	0	1
Subsp Paeds Neurology	0	0	0	0	0	0	0	0	1	1	1	1
Subsp Paeds Pulmonology	0	0	0	0	0	0	0	0	0	6	0	6
Subsp Paeds Rheumatology	0	0	0	0	0	0	0	0	0	1	0	1
Subsp Paeds Pathology Haematology	0	0	0	0	2	0	0	0	3	5	5	5
Subsp Surgery Critical Care	0	0	0	4	0	0	0	0	1	3	1	7

ALL MPs	AFRICAN		WHITE		INDIAN		COLOURED		BLANK/UNKNOWN		TOTAL	
	F	M	F	M	F	M	F	M	F	M	F	M
Subsp Surgery Gastroenterology	0	1	0	6	0	1	0	0	0	19	0	27
Subsp. Surgery Paediatric Surgery	0	0	0	3	0	0	0	0	2	10	2	13
Subsp Surgery Vascular Surgery	0	0	1	11	0	1	0	0	0	20	1	32

### **3.4.3 Programme trends in medical schools and universities**

The Medical and Dental Professional Board (MDPB) of the HPCSA accredits universities to offer undergraduate and postgraduate medical education and training programmes based on the content of the programmes, the quality of the training facilities and the availability of consultants to train students. The HPCSA serves a variety of other roles, such as the registration of health practitioners and trainees, the enforcement of a code of professional conduct and the accreditation of programmes for continuous professional development (CPD) by awarding points in different categories as part of an endeavour to promote life-long learning of practicing clinicians. The HEQC is currently drawing up memoranda of understanding between itself and the professional bodies, such as the HPCSA, on the process of quality assurance.

The MDPB has the additional current responsibility of ensuring that medical curricula are in line with the outcomes-based approach required in terms of SAQA regulations that demands new methods of teaching and assessment. Medical schools are rethinking the traditional medical training course, with regard to content, assessment and length of programme. In addition, this new approach requires resources in terms of facilities, staff complements, staff training and materials development. If institutions, and national departments of health and education are facing financial constraints, decisions about the curriculum and teaching and learning practice are often based on economic rather than on educational principles. The impact of these changes on educationally disadvantaged students requires further investigation. While some institutions, such as Transkei and Pretoria, have selected a problem-based learning approach, others have selected a hybrid approach, the approach selected often being influenced by the availability of resources.

The traditional medical curriculum has its roots in its colonial history, and re-curriculation efforts are often met with resistance. Training consists of both theoretical and clinical exposure, but there is ambiguity about the most appropriate level at which clinical training should be introduced. All MBChB programmes place emphasis on general science courses, such as

Chemistry, Mathematics and Physics, in the first year of study to serve as a basis for later courses in medicine. The *White Paper on Science and Technology: Preparing for the Twenty-First Century* proposes the establishment of a National System for Innovation directed towards the development of problem-solving knowledge in recognition of the new forms of knowledge production. It states that:

*Traditional ways of producing knowledge within single disciplines and institutions are being supplemented by knowledge generated within various applied contexts. This is knowledge that is collaboratively created within multi-disciplinary and trans-disciplinary research programmes directed to specific problems identified within social and economic systems (DACST 1996: 6)*

In medical education and training this approach extends beyond research activities. Often students undertake ward rounds with a team of specialists who, on the basis of a shared multi-disciplinary understanding, make diagnoses and decide on treatment plans. The philosophy underpinning decisions of relevance in terms of content, teaching methodologies, training priorities and methods of assessment is important to analyse as ideological differences could account for the diversity in the provision of medical education and training.

There is also no consensus on the length of the programme as some institutions have opted for a reduction to a five-year curriculum, one is introducing a four-year postgraduate medical programme and others have chosen to maintain the six-year curriculum. The nature and length of the MBChB programme result in it being a very expensive programme and this has serious consequences for financially needy students, most of whom are Black, who accumulate high levels of financial debt and who are therefore not prepared to engage in postgraduate studies. There are also negative consequences for specialised institutions, such as Medunsa, that are unable to cross-subsidise their costly programmes by funding from other, less expensive courses.



Creating an institutional climate that is conducive to the academic success of members of designated groups in medical faculties is a difficult task as there are no quantitative indicators of success. However, a conducive academic environment that is free of harassment and unfair discrimination is a fundamental determinant of academic success.

Understanding the power dynamics associated with the dominant discourse of medical education and training provides insight into the different notions of excellence, efficiency, quality and equity as they currently exist.

### **3.5 CLARIFYING SHIFTS, TRENDS AND TRANSFORMATION INITIATIVES**

Current race and gender inequities in the student and staff profiles in higher education and in medical education and training demonstrate marked similarities and differences and point to the need for redress. It is however imperative that these inequities be examined within a broader analysis that includes historical, political and economic contextual considerations. For example, a staff profile by race in a particular institution and area of specialisation is influenced by factors such as private sector demands, the institutional climate, role model availability, training opportunities, service demands. Explication of the complexities and challenges facing the redress imperative are introduced in this study to generate a level of sensitivity that would move equity discussions beyond the statistical domain and explore strategies that address the underlying issues that make redress difficult.

The main cause of the manifested inequities is the long, entrenched and systematic application of the policy of apartheid that resulted in about 80% of the population being oppressed in every facet of their existence, such as economically, socially and educationally. According to the October household survey (1995), nearly a quarter (23%) of all African women and 16% of all African men, aged 25 years and older, had received no formal education at all, as compared to all White men and women having received some formal education. The lack of strong role models, deficient cultural

capital and lower incomes associated with unskilled work are highly likely to affect the access opportunities of many Black students to institutions of higher education, especially in the fields of science and technology. Two effects of direct relevance to this study are that the majority of the population continues to receive grossly inferior formal schooling and limited, substandard or in some cases, no access to health care services.

Severe and pervasive historically derived social inequities are acknowledged by the current government and there is a commitment to social redress, such as the establishment of a democratic, enabling legislative framework (cf. 3.3), but serious fiscal constraints in terms of the magnitude of the economic resources required to redress competing historic inequities impedes the rate of social transformation and influences decisions in, *inter alia*, higher education and public health. A case in point concerns the imminent announcement by the Ministry of Education concerning the re-landscaping of the higher education sector (DoE 2001a:82-84), which inevitably will influence equity in terms of access and the future of most HAIs and HDIs that have served different purposes historically. In 1992, 15% of students in HDIs were in the sciences, and postgraduate enrolments and made up only 5% of the total enrolments. In comparison, 40% of students in HAIs were in science programmes and 22% of their total enrolment was at the postgraduate level (MacGregor1997: 6-7). While HDIs provided the widest access to students in this period, HAIs contributed more to the development of high level and high demand skills and this continues to be the experience in terms of medical education and training (cf. 3.4.1.1).

HEIs differ in terms of their mission statements, notions of excellence, relevance, social responsibility and quality, as well as their understanding of equity, access and redress. A challenge facing the DoE is to realistically guide equity transformation in higher education effectively and efficiently, while simultaneously respecting institutional autonomy. However, current transformation initiatives by the DoE suggest greater state regulation in the management of HEIs. The National Working Group (DoE 2001b:2) in a

draft document to HEIs of the expected features, indicators and benchmarks, with regard to the latter in terms of equity suggests that:

- [1] At least 40% of on-campus students are African; each gender has 50% share of contact student enrolment
- [2] At least 40% of professional staff are African; each gender has 50% share of total staff profile  
(DoE 2001b:2)

These are laudable benchmarks, but the hypothetical implications for HEIs could effectively result in them enrolling large numbers of African and female students and employing large numbers of African and female staff in low social demand, low professional status and low income fields of study. Failure to disaggregate equity benchmarks according to programmes, such as medical education and training, could render invisible, mask or exacerbate prevailing inequities, particularly in a field such as medicine where staff and student posts are stringently regulated by the DoH.

Further, common benchmarks in a field such as medicine do not realistically accommodate for differences in the current faculty equity profiles, differing admission requirements and, more importantly, perceptions among prospective members of designated groups about the attractiveness and accessibility of various faculties of medicine due to their historic positions (cf.5.3.7).

Of particular significance is the failure of such benchmarks to acknowledge the skewed pool of specialists by race and gender (cf. Table 3.27) available for employment in medical schools, and the inferior schooling of the majority of members of designated groups. The number of Black and female students selecting subjects required for admission into medical schools for study at high school remains exceedingly low. Therefore the pool of suitable applicants that institutions need to select from is not representative of the national or regional demographic profiles.

Evidence of commitment by the DoE to address the problem is its support to 100 high schools dedicated to the teaching of Mathematics and Science. The plan is to re-employ retired, qualified teachers and upgrade the skills of 8 000 existing Mathematics teachers and 8 200 Science teachers. The 100 named schools will work towards attracting more female and Black students to study these courses (Sunday Times Business Times 2001:2). Some institutions are involved in projects to improve the results of matriculants in historically Black schools as part of the recruitment strategy. A challenge for HEIs is to find a way to identify potential that is not as dependent on matriculation grades, and another challenge is to attract and retain staff in academic medicine, given the lucrative remuneration and better working conditions that private practice has to offer (DoH n.d.:32).

In a meeting of the Health Portfolio Committee of Parliament (DoH 2001b:1-3) on the admission of medical students, a number of the current challenges were raised. The DoH would like to work with medical schools to scale down the medical education curriculum from a six to a five-year programme and to introduce a one-year internship programme as the two-year internship preferred by medical schools is too costly and unaffordable to the government. Concern was also expressed about the high drop-out rate and low completion rate of Black students in medical schools, low doctor: patient ratios in rural areas and the imbalances of Black versus White registrations. A further consideration is the re-introduction of permission to medical doctors to engage in remunerative work outside the public service to arrest their exodus to the private sector. Such deliberations signify the primacy of economic considerations in equity debates and the need for continuous negotiation and re-negotiation of terms in the particular field of medical training.

A landmark decision that offers evidence of the commitment by the DoE to equity is that of funding academic development programmes to bring students, most of whom are Black and who had an inferior school education, on par with students who have had the benefits of attending good schools. However, many students display resistance to being placed in academic

development programmes as it increases the financial burden on them and placement may result in them being stigmatised. The challenge facing HEIs is not just to increase access for members of designated groups to higher education, but also to put in place support processes that will improve the throughput, retention and graduate rates of these students and introduce incentives to attract them into postgraduate programmes. However, due to the length and costs of a MBChB programme, graduates are keen to commence in paid employment. Colborn et. al. (1995) describes the changing student profile from 1986 in the medical school at UCT in terms of race and gender, and concludes that academic support and affirmative action have been responsible for the heterogeneity achieved since African students were first admitted in 1986 to study medicine at UCT.

The issue of gender is more complex but of particular importance in the field of medicine due to the increasing number of women admitted into MBChB and the fewer women entering postgraduate training, differentially by race and area of specialisation (cf. 3.4.1.2; 3.4.1.3), and the historic inequities by gender and race in the staff profiles in academic medicine (cf. 3.4.2.1-3) and medical practitioner registrations with the HPCSA (cf. Table 3.27). Female enrolments in science fields at university are far lower than could be predicted based on the matriculation statistics (Calitz 1997). According to the NPHE (DoE 2001:21), in 2000 only 19 327 school-leavers obtained higher grade passes in Mathematics, which denotes a decrease from the 26 5000 pupils who obtained a higher grade pass in Mathematics in 1997.

The causes of gender inequities cannot be reduced to apartheid, although apartheid has probably affected the position of Black women in medicine in multifarious ways. Although women in ancient times were associated with medicine and healing, women's traditional role in modern civilisation is that of wife and mother. Women's entry into modern medicine has been in nurturing roles, such as nursing and midwifery, and it should be of interest to track whether the current occupational status and income trends continue in the medical profession amidst its increasing feminisation (cf.2.2.3).

Important considerations in terms of gender are the culturally diverse definitions of the roles of women, the often culturally similar and at times culturally different stereotypes among both women and men of gendered suitability to areas of specialisation, the double-shift of combining childbearing, childrearing and domestic care responsibilities, the triple oppression experienced if in addition the woman is Black, and the personal inner conflict in negotiating and combining private and professional responsibilities. A factor that needs also to be included is the increasing national and international trend of the choice of women in senior positions or particular specialisation fields in academic medicine to remain either unmarried or be divorced. Women's frequent late entry into specialisation training, often their interrupted full-time careers due to childbearing and childrearing responsibilities, their lower publication records and their slower penetration of the "glass ceiling" in terms of management positions ( Morley & Walsh 1996:21) needs to be incorporated into the equity discourse in medical education and training.

A traditional criterion of academic excellence in universities is research output and it is therefore understandable why building research capacity is an important national and institutional goal, especially for HDIs that have a majority of Black students and staff who can be developed to form part of the "critical mass of black intellectuals and researchers" (Asmal 2001:1). However, workplace skills development plans, employment equity plans and succession plans often fall into disarray as there is a continuous drain of academics to better resourced institutions, both locally and internationally.

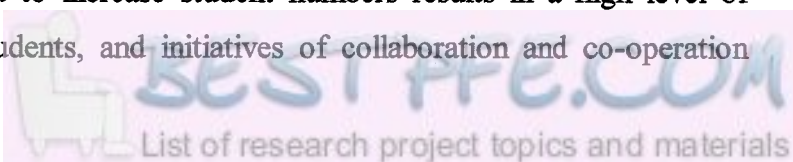
### **3.6 CONCLUSION**

The Minister of Education, Professor Kader Asmal, outlined some of the challenges facing HEIs at the bi-annual general meeting of SAUVCA in 1999. Challenges included the fight against illiteracy and the need for universities to become more efficient and more committed to community values and needs so that they become vibrant centres for community life and involvement. Gender

equity was identified as another major challenge, with the Minister stating that he was appalled by the lack of progress on gender equity. He called for a visible change at senior administration and professional levels and hinted at government's prescription of gender targets if institutions did not show sufficient progress in achieving greater gender equity (Cape Times 1999: 1).

Acknowledgement of these realities at a national level is praiseworthy but it is of greater importance for national ministries, in the case of medical education and training both the DoE and DoH and to a lesser extent the DoL, to jointly explore a strategy that could effectively facilitate redress of historic inequities. Findings presented in this chapter establish that staff and student trends in medical schools are significantly different to those reported generally for the higher education sector in South Africa. It also shows that the participation rate of African students in the MBChB programme is increasing at a slower rate than the overall participation of African students in universities in South Africa. From Table 3.3 it can be seen that HDIs continue to provide African students with the greatest access into medicine (68% in 2001), and historically English medium HAIs provide greater access (20% in 2001) to African students into medicine than do historically Afrikaans medium HAIs (11.5%). The extent to which these enrolment figures are related to policies of access, student support, role models and prevalent stereotypes requires further examination. This is clearly an area for in-depth research as it underpins policy and functional decisions, such as curriculum design and research thrusts, and informs debates on excellence, relevance, quality and equity in higher education.

The compliance of HEIs to national goals is influenced by the economic dependence of these institutions on the government subsidy. Contradictions arise from a disjuncture between institutional goals and contextual realities, and national goals. An example of this is the encouragement of collaboration among institutions, especially among those in close proximity in a region. However, the need to increase student numbers results in a high level of competition for students, and initiatives of collaboration and co-operation lose priority.



The need to increase enrolments leads to larger class sizes, making lecturer-student interactions more difficult. Many students enter the higher education system having had an inferior school education - thus the decision by the government to fund academic development programmes in the proposed new funding formula. However, large class sizes do not facilitate learning for academically struggling students.

Current discourse on medical education is largely eurocentric and male-centered, shaped by its colonial history and to a great extent reinforced and reproduced by the dominance of White males in senior positions in academic medicine. There is a need to construct an understanding in terms of South African contextual realities, especially in terms of the experiences of Blacks and women as students and staff in medical schools, and to compare these findings to those of international studies. The discrepancy between the increasingly large enrolment of female students in MBChB and the relatively small number of female students in postgraduate training and in the medical practitioner profile must of necessity be acknowledged and managed.

The transformation of higher education in South Africa is aimed at simultaneously redressing severe historic inequities and inefficiencies, and developing capacity to meet the challenges of globalisation. Professor Colin Bundy, the former Vice-Chancellor of the University of Witwatersrand at an address at Stanford University in the United States cited an international study that found that universities have changed more in the last three decades than in the previous three centuries. He said that while universities are among the oldest surviving institutions in the western world, the challenges that face them today mean that future change is inevitable and that transition is anything but temporary. According to Bundy, it is not only about the information revolution but also the pressure for greater accountability and the need to widen access. It is also about having international recognition while at the same time contributing to the society in which the university is located. Today's issues also include a concern for the environment, HIV/AIDS, better human resource management and preservation of our past (Star, 1999:12).



Redressing the serious inequities in public health care and higher education is a common priority of both DoE and DoH, and HEIs continuously straddle the divide between local relevance and international competitiveness by mediating the tension between social responsibility and traditional academic concerns, such as research output. According to Gibbons, the skills that all graduates will require in the 21<sup>st</sup> century are computer literacy, knowledge reconfiguration skills, information management, problem-solving in the context of application, team-building, networking, negotiation/mediation competencies and social sensitivity (Gibbons 1998; DoE 2001:31).

Professor Manuel Castells, in his address to the CHE on July 11<sup>th</sup> 2001, outlined global challenges for universities as the need to play a dynamic role in the production of knowledge and the use of that knowledge, assume a critical role in the production of a highly skilled workforce and in the production of self-programmable labour as the workplace no longer needs merely well- skilled people, but people who can be retrained and learn new skills. Another challenge issued by Castells to universities was to provide the institutional basis for social re-training and to be involved in the formation of people, not merely of labour, by contributing not only towards changing the economy but also to changing culture.

Consideration of the relevance of these challenges outlined by Castells to the training of medical doctors in the context of primary health care and international scholarship, such as research into HIV/AIDS, and for the design and delivery of medical curricula suggest the need for greater collaborative strategising and seamless management of medical education and training by the DoE, DoH, faculties of medicine and their university managements.

## CHAPTER 4

### RESEARCH DESIGN

#### 4.1 INTRODUCTION

A fundamental determinant of the quality of a research study and the value of its findings is its research design. Social equity, as a significant field of research in South Africa, emerged and has grown substantially only during the past decade as a result of the change in emphasis of the democratic government on equity and redress for historic inequities in all sectors. Therefore, many of the previous studies are preliminary and exploratory in nature, aimed at providing a broad overview of inequities across a sector. The focus has been on description rather than analysis, and these studies have provided useful baseline data, especially in terms of statistics that indicate shifts, trends, and the degree and extent of historic inequities that need to be redressed.

This study is also exploratory in nature but its focus is narrowed to a small, important and differently organised field of professional training, that of medical education and training. The aim in selecting a narrow focus is to provide an in-depth analysis of a single discipline within the wider context of higher education. Based on previous research studies and literature in the field, some of the major equity issues in higher education and medical education and training are identified. This study combines both qualitative and quantitative research methods in varying extents, as the primary research method employed is a qualitative one. Quantitative data is selectively collected and analysed in areas where statistical data by race and gender has not previously been published, such as staff profiles in medical schools and fields of medical specialisation (cf. Table 3.18; Tables 3.20-3.27). Institutional and faculty documents are also used as sources of information. Reliability and validity of this study are strengthened by triangulation, that is

the collection of data on the same issue using a variety of data collection techniques, namely statistics, interviews and document analysis.

The chapter begins with a discussion of the value of a qualitative approach for this study. It then outlines the designing (planning) and organisation phases in the research process, followed by a description of how the research was conducted (implementation phase) and the methods used for analysing the research findings. Considerations taken into account, including possible limitations of this approach, are reported on and the chapter concludes with the researcher's reflection on the experiences of conducting this particular study, as drawn from field notes.

#### **4.2 VALUE OF COMBINING QUALITATIVE AND QUANTITATIVE RESEARCH METHODOLOGIES**

The decision to combine both qualitative and quantitative research approaches in this study are linked directly to the research problem and the specific aims of this study (cf.1.3; 1.4). The qualitative method is employed as the primary method of data collection, but quantitative data is used to support and strengthen the findings, as there is not a substantial amount of statistical data available on equity in medical schools.

Qualitative research is an inductive, holistic, subjective, process-orientated research method used to understand, interpret, describe and develop theory pertaining to a phenomenon or setting. The use of a qualitative approach has particular value for this study and is most appropriate for this investigation for a variety of reasons (Berg 1995:8-10; Seale 1999 24-25).

Equity is a controversial and sensitive social issue that cannot be adequately explained by statistical data and is strongly influenced by the degree of support and resistance received from a multitude of people involved (cf. 2.7.3; 5.3). Qualitative research allows a systematic study to be made that

values participants' perspectives on their worlds and seeks to discover those perspectives, based on the assumption that no view is trivial as it could contain a clue for understanding the phenomenon under investigation (Bogdan & Biklen 1992:31-32).

According to Cassell and Symon (1995:2), a qualitative method enables the researcher to accurately describe, decode and interpret the precise meanings that people concerned with a phenomenon give to the complexity, authenticity and contextualisation of that phenomenon. This is of particular importance when attempting to provide a single, integrated and holistic treatise on the management of equity in medical schools, as the differentiation among the faculties of medicine and their universities, the diversity of their policies and practices, as well as the particular strategic frameworks and unique structural arrangements between the DoE and the DoH in the field of medical education and training complicates the management of equity in this discipline.

Qualitative research uses a multi-method approach (Brewer & Hunter 1989) that enables the researcher to combine in a single investigation, a variety of interconnected methods for data collection (Flick 1992:194; Coffey & Atkinson 1996:6). Denzin and Lincoln (1994:2) describe qualitative research as the construction of a bricolage – a collage-like representation of the researcher's understanding and interpretation of the phenomenon under investigation, created through employment of a wide variety of methods and strategies. Thus, the researcher's personal field notes are also included as data in this study as it is important to capture the richness of the diversity, the intensity of the perceptions, the depth of the sensitivities and the textured realities that create the reality of a phenomenon, such as equity management and related issues such as access, redress and affirmative action, within a particularly harsh historic legacy. The field notes are a record of participant observations, contradictions and strong opinions that guide further probing and issues that require clarification either in the statistical analyses or interviews.

The effective use of multiple methods can simultaneously facilitate data collection and increase the validity of the research findings. Triangulation of various methods of data collection, such as interviews, document analysis, statistics and the researcher's personal field notes, enabled the investigation to be conducted as an interactive process between the researcher and the participants (Berg 1995:4-6; Seale 1999:54-55).

A series of unstructured interviews with policy makers and managers was used as the main method of data collection. Documents, in the form of national, institutional and faculty reports relating to equity in medical education and training, and limited basic quantitative data to identify trends and shifts in the staff and student profiles in medical schools, were analysed. These documents assisted in the identification of the pertinent issues and indicated management philosophies, strategies and approaches. Such information was useful in recognising the issues that needed to be addressed during the interviews and for confirming, refining or rejecting hypotheses formulated during the analysis of the interviews.

Statistical data was collected in specific areas where there were existing gaps, such as the staff profiles in medical schools and the fields of specialisation according to race and gender (cf. Tables 3.22-3.26).

A qualitative research method uses a systematic set of procedures to develop an inductively derived theory about a phenomenon (Strauss & Corbin 1994: 24). The aim during the data collection and analysis was to promote the emergence of the challenges, best practices and recommendations on enhancing equity in medical schools. Initial concepts guided the development of hypotheses within a qualitative research paradigm, but these were continuously shifted or discarded as data was collected and analysed. Analysis commenced after the initial data had been collected and continued throughout the data collection process. Therefore, this method is also referred to as the constant comparative method (Strauss & Corbin 1994: 273).

### **4.3 DESIGNING THE RESEARCH STUDY (PLANNING PHASE)**

#### **4.3.1 Topic selection**

Having worked in the field of equal opportunities and academic development in a predominantly health sciences training university, it was important that the topic selected was of personal interest, relevant to the field of work, topical and offered the potential of having impact in the field. The current dynamism and unpredictability in the transformation of higher education, as well as the contradictions and tensions in the management of equity in medical schools, influenced this specific topic selection.

#### **4.3.2 Qualitative research methods**

##### **4.3.2.1 Interviews**

According to Zelditch (1962:109), the most efficient and best method for obtaining information about institutionalised norms and statuses is by interviewing informants. Unstructured interviews were used in this study as the primary method of data collection as it “maximises discovery and description” and through its focus on attitudes and feelings, often unquantifiable information is gleaned (Bell & Roberts 1984:112; Reinharz 1992:18). Unstructured, in-depth interviews with key informants who have a good understanding of, or are involved in the management of equity in medical schools in Gauteng were conducted.

Interviewees from three strata were selected, namely the national level, the institutional level and the faculty level. At the national level, two participants were selected from the Department of Health, two participants from the Department of Education, one participant from the Department of Labour and one participant from the HPCSA. These were individuals at the level of executive management who were involved directly with human resource development issues. Both at the institutional and faculty levels, the most senior individual responsible for all issues affecting overall management,

curriculum design, student selection, academic staff development and student support, institutional planning and quality assurance were selected as they would be involved with management issues influencing student access and success from a range of perspectives. In instances where the most senior person responsible for a particular function was not available, the second in command was interviewed. Due to the different structural arrangements in each institution, 12 interviewees were from the University of the Free State (pilot study), 10 interviewees were from the University of Pretoria, 11 interviewees were from the University of Witwatersrand and 10 interviewees were from Medunsa. Therefore a total of 49 interviews were conducted in this study.

The unstructured interview provides the breadth to attempt to understand the complexity of human behaviour and change without imposing any *a priori* categorisation that may limit the field of inquiry (Denzin & Lincoln 1994: 366), and facilitates the collection of large amounts of information in a short time. It also enables the researcher to ask follow-up questions and seek clarification immediately (Marshall & Rossman 1989: 82). Although the research process is systematic, it is at the same time flexible in that the researcher may collect more data on aspects that were insufficiently or not covered, either on that or a subsequent occasion.

This method encouraged the active involvement of participants in the construction of data about their work and experiences. These unstructured interviews were also useful in obtaining non-standard information. Reinharz (1992:19) points out that this allows the researcher to make full use of the differences among people and institutions, while simultaneously gaining access to their ideas and thoughts in their own words. Relying on people's words as the primary data, the method is mainly descriptive (Marshall & Rossman 1986:4; 11).

The use of unstructured interviews as the primary method of data collection in this study on equity within a specific context is appropriate as it facilitates the emergence of an understanding rooted in the everyday experiences, in the

living identities within particular social locations of the respondents and the researcher, that is it relies on the “situated knowledges” of the participants (Anderson & Williams 2001:3).

#### ***4.3.2.2 Document analysis***

Document analysis is an unobtrusive method of data collection that does not require the co-operation of participants and is of particular value in this study for purposes of triangulation. Document analysis provided a good understanding of the background, current position and future plans of the institution. The data in the documents supplemented the data derived from interviews and collection of statistics, and often provided verification of the accuracy of data (Marshall & Rossman 1989:101).

A variety of documents were collected from the institutions and faculties of medicine in the sample. These ranged from plans and policies, such as strategic management, employment equity and three-year rolling plans, to reports such as those forming part of the HPCSA accreditation process and principals’ annual reports. Also included were policy documents, such as student admission policies and staff appointment policies, as well as operational documents, such as quality assurance evaluation instruments and academic support information brochures.

Analysis of these documents was within the framework of the understanding provided in Chapters 2 and 3 that included the review of legislation, strategies and findings of investigations commissioned by the DoH and the DoE. This framework for the analysis was also informed by the data collected during the interviews and provided by the statistics.

#### ***4.3.2.3 Personal field notes***

Observations, notes and decisions taken have been recorded throughout the research process in a journal. This allowed the researcher the opportunity to record, share and include in the study, thoughts, feelings and observations



during the fieldwork. In this way, the active interaction process between the researcher and the research process was integrated into the report.

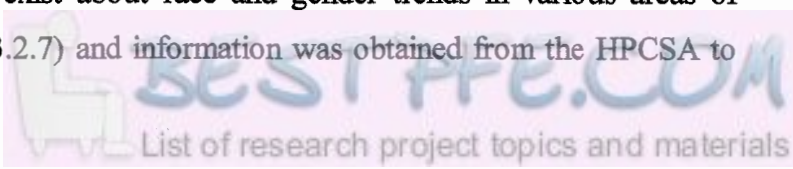
### **4.3.3 Quantitative research method**

Statistics provide useful information about the rate of change as well as identification of significant equity shifts and trends at national, institutional and faculty levels. In Chapter 3, staff and student profiles are described for the higher education sector, the universities having medical faculties and the faculties of medicine by race, gender and rank to depict the contextual differences and similarities between medical schools and the broader institutional and higher education sectors.

Although some data is available on the student profiles in the medical faculties, this is incomplete (cf. Tables 3.3-3.6) and very little quantitative data is available on the staff profiles within the medical faculties. Data on staff profiles in medical schools in the sample was difficult to obtain as most of the staff are on joint appointment and are recorded on the database of the provincial DoH, while a few members of staff of medical faculties are university appointees, included on the university database.

Available statistics regarding the race, gender and rank profiles of staff were obtained from universities and faculties of medicine in the sample and a request was made to the academic hospitals attached to medical schools for similar information. While some institutions were in a position to provide such information, others appeared to experience difficulty in making available the information in the format requested. Statistics from both sources are presented to offer some understanding of the trends in medical schools, although it needs to be pointed out that there is probably a margin of error in the data presented.

Strong perceptions exist about race and gender trends in various areas of specialisation (cf.5.3.2.7) and information was obtained from the HPCSA to



seek empirical justification for these perceptions. However, there are many gaps in the information available from the HPCSA (cf.3.4.2.3)

Although the reliability of the statistical information is low, the statistics are relevant to this study because they:

- contribute to the existing knowledge about equity in medical education and training in South Africa
- suggest equity shifts and trends among medical practitioners that could form areas for future research on either a regional or national basis
- assist in directing the scope and prioritisation of items in the research schedule prior to the interviews in each institution
- serve to confirm or challenge findings of the qualitative analysis

#### **4.3.4 Selection of sample of institutions**

The total population of institutions in this study were the eight medical schools in South Africa. For purposes of manageability and due to the fact that the provincial DoH strongly influences the functional management in medical schools, such as the appointment of academic staff, the decision was taken to focus on only three medical schools, all in the province of Gauteng, as it has the largest number of medical schools in any single province. These are medical schools in the University of Pretoria (UP), the University of Witwatersrand (Wits) and the Medical University of Southern Africa (Medunsa). A summary of the institutions involved in this study in terms of selected characteristics of their medical schools is presented in Table 4.1.

**TABLE 4.1: SELECTED CHARACTERISTICS OF THE SAMPLE OF INSTITUTIONS AND FACULTIES OF MEDICINE**

INSTITUTION	MEDICAL SCHOOL LOCATION	ACADEMIC HOSPITAL	TYPE	LANG-UAGE	2001 % AFRICAN STUDENTS	2001 % WHITE STUDENTS
Free State (pilot)	On -campus	Universitas	HAI	Afrikaans/English	17	75
Wits	Off-campus	Johannesburg General; Chris Hanu Baragwanath	HAI	English	34	39
Pretoria	Off-campus	Pretoria Academic	HAI	Afrikaans/English	12	78
Medunsa	On-campus	Ga-Rankuwa	HDI	English	80	1

Of significance is the fact that these medical schools are representative of the historic institutional types, UP being an Afrikaans HAI, Wits being an English HAI and Medunsa being an HDI. According to Marshall & Rossman (1989:55), it is best to include a sample with the widest possible range of variation in the phenomenon under investigation. The first Black graduate in medicine at Wits was a Coloured male in 1933, and the first graduate in medicine from Pretoria was also a Coloured male in 1995. In 1999 the first African students, one male and the other female, graduated from Pretoria as medical doctors. Medunsa was established in 1976 for the training of Black health care professionals and currently trains the largest number of African medical doctors.

#### **4.3.5 Selection of participants**

Based on the assumptions that people make change happen and that legislation plays only an enabling role in the achievement of equity, key people responsible for formulating policy and plans, leading transformation and managing equity at a strategic and systemic level nationally, in the university and faculty of medicine were selected to be interviewed, as

summarised in Table 4.2. Although the plan was to maintain a high degree of uniformity in the study by interviewing individuals responsible for similar portfolios, it was necessary to conduct complementary interviews where insufficient information was obtained from initial interviews conducted. This arose mainly where incumbents had been newly appointed or selected portfolio positions were currently vacant.

**TABLE 4.2: OVERVIEW OF PARTICIPANTS SELECTED**

INSTITUTIONS	TOTAL NUMBER OF INTERVIEWEES PER INSTITUTION	RANGE OF RANKS OF INTERVIEWEES	RANGE OF PORTFOLIOS
DoE	2	Chief Directors	Strategic management Policy formulation Curriculum development Quality assurance Staff development Transformation Human resources Student support Financial aid
DoH	1	Registrars	
DoL	1	Vice-Chancellors	
Free State (pilot)	12	Deputy Vice-Chancellors	
Wits	11	Vice-Principals	
Pretoria	10	Directors	
Medunsa	10	Deans	
HPCSA	2	Deputy Deans	
		Institutional planners	

Executive and senior management staff from the university and the faculty of medicine who are involved in policy formulation and decision-making that impacts on the management of equity in medical schools were interviewed. Individuals interviewed included key management and academic support staff of the university and faculty of medicine, such as the Vice-Chancellor, Deputy Vice-Chancellor, Vice-Principal, Dean and Deputy-Deans of the Faculty of Medicine, Strategic Planner and Director of Academic Development. It is necessary to interview managers from both the institutional and faculty levels to draw the links between the narrower faculty perspectives and the broader framework of policies and practices of the university. However the emphasis was on the faculty rather than institutional management as the pilot study revealed that a large amount of

the decision-making and activities pertinent to medical schools occurred at the faculty rather than at the institutional level. Individuals from the HPCSA, DoH, DoE and DoL were also interviewed to gain insight into the national frameworks within which institutional and faculty equity initiatives needed to be aligned.

#### **4.4 ORGANISING THE RESEARCH STUDY (ORGANISATION PHASE)**

##### **4.4.1 Access**

A letter was written to the Vice-Chancellor of the university in the pilot study and of the universities in the sample, namely Free State, Pretoria, Wits and Medunsa, requesting permission to visit the institution, conduct the interviews and for the contact details of an individual in the institution with whom the researcher could communicate regarding arrangements for the visit (cf. Appendix 1). This letter included a brief explanation of the purpose of the study, and a letter from the promoter of the research study, verifying the registration and purpose of the study, was included. The researcher's letter also stated that a brief summary of the findings would be sent to all participants on completion of the study.

On receipt of a response, the researcher communicated with the contact person to supply contact details of the persons to be interviewed, or for the contact person to arrange a schedule of interviews of about 60 to 90 minutes in duration. The number of interviews conducted per institution varied according to the structural arrangements within each institution (cf. Table 4.2).

Letters were also written to the DoH and DoE and interviews were arranged telephonically. In the case of the DoL and HPCSA, all communication was telephonic.

#### **4.4.2 Constructing the interview grid**

In this study, a simple interview grid was used that served as a checklist for the researcher to ensure that the range of issues planned for discussion or that arose during the interview and required further probing were discussed.

The interview grid comprises a table of cells, with issues requiring discussion listed under different columns. Columns common for all grids were labelled according to the key categories identified, namely students, staff, curriculum, research and postgraduate studies, and policies and practices. Other blank columns were labelled as issues emerged during the interview. The guiding comments on the interview grids were different for the different portfolio positions, changing from a broader, holistic, visionary perspective at the levels of Vice-Chancellor and Dean, to a narrower, focused and more operational perspective at the lower levels of management, such as the Academic Development Manager (cf. Appendix 2).

Prior to the interviews, the researcher requested statistical data, policies, institutional plans and reports for familiarisation with the institutional context. Based on the information provided and from prior interviews conducted, a preliminary identification of the issues that required prioritisation and in-depth probing were included on the interview grid. However, in many instances, substantial amounts of material, mostly not initially requested, were provided during the interview by the interviewee as useful for the purposes of the study. On a few occasions it was necessary to telephonically contact the interviewee after the interview had been completed to request clarification or elaboration about an issue in a document or mentioned by a subsequent interviewee, and two participants were interviewed twice due to the large amount of data that they had to offer.

Complete flexibility was maintained in the ordering of the issues during interviews and the researcher was able, when necessary, to include, exclude, expand on or limit issues for discussion.

## **4.5 CONDUCTING THE RESEARCH (IMPLEMENTATION PHASE)**

### **4.5.1 Conducting the pilot**

The University of Free State (Free State), with its medical school, was deliberately selected as the institution to conduct the pilot at, as it had demonstrated a significant shift in the composition of its students, changing from 1% Africans in 1988 to 59% Africans in 1998, although it showed a minimal change in its academic staff profile (Instruction/Research category), changing from 1% Africans in 1996 to 4% Africans in 1999 (cf Tables 3.2 & 3.20).

Free State had also radically changed their MBChB programme by decreasing it from a 6-year to a 5-year degree, introducing a parallel, dual-instruction medium of English and Afrikaans, and having more stable university and faculty managements, with both the Vice-Chancellor and the Dean of the Faculty of Medicine having been at the University for the past few years.

The original plan was to place emphasis on management of equity at the institutional level and then to investigate how faculties were aligning their policies and practices to the university strategies. However, during the pilot study it became clear that the management of the faculty of medicine, although linked to the broader university, was in the main autonomous in terms of its management and functioning. This resulted in a shift in the study to an emphasis on the management of equity at a faculty of medicine level and a comparison to the philosophy, policies and practices of the university.

### **4.5.2 Conducting the interviews**

Institutions differed greatly with regard to their policies, resources and strategies relating to transformation. Interviewing those individuals who were directly involved in higher education transformation, both within and

outside the institutions, was regarded as a naturalistic, interpretative approach to socially construct an understanding of the management of equity in medical schools in terms of the meanings people associated with medical education and training.

The researcher consistently used a similar introduction for all interviews and included an explanation of the purpose of the study. Permission was sought from participants to tape record the interview and transcribe it, and they were assured of confidentiality in the research report for ethical reasons (Burgess 1989:45). During this introduction, the researcher presented the respondent with a typed, laminated copy of an extract on equity contained in the *White Paper 3: Transformation of Higher Education* (DoE 1997:1.18). This was to establish a common basis for discussion. The extract presented was the following:

The principle of equity requires fair opportunities both to enter higher education programmes and to succeed in them. Applying the principle of equity implies, on the one hand, a critical identification of existing inequalities which are the products of policies, structures and practices based on racial, gender, disability and other forms with a view to redress. Such transformation involves not only abolishing all forms of unjust differentiation, but also measures of empowerment, including financial support to bring about equal opportunity for individuals and institution (DoE 1997:1.18)

It was explained that the purpose of the study was to identify the challenges, best practices and recommendations to manage equity in the medical school more effectively, and it was emphasised that the intention was not to criticise or depict in poor light any institution or individual. The interviewee was also informed that the study adopted a holistic approach and examined the management of equity within broad areas, such as students, staff, curriculum, research and postgraduate studies, and policies and practices.



Prior to each interview, the researcher recorded on a grid, issues that it was hoped that the respondent would address during the interview, based on the management portfolio of the individual. The issues were derived from the literature, documents and statistics received, as well from other interviews that the researcher would like the respondent's comment on. The issues were marked as they were addressed and other issues recorded during the interview that required further clarification were marked as well as new trends that emerged that required elaboration. Such clarification and elaboration were obtained when appropriate, which could have been at that stage, later during the interview or on completion of the interview. Although the aim was to talk freely with minimum interjections, it was important that the interview be conducted in as informal a manner as possible, preferably as an informal conversation. Each column in the grid was committed to a particular theme as it emerged in the conversation and a key word was recorded. It was essential to listen carefully throughout the interview (Reinharz 1992:21). The tape recorder was small, aimed at being as unobtrusive as possible and note-taking was kept to a minimum so as not to inhibit or distract the participant. This facilitated the easy flow and unfolding of information about equity issues as viewed by the informant in terms of priority and significance (Marshall & Rossman 1989:82).

#### **4.6 ANALYSIS OF FINDINGS**

Various prominent authors name differently the stages used in qualitative research analysis, although in essence these stages are very similar. According to Miles and Huberman (1994: 429), data analysis involves the three linked sub-processes of data reduction, data display, and conclusion drawing and verification. Data reduction involves data selection and condensation through processes such as coding, clustering and categorising within conceptual frameworks. Data display requires representing the implications of the data diagrammatically, pictorially or visually. Wolcott (1994:36) uses the terms description, analysis and interpretation in his description, and these terms are used to describe the stages in this study.

#### 4.6.1 Description

During this initial stage, data was transcribed from the tape recordings. Each transcript was then read while listening to the tape recording in order to ensure its accuracy. A master copy of the original transcript was retained for contextual significance and was occasionally consulted during the write-up stage. Three other copies of the transcripts were reproduced for initial and subsequent coding and categorising.

#### 4.6.2 Analysis

During this stage, each idea in the transcript was coded and the same code consistently assigned to the same or similar idea articulated in every transcript. A category was also attached to each code and these could differ for the same code. For example, one idea was labelled as *selection criteria – M score*, and another was labelled as *selection criteria – leadership*. Codes and categories were written in the margin of the text, next to each new idea.

Miles & Huberman (1994:56) define codes as “tags or labels for assigning units of meaning to the descriptive or inferential information compiled during a study.” By coding the information, a *link* can be formed between the raw data in the transcript and the researcher’s theoretical concepts so that the data can be organised, retrieved and interpreted. Using the process of coding, the researcher is able to notice relevant phenomena, collect examples of these phenomena, and analyse the phenomena to find commonalities, differences, patterns and structures (Seidel & Kelle 1995: 52-56).

Each transcript was read several times as further codes were revealed through subsequent readings. Codes were then organised according to more inclusive and abstract categories. Overlapping categories from each of the transcripts were grouped together.

This process commenced once two to three interviews were completed. According to Coffey & Atkinson (1996:6), such an on-going and cyclical

analysis allows the researcher to adjust observational strategies, shift emphasis towards experiences that enhance development of understanding, and exercise control through simultaneous checking and testing of emerging ideas. It further facilitates the early discovery of significant classes of data and the properties that characterise each class, early naming of the classes, and drawing an ever-increasing density of linkages (Schatzman & Strauss 1973:108-110).

Copies of the transcripts were made and each coded and categorised idea cut and temporarily pasted onto large pages of newsprint, each page labelled by code and every page divided into categories. Ideas were then shifted and rearranged many times until codes and categories formed a cohesive group. This process was used to identify recurring ideas, beliefs or themes that linked people and settings together and constituted the pertinent categories of meanings held by participants. From among the categories that emerged, a search was conducted for those that had internal convergence and external divergence as it was important for categories to be internally consistent but distinct from each other (Rossman & Marshall 1989:116). Original transcripts are maintained in safe-keeping for a period of five years.

#### **4.6.3 Interpretation**

This stage involved identifying core equity issues in medical schools, both directly and indirectly from the multiple perspectives of the participants. Participants' perspectives were further incorporated into the categories formulated and emerging ideas developed (Strauss & Corbin 1994:280). These emerging ideas were then tested against the data collected, including the literature review and statistical data, and reformulated when emerging data presented a recurring challenge to formulated beliefs, and eventually incorporated into a conceptual framework.

During this stage it was important to interrogate the categories in terms of their validity and additional informational value. It was also necessary, as suggested by Marshall and Rossman (1989:119), to seek and identify

List of research project topics and materials

alternate explanations, and to substantiate the presentation of the selected explanation from literature and participants' words.

Key equity issues and good practices were solidified as major modifications occurred less often and concepts fell into established categories. During this stage, conclusions were drawn and verified, and the displayed data interpreted and meanings attached. An important part of this stage was the drawing of links and connections between the various categories, and on a few occasions this led to further shifting of categories. The analysis was finally complete when the critical concepts were defined, the relationships among them established, and they were integrated into a holistic account (Marshall & Rossman 1989:114) which could be relevant to the understanding of the context or influential to the actions of policy makers and managers (Strauss & Corbin 1994: 281).

#### **4.7 RELIABILITY AND VALIDITY**

Denzin and Lincoln (1994:11) point out the legitimization crisis in qualitative research as the validity, generalizability and reliability that are problematic in terms of traditional criteria for evaluating research. Triangulation was used to increase the validity and an experienced research assistant was employed as a co-moderator to independently code and categorise data for comparison, and various other actions were taken to increase reliability and validity (Krefting 1990:219).

Establishing a relationship of trust with the participants was considered important, as it can influence the amount and nature of the information that participants are willing to share. Although universities are public institutions and naming institutions or external departments would have provided a more informative backdrop for the comments made, no institutions or individuals are named in the study. The identification of institutions by name and individuals by office might have inhibited the spontaneity of responses and identification of good practices and challenges. The exception was for the presentation of statistical data, as a large amount of data was derived from

previous studies or South African Post-Secondary Education (SAPSE) data, and where statistics were collected for the first time, such as for the staff profiles in medical schools, the institutions were named to enable such data to be added to the current database.

It was important that participants felt comfortable and trusted that the aim of the interviewer was not to criticise or provide any response that might be construed as judgemental. Therefore, care was taken to ensure that the introduction was detailed and friendly, the respondent was listened to carefully, and interest demonstrated through both verbal and non-verbal responses.

A few of the participants were known personally, but this did not appear to influence the disclosure of information during the interview, either positively or negatively, except in one instance where the respondent, knowing of the researcher's interest and work in the field of gender, placed great emphasis on the gender dynamics in medical schools. An attempt was made to steer the conversation to other issues, but it was frequently returned to a focus on gender. In this case, it was difficult to ascertain whether the primary concern was with gender issues or whether this was influenced by the respondent's knowledge of the researcher. No conclusive evidence concerning the relationship of the researcher knowing the participants was found in the literature.

The field of equity is a contentious one with participants holding diverse opinions on aspects such as affirmative action. The interviewer's own personal characteristics, such as race, gender and occupation, could influence the responses of informants, and therefore a conscious effort was made to exercise good listening, personal interaction and question-framing skills, as listed by Marshall & Rossman (1989:83), as the essential prerequisites for minimising the effects of variables such as those listed.

There could have been a degree of discrepancy between individuals' own ideologies and current dominant discourses in the institution or broader

society, and due to the sensitivity of the subject, interviewees might have been reluctant to disclose personal opinions (cf.2.7.3). Interviewees might have also have been averse to revealing any information that could possibly project a negative image of their institutions, especially amidst current insecurities and uncertainties in the higher education sector due to an imminent pronouncement by the Minister of Education on the reshaping of the higher education landscape through institutional mergers.

Interpretations, especially those rooted in social discourse, are coloured by the personal philosophy and personal experiences of the interpreter. Strauss and Corbin (1994:356) use the terms voice, signature and the imagined reading audience to describe this effect.

Interviews were conducted within as short a period as possible to increase reliability, as national or institutional influences at different times of the year could have affected the responses during the interviews. For example, interviews conducted during the period when the National Task Team, established in terms of the NPHE (DoE 2001a:82-84), was meeting with the management of the institution, may have coloured the response of the participants. The heightened awareness and pressure to comply with national goals could have resulted in responses being significantly different to the participant's response at a different time. In a qualitative study it is impossible to control the influence of all variables, but by concentrating the interviews over as short a period as possible helps minimise such influence.

Theoretical sensitivity was applied in the analysis and interpretation stages. Theoretical sensitivity refers to the ability of the researcher to have the insight to understand the data and select only the relevant data. This depends to a large extent on previous reading, experience in the field and analytical skills (Strauss & Corbin 1990:41-43). In addition, contextual and cultural sensitivity was exercised when analysing the data.

Non-verbal data may be included in a qualitative study but this study relied on the verbal responses of participants. The reason for this was that the

participants are from diverse cultural backgrounds with which the researcher may not be completely familiar and would not therefore be able to interpret such non-verbal responses with confidence.

#### **4.8 CONCLUSION**

The main advantage provided by the use of unstructured interviews was the rich and large amounts of contextually grounded data that was produced. Deeper levels of meaning became apparent, a number of links were made visible and the subtle nuances in meaning and expression were identifiable. Although the issue of equity is often a sensitive and controversial one, the open, frank responses and warm reception by every single interviewee contributed greatly to the personal enjoyment derived from undertaking this project.

Triangulation of various qualitative methods and quantitative data was considered necessary to improve validity in this study, as equity is a broad, cross-cutting issue around which there is ambiguity, lack of clarity and controversy. Documentary and statistical evidence was used to supplement data obtained through the interviews and to confirm the developing ideas.

The value of the study depends to a large extent on the sensitivity and competence of the researcher to make the links, expose the complexities and pertinent issues, and integrate findings from the different sources of data in the written report. The maintenance of objectivity is critical because equity is both a sensitive political and personal issue. Most White interviewees revealed a tendency to discuss equity issues from a depersonalised and de-institutionalised manner, while most Black respondents were inclined to contextualise the discussion in terms of their own subjective experiences of growing up, in higher education, and as employees within that particular institution. When participants, irrespective of race or gender, were asked to describe either methods of student selection or the curriculum development process in their own institutions, they often, with confidence, drew comparisons with the practices in other institutions. An interesting

observation was how misinformed participants were about practices of other institutions, and this exemplified the insular functioning and independent development initiatives of medical schools, even within the same province.



## CHAPTER 5

### PRESENTATION AND DISCUSSION OF FINDINGS

#### 5.1 INTRODUCTION

In this chapter, the fundamental national, institutional and faculty level contextual challenges concerning equity in medical schools are discussed. Practices at both the institutional and faculty of medicine levels that affect equity are examined within an integrated analysis in an attempt to identify problematic issues and good practices that could ameliorate existing inequities. In certain instances issues raised could serve as the basis for further discussion, debate and possible future research, as there are more challenges identified than recommendations offered in this study. The analysis of the findings is supported by statements from personal interviews, statistical analyses and documentary evidence, and compared to relevant national and international studies. The discussion is based on predominant perceptions among individuals about particular equity issues, specifically and significantly at senior management levels.

The interviews provide insight into the complex sets of dynamics at various levels that impact either directly or indirectly on equity issues in medical schools. Thus, descriptive data is included to provide the backdrop for this snapshot analysis of equity in medical schools as it relates to students, staff, research and postgraduate studies, the curriculum, and policies and practices. Statistics are used to corroborate or refute qualitative findings and as the basis of comparison of student and staff trends in the faculty of medicine with those of the university.

The particular structural arrangements between the DoE and DoH in a fiscally constrained economic climate is of particular significance and requires a brief description as this arrangement influences many of the equity issues discussed in this study. Frequent reference is made both to more

specific aspects of the structural arrangements and the economic factors as they affect the separate issues discussed.

## **5.2 NATIONAL-LEVEL ISSUES**

### **5.2.1 Structural arrangements**

Medical schools are either separate faculties of universities or parts of broader health Sciences faculties or schools within universities, governed by their own private acts and funded through the national DoE. As integral components of universities within a dynamic and radically transforming higher education sector, medical schools are operationally affected by legislation, such as the *Higher Education Act* (S.A.1997c), the *Skills Development Act* (S.A.1998b), the *Employment Equity Act* (S.A.1998a), the *Basic Conditions of Service Act* (S.A. 1997a), the *Labour Relations Act* (S.A. 1995b) and the *South African Qualifications Authority (SAQA) Act* (S.A.1995a), as well as decisions by the DoE, such as the *National Plan on Higher Education* (DoE 2001a). The influence of some of these on the functioning of medical schools is discussed in the course of this analysis.

A structural arrangement unique to the medical school is that the majority of the academic staff, including registrars (professional specialist training personnel), are employed as joint appointees between the university and the provincial DoE, with the salaries of the joint appointees paid from the provincial budget allocation to the academic health complexes, that is the academic training hospitals and their associated medical schools. The impact of this arrangement on staff equity forms a central part of the discussion on staff recruitment and selection (cf. 5.3.2.2). The provision and development of human resources in academic medicine is directly affected by the provincial budget allocation to the academic training hospitals. This allocation is influenced by other factors, such as the number of community service posts that need to be funded and the over-expenditure or under-expenditure of the operational budget of the academic hospitals.

Another, yet to be finalised structural arrangement that is currently the source of great concern is the transfer of pathologists, as joint appointees between the province and the universities, to the recently established National Health Laboratory Services (NHLS). This is discussed under the management of staff equity (cf. 5.3.2.5).

Various other structures, such as the Co-ordinating Committee of Medical Deans that is frequently engaged in discussions with the national DoH and interactions with the Parliamentary Portfolio Committee of Health, have influence. The Health Professions Council of South Africa (HPCSA), responsible for programme accreditation, also plays an important role in issues relating to medical training.

### **5.2.2 Economic constraints**

The rate and extent of transformation towards equity is influenced strongly by economic determinants. Both the DoE and the DoH, among many other departments, are competing for a larger slice of the gross domestic product (GDP) and the received amount has to be spread across the sectors within that department, in line with its strategic priorities, which for the DoE and DoH differ significantly.

The DoE is particularly concerned with increasing student participation rates in higher education, especially in increasing access to those groups that were historically disadvantaged in terms of access, increasing the production of highly skilled human resources in fields of high demand by the labour market, such as Science and technology, and increasing the research output of HEIs (DoE 2001a).

The intention of the DoH is to redress the uneven distribution of health care services in the country by developing an integrated primary health care service that will provide all communities, particularly the poor rural communities, with access to health care services. This entails a redistribution of available resources to the areas that require development (DoH n.d).

Documentation suggests that there is not a serious shortage of medical doctors but that they are concentrated in urban areas, resulting in a very high doctor: patient ratio in rural areas (DoH 2000; cf. Table 2b). Various strategies are being employed to rectify this, such as the freezing of posts in urban locations and the creation of more community development posts, and provincial grants given to those provinces that do not have health service facilities, such as medical schools (DoE n.d.:29).

Training of medical doctors has serious cost implications for the university, the academic training hospital and the students, as the programme is long and expensive. An acknowledgement of the high cost in training medical doctors has been the allocation of the National Increment for Teaching and Research (NITER) fund to academic health training complexes (DoE n.d.:29). A few respondents in management posts in the faculties of medicine were divided on whether this money was intended for the academic training hospital or the university as compensation for high training costs, as both legitimately claim a burden of high costs associated with training medical doctors. This was one of the controversial issues that emerged from the interviews for which clarification could not be obtained.

The government subsidy to universities is calculated according to a formula linked to their full-time equivalent student enrolment (FTEs) in the different programmes, levels of study and graduation rates. These specific criteria work against those medical schools selecting large numbers of African students for the limited places available, as often Black students take longer periods to qualify due to their poor schooling (Bowen & Bok 1998:55-59). The total subsidy has decreased over the past decade due to a decreased constant (the "a" factor) within the formula, exacerbated by the steady decrease in the number of students in HEIs in recent years (DoE 2001c:E2). HEIs are in competition for students to ensure their financial viability. The need to ensure high throughput rates depends on ability of institutions to attract students with high levels of academic competence into their programmes. In the case of medicine this is not difficult as there is a very

high demand for limited spaces from among students having the highest matriculation results.

The limitation on intake is an externally imposed constraint for medical schools in terms of both their undergraduate and postgraduate programmes, and this has more serious implications for an institution in this study that has its medical school as its largest constituent faculty. The constraint relates to the DoH's restriction on the eight medical schools of the total number of first year students (approximately 1200 students in 2001) that may be admitted among them. This restriction is linked to the DoH's projected budget for internship posts, generally in six years time when students qualify. Entry into postgraduate training as medical specialists is also restricted in terms of the number of registrar posts that are made available by the DoH. These restrictions, based on economic realities, have serious equity implications that are discussed in examining student access in medical schools (cf. 5.3.3.). Enrolment trends in faculties of medicine (cf. Tables 3.4 & 3.5) suggest attempts by faculties to mediate the tension between equity and obtaining the maximum government subsidy by selecting students who show the greatest academic potential and are therefore more likely to complete the degree in the minimum required time. This often includes the over-representation of Indian students and excludes the admission of African students having the greatest levels of educational disadvantage, often from remote and extremely poor communities in South Africa. This is elaborated on in the discussion on medical training in Cuba (cf. 5.3.3.4).

Currently, the subsidy received by the government in terms of students enrolled for the MBChB programme is for approximately 4 to 4,5 years of the total training time, based on the formal training time, excluding experiential training. The decision of some medical schools to reduce the length of their curricula to between four to five years and the decision of others to maintain the six-year programme will have financial implications for the universities. An important change in funding to institutions is the decision to fund academic development programmes, such as foundation programmes, but the extent to which faculties of medicine will use such

programmes to rectify imbalances in their student profiles, given the existing high demand to study medicine, is likely to be minimal without intervention at a policy level.

### **5.2.3 Academic training complexes**

A consequence of the government's aim to make health care available for all citizens is the limitation of resources to be expended on academic health complexes, resulting in inadequate resources for training and appalling conditions in academic hospitals (Landman 2001; DoH n.d.:17). A participant who is a member of faculty management described the decline in standards:

Years ago academic health complexes were flagships of health care services in the country, with the latest medical technology and highly qualified specialists, but remunerations and resources in the public sector have not kept up with the private sector – job satisfaction has dropped and we cannot retain specialists because of the lack of equipment and the low salaries.

This comment needs to be considered within the historic context of academic health complexes and linked to the racially segregated health professional training and patient treatment under apartheid. Various statements in interviews suggest that academic training hospitals are in urgent need of a revamp, despite the focus on the development of primary health care services, if not from a moral and training perspective, then from a human rights one. Many descriptions of the conditions in academic hospitals are alarming, such as this description by a deputy-dean of medicine:

There are no seats on the toilets and you sit with your feet in urine. This is an academic hospital, if you go to some of the other hospitals, it's ten times worse.

Another member of a faculty management commented:

Hospitals are over-crowded, short-staffed and dirty... patients are often discharged too early to make beds available.

Clearly poor people who did not have private medical aid are disadvantaged, even though they may have access to health care in academic hospitals. An executive member of the faculty management provided the following example:

MRI scans are in the private sector and if the patient has no medical aid, we cannot refer this patient for a scan. The challenge lies in the philosophy of public health care so that health care services should be seen as a social investment and not a charity.

Public hospitals are utilised predominantly by patients earning less than R20 000 and having no private medical aid, and whom are predominantly African (Soderlund, Schierhout & van den Heever 1998:143). Quality service, dignity and cleanliness should not be a function of the ability to pay as this would simply reproduce and reinforce social class inequities. There is inconsistency in the charging of private patients receiving treatment in academic hospitals but where this is effectively done, the money generated could be used for capital and professional developments. It is reported in the interviews that Groote Schuur Hospital and the new Pretoria Academic Hospital are developing separate wings to cater for private paying patients, and this should prove to be a good practice as long as the fundamental difference is going to be increased charges levied for hotel fare that could be used to subsidise indigent health care, and not the quality of medical care received.

#### **5.2.4 Government responsibility vs. institutional autonomy**

By virtue of the private acts of institutions and their traditional, hallowed positions as ivory towers of knowledge, institutional autonomy has been

respected and defended when threatened, as will be discussed with regard to various issues, such as student admission policies, a central admissions proposal and the institutional language policy (cf.5.3.7). This limits the interventionist and regulatory role that the government may wish to play in redressing inequities, that is in pursuing a transformation agenda and establishing a particular health care approach, namely a developmental strategy. A regularly debated issue is the role of government in higher education and the extent to which it is legitimate and desirable for greater state regulation in higher education to achieve social and political goals. A member of the institutional management remarked:

Public policy makers need to understand their limitations in terms of influencing institutional policy, such as the institution's student admission policy or language policy.

An example cited by a strategic planner was that of the amalgamation of the Veterinary Faculties of the University of Pretoria and Medunsa. From its inception in 1990 until the merger in 1999, the Veterinary Faculty of Medunsa produced 101 Black graduates and this was due to the institution having a policy of student admissions in accordance with the demographic profile of the country. The University of Pretoria admits students mainly based on matriculation results, and since there is a high demand of students with excellent grades who apply to study Veterinary Science, few Black students are admitted. In 1999, of the total of 75 students admitted, two were Black. In 2000, of the 84 students admitted, three were Black, and in 2001, of the 67 students admitted, only one was Black. The gravity of the outcome on equity of this decision needs serious consideration by government to ensure that future mergers do not result in similar consequences. As the same participant remarked:

Institutional mergers on the basis of geographic proximity or financial efficiency could have negative outcomes for equity, unless the government is able to obtain the necessary legislative authority to



intervene in certain institutional processes, such as student selection and language policy.

A few participants were highly critical about the failure of government to employ a strong interventionist role to redress historic inequities in HEIs. A member of management of an institution explained:

The current inequities in higher education are the result of universities adhering to the apartheid policies of the previous government. Our present government has failed us in not ensuring universities address in a meaningful way, the historic exclusion of Blacks.

The DoE, aware of the continued tendency of some universities to enrol classes that are largely White and male, could use funding as a lever to compel institutions to change their enrolment patterns, but it is not supportive of quotas (cf. DoE 2001a:39). Currently, all institutions are required by the DoE to submit three-year rolling plans that include projections in terms of equity (DoE 2001a:46). The challenge is for such submissions to require institutions to formulate projections based on equity targets and to carefully monitor achievements. This would entail a more detailed reporting process in terms of a breakdown of race groups by gender, nationality, programmes and levels of employment. Such a process would facilitate greater scrutiny and transparency and make institutions responsible and accountable for their transformation.

### **5.3 EQUITY ISSUES: INSTITUTIONAL AND FACULTY LEVEL**

Medical schools, as part of universities, conform to institutional policies and practices to a large extent, but also reflect specific faculty policies and practices that in certain instances are at variance with broader institutional norms and trends. All institutions visited were in the process of major restructuring, resulting in an environment of fluid dynamism and uncertainty. Institutional visits provided insight into the potential of good

management practices to not only enhance equity but to integrate equity as a principle of efficient and effective functioning across a co-ordinated system within the institution. This could only occur where the quest for equity became an organising principle for all change initiatives and this was not always apparent, even in institutions with the best management practices and infrastructure. In this section, two broad, inextricably linked issues are discussed, namely the policies and practices of the universities in relation to their faculties of medicine, and the institutional climate.

### **5.3.1 Management approach**

The philosophy of individual managers and the management team on equity have a direct impact on the achievement of equity within the university, and this philosophy relates to the extent to which there is convergence and commonality in the individual philosophies of equity within the management team, the specific management systems, plans, strategies and structures. The manner in which equity is managed is directly related to the manager's personal ideology and philosophy relating to equity.

A Dean of one medical school expressed his personal view:

I think that the issue of equity is overrated ...I'm not focusing on any one political understanding of equity. Certain people are more gifted than others in certain areas...it's foolhardy to have a policy that says that everything should be equal-everything cannot be equal.

The motivation for the achievement of equity differed at systemic and individual levels, ranging from moral to strategic reasons. Emerging from the study is a definitive set of good practices and prerequisites for good management that do not necessarily translate into the achievement of greater equity, which is more dependent on the levels of institutional and individual commitment.

All interviewees agreed that equity, generally perceived only in terms of student and staff profiles, was important, but there were marked differences, even among those within the institution of how well they were doing and what needed to be done. The latter was more common among Black respondents in HAIs who remarked on institutional climate issues. Responses were strongly influenced by the historical institutional philosophy within the HDI, placing a greater emphasis on equity as an organising principle and demonstrating a greater sensitivity to the dynamics of equity, such as class differences.

Two of the institutions in the study had recently appointed vice-chancellors and one was in the process of appointing a vice-chancellor. Two of the Faculties of Medicine had recently appointed deans but it became apparent that there was at some point in the history of the institution or faculty, a leader or champion who had provided a particular vision for the institution or faculty in terms of equity, access and redress. The high turnover of staff at institutional and faculty executive management levels is likely to have a negative effect on processes of transformation, as one executive member of a faculty pointed out:

You need time if you want to change something. Very little real change can be made in a year or two – it takes time to understand the situation, decide on a direction and continuously lead people in the direction of that goal.

An important enabler was a participatory team management approach with the deans as part of the team. There appeared to be a direct correlation between the levels of trust, rapport and responsibility in this team and the extent to which they bought into and followed a focused, co-ordinated and common approach to managing equity.

### *5.3.1.1 Good management practices*

Effectiveness of transformation in terms of all issues, including equity, is enhanced by good management practices, although in terms of equity, institutional and individual commitment and ideologies appear to play an important role. Some effective management practices observed are described as a means of identifying good or potentially good strategies for managing equity.

One good practice is to have the dean of the faculty driving and championing the process of transformation in terms of equity in the faculty. A participative management style can be useful in obtaining buy-in for transformation initiatives. In one faculty, the Dean takes all HODs on a Bosberaad every year to exchange ideas about various issues, such as curriculum changes and employment equity targets. He also holds a lunch meeting every two weeks with HODs to discuss issues affecting the faculty.

In terms of equity and access he explained:

I sold the idea that this is an Act, we cannot fight about it, so how are we going to achieve it. The lunch hour meetings has the effect of HODs participating in decisions affecting them and their commitment to change increases.

It is important to obtain buy-in for equity that goes beyond substantive compliance, but in an environment where there is high resistance, such compliance could mark a useful starting point. The effectiveness of a vice-chancellor or dean in leading change also appears to depend on personal characteristics and management skills. A dean of a faculty described his approach:

You should think very carefully about what you want to do and then do it, and not be derailed by criticism in taking people along. You have to believe in what you do in order to convince other people.

The success of this approach was evident from other comments about this particular leader, such as, “he led but didn’t push, and, he has a clear vision in terms of the whole picture.”

Transformation in terms of equity is promoted by successful support structures and the status of particular positions in the institutional hierarchy. Universities have different structural arrangements in dealing with the issue of equity. One institution had an Employment Equity office, another previously had an Equal Opportunities Directorate that had dealt with all equity issues, but it had recently been incorporated into the Human Resources Directorate, and another had a Transformation Office, supported by an Equal Opportunities Committee, while in one institution the issue was managed by human resources at a staff level and a structure was being planned. The effectiveness of these structures appeared to depend more on the philosophy and commitment of the person heading the unit, than on the size, structure or reporting line of the office. An institutional manager remarked, “I have very good people – we’re a very cohesive group. We don’t have people pulling in all different directions.”

A particularly useful structure is an effective institutional research office, observed in one university having an excellent information management system that is able to integrate, analyse and recommend changes to the executive management. This is essential for articulation of planning and transformation initiatives, such as skills development, student equity, academic performance, employment equity and financial management. All institutions have a system in place, but they varied greatly in quality and effectiveness. The head of this institutional research unit outlined its value:

We have a system that produces information, as part of a scientific, systematic process for purposes of planning and monitoring, and this requires particular competencies and skills of people in the unit rather than huge financial resources.

The unit produces a diagnostic analysis per faculty, department and course that is used as the basis for control and self-reflection during the cyclic internal quality assurance process. However, despite the sophistication of the analysis process, equity was not an independent factor in the analysis, reflective of the general approach that issues relating to equity were inevitable and needed to be managed when they arose, rather than the adoption of a proactive approach to ensure greater equity.

A decentralised management strategy worked well, particularly for the medical faculty in terms of its administrative ties with the DoH. This was the practice in most institutions, whereby the executive management of the university mapped out clear strategic objectives and each faculty responded on how it would reach set objectives, and this influenced the budget allocated. It was explained that this was part of a learning organisation philosophy where faculties were given the freedom to creatively explore different ways of achieving their equity goals, thus minimising prescription and regulation, and introducing greater responsibility and accountability. However, in one instance, the central management found, on monitoring equity achievements across faculties and departments, that there had been an attempt to circumvent the institution's intended strategy. The member of management responsible for promoting employment equity in the university described the finding:

We observed an overwhelming shift towards a softer option of appointment of White females and that the representation of Blacks had not improved significantly, but we are putting in place measures to curb this.

A more horizontal than vertical management structure appeared more effective in managing transformation. In one institution, regular meetings were held of a broad executive co-ordinating committee that guided and monitored the implementation of changes across the system. It was considered important that all deans were part of this committee. There was also a smaller executive committee that handled confidential and sensitive

matters, but decisions were filtered to the broader committee. The effect of this constant monitoring of equity is described by the chairperson of the committee:

This has the result of constant conscientisation about equity and the problems associated with it, so that equity does not become an add-on, but part of the key points on the agenda.

This was complemented by a series of *ad hoc* portfolio committees that consisted of experts from representative groups from any level. These committees formulated proposals as the basis for wider discussion, for example, staff selection procedures. In some instances, this took the form of “virtual structures” consisting of some external people from different locations in the country. A member of the executive management of the university commented on the value of this practice:

The ad-hoc portfolio committees resulted in not having the same people in all discussions and meetings, and a feeling among people, even at junior levels, that they had a voice, were important and could play a role in institutional decision-making and transformation.

An effective open, planned two-way communication system appears essential in establishing a common understanding about change, building a sense of common purpose, and reducing resistance and threats within an institution or faculty. One institution has a formal communication strategy to underpin the achievement of strategic objectives, so that even those individuals not in agreement with a particular change, have a clear understanding of the motive/s for the change. This included a mechanism for disseminating information through the organisation and providing channels for feedback. An example of the importance placed on communication was the engagement of a communication consultant who facilitated the development of the strategy to a detailed level. A participant involved in the formulation of the communication strategy described the level of detail involved:

communication strategy described the level of detail involved:  


We even planned the speech that was to be relayed by every Dean, Director and Head of Department to members of staff at a set date and time that coincided with the Rector's press release on the institution's financial turning strategy.

Although there was commitment to addressing historic inequities, there was no similar explicit strategy relating to equity.

Formal equity policy documents outlining staff and student selection procedures and formal structures, such as an Equity Committee of Council, facilitated the achievement of specific goals. A further good practice observed was "the linking of the achievement of equity targets as a key performance area for every line manager," and this having a significant weighting in the performance appraisal of these line functionaries. This was particularly useful in the area of staff mentoring and skills development. A vice-principal of a university explained the value of this practice:

By doing this brings in a sense of urgency, not "I'll do this if I have the time," – it brings a realisation of priority – that the university regards it as important and shifts the balance. Unless we have a foundation upon which the whole process of equity is built, it will never succeed – it will be destroyed down the line. You need a sense of commitment from people and if you can't buy it, you make it their responsibility and a determinant of their personal success. Performance bonuses are linked to the achievement of goals that include equity goals.

The personal commitment of the Deans to equity is also of significance, but in some instances there appeared to be tension between levels of personal commitment and particular individual notions of quality and excellence.



### **5.3.2 Managing staff equity**

Instruction/research staff in medical schools are still predominantly White and male, especially at the more senior levels. Among the deans of medical schools, there has never been and currently is no female dean.

Both the medical schools and DoH subscribe to the need for greater equity in the staff profiles of medical schools, and all institutions indicate that during the process of staff appointments, the joint appointments process facilitates the achievement of greater equity. However, there were comments about the shift in the position in the NPHE (DoE 2001a) to appoint Black non- South Africans from the original position of the *Employment Equity Act* to focus on designated groups in South Africa. A participant who had been a member of a selection committee where this shift had on one occasion resulted in controversy described the incident:

The dissent arose over whether a White female South African should be given preference over a Black non- South African with better qualifications than the White candidate, in a department that had no Blacks.

#### **5.3.2.1 Joint appointments**

The majority of staff is on joint appointment with the university and the provincial DoH. Salaries of staff on joint appointment in Gauteng are paid by the Gauteng DoH, and therefore academic staff generally regard their employer as the Gauteng DoH. Although they may have a strong commitment to their teaching and research responsibilities, their service responsibilities often have a negative impact on their university activities. Respondents were divided on whether it would be better to be employed by the DoH or DoE, but “the serving of two bosses” was clearly on issue for some respondents. A participant from a national ministry made an interesting comment relating to this:

Joint appointees often use this structural arrangement for their own convenience when necessary, claiming to the DoH that they are abiding by university requirements, and at other times informing the university and DoE that they are DoH employees.

Conditions of employment, promotions and disciplinary procedures are linked more closely to the DoH than to the DoE, and most respondents cite the difficulties with this arrangement but adhere to it, with the exception of one institution, where the person responsible for staff management explained:

We've assumed with joint appointees that we're the employer – we take disciplinary action and we recruit staff. I've had incidents about who is the employer, but we discipline joint appointees. For example, we had a member of staff accused of raping a student and we disciplined him. By the time the DoH gets their act together, we've moved on. You cannot allow yourself to be held back to mull over who's responsible or not. In one case that happened 16-18 months ago, we dismissed the employee and he is still to go through the disciplinary process with the province.

The DoE, DoH and universities concur that the four major functions of academic health professionals are teaching and training, research, clinical service and community development. However, priorities differ, with the DoH placing greater emphasis on clinical service and community development, while the universities and DoE are more concerned with the teaching and research functions. These differing priorities are in line with the different strategic objectives of the national DoE and DoH, discussed in Chapter 3 (cf.3.3.1 & 3.3.2). The following statement by a member of management of a university describes this tension:

Purely from a management point of view, we would like to get rid of the joint appointment system. The problem is whether we like it or not, or are prepared to admit it or not – we are subsidised by DoH

and are benefiting financially from the current arrangement – although from an academic and research point of view, we are not controlling teaching and research to the extent that we would like to – that is the core business of the university and it is not the core business of DoH – they are interested in service rendering.

The structural arrangement between the DoE and DoH is not advancing equity in terms of the staff profile in medical schools at the rate that it could be. Both departments share the common goal of improving staff equity profiles, but the departments, either individually or collectively, appear not to have an employment equity plan with targets and underpinning strategies. A manager involved with staff recruitment explained:

We can only be effective in enhancing diversity if we have the DoH and the university partnering each other in setting up employment equity goals – this has not happened – we’re waiting for the DoH – they’re actually calling the shots.

A concerted effort is required to plan, implement and monitor equity goals and strategies to accelerate the rate of transformation in this sector. A participant remarked on the experience in his faculty:

Information comes to the faculty from the HR (Human Resources) department and you have to set targets for the next few years for the employment equity plan, but its one thing to say what we want and another thing to get there, because in many fields there are very few Black specialists and they are in private practice.

### **5.3.2.2 Recruitment and selection**

It is only specialists who are employed in academic medicine and many managers commented on the extremely small pool of Black and female specialists in the country. This is confirmed by the statistics provided in Table 3.27. Due to late entry of Blacks into the field of training to be

medical doctors and the low numbers of Black students admitted into medical schools, the pool of Black doctors remains very low.

A dean explained the difficulty:

African specialists are very few in number because there's an inevitable lag period of 12 to 15 years from the time that you start taking Africans into a medical school to the time you've got specialists – the problem will remedy itself over time. Staff turnover is low, especially at the senior levels where staff is on permanent appointment. You actually have to wait for somebody to leave before you can redress staff imbalances – we only need to replace the chair of Neurosurgery every 20 years and the chair of Radiology every 10 years.

Further, salaries paid by the province to specialists are far lower than the earnings of specialists in private practice and many Black specialists opt for private practice. A member of management of a faculty ascribed this trend partly to the following factors:

People who come from a middle class background often don't have so much debt and can live with the compensation of being an academic, and what it offers may compensate for the lower salaries – but for people who are feeling much greater pressure to earn - to support a large extended family – perhaps only to acquire the trappings of middle class that they might not have had, the pressure to go private is huge.

All institutions appeared committed to achieving greater equity, especially at senior levels of management, but the concern is more about race than gender, and institutions differed in terms of the manner in which interventions were made during staff appointments. A manager of a university outlined its approach:

The main responsibility for equity lies with line management. When they are interviewing candidates, they are in the best position to take the right decision, but we have the liberty as executive management, once we receive the statistics of applicants for a particular position, to refer recommendations back to them if members of designated groups are unsuccessful.

The commitment to appoint members of designated groups appeared stronger at the levels of executive management than lower down the line. A participant responsible for advancing staff equity at the institutional level explained the reason for such strong commitment:

Our explicit philosophy is that each and every position created or vacated are employment equity opportunities. We are working from a very low base and this is a daunting task. We are setting conservative, realistic, achievable targets that would give our efforts some legitimacy with the government and stakeholders.

There are various strategies that institutions report using successfully to increase the representation of particularly Blacks. One institution attempts to ensure that every appointment selection committee is representative in terms of race. An example given by a manager in a medical faculty is:

Every faculty selection committee has to have members of the designated groups on it – sometimes we only find one African member, but the general balance is constructed of people that have that goal in mind. There is also an Equal Opportunities Committee that nominates people to sit on selection committees. The Equal Opportunities Committee is an open committee – it identifies areas that may obstruct progress or advancement of Black academics, and is also a talk-shop and support group – people can share their experiences and realise that they're not alone in the things that they are experiencing.

In another institution, it was a representative of the human resources or equal opportunities office that was part of all selection committees. A flawed fundamental assumption is that having Blacks or academics who espouse equity means that they comprehend fully the dynamics of historic disadvantage and can act in a manner that would eradicate related prejudice in the selection process. At no institution was there a requirement for members of selection committees to be trained. Intensive training in selection is important in that it enables selectors to confront their personal biases and socialised preferences, and be able to apply consistently the criteria scheduled in the *Employment Equity Act* (SA 1998a), such as potential to do the job or to acquire within a reasonable time the skills to do the job. The problem is that many institutions, faced with staff cuts, are seeking individuals who could perform the functions of often more than one person immediately.

Headhunting is reported as an effective way to recruit Black staff, but some institutions, particularly the HDI, reported carrying the development costs in training, supporting and mentoring individuals who are bought by other, better resourced institutions. A participant at management level in the university expanded on the general criticism:

More and more money is expended on the same individuals who play musical chairs among institutions offering the best package. They don't stay long enough to make the envisaged difference in the institution and reduce the resources that could be used to develop others.

There is clearly a critical shortage of suitably qualified Black candidates in certain fields. A popular practice among the HAIs is to appoint suitably qualified members of designated groups in supernumerary positions for a limited period of time.

A manager responsible for promoting employment equity at a university outlined this practice:

When we spot someone that we think would be suitable for a post, but if there is no post vacant, we can apply to the central university fund for funding (supernumerary positions) of that post up to two years.

Many institutions had programmes to grow their own timber. An example is the participation by one institution in a project sponsored by the Mellon Foundation that supports African masters and doctoral students financially, with the aim of them becoming academics. The project also funds the mentoring of these students throughout the programme.

A manager responsible for staff development claimed that a form of mentoring programme was essential for all new staff and explained:

They need someone to show them the ropes – this is a fairly arrogant, hostile and cliquy environment, and if you come in as new, and particularly if you look different – you find it extremely hard and feel very alienated.

An unresolved issue is whether race, gender or area of research would be the most appropriate basis for matching mentors and mentees, but in the medical school and generally in the university there are small numbers of Blacks and women in senior positions to act as mentors, as is the experience internationally (Gregory 1995:63; Elam, J.C. 1989:37-38).

### **5.3.2.3 Staff Development and Retention**

A manager responsible for academic staff training in a medical faculty stated categorically:

People just don't know about teaching. They get employed because they are specialists and they have no educational background, but it seems that the thought doesn't occur to them or to management that that is something that is lacking in the institution whose primary focus is to teach. It's the institution's responsibility to put things in place – and it will have to be very prescriptive.

This comment was similar for all medical schools in the sample where the teaching styles of respondents were strongly influenced by role models from their own training experiences, and although every institution had in place some staff development programme, none were functioning optimally.

In medical schools, the majority of the academic staff is on joint appointment and the institution is therefore restricted in terms of prescribing attendance of any staff development programme, including staff orientation, or to offer incentives linked to remuneration. In one institution, all staff development programmes were accredited by the HPCSA for continuous professional development (CPD) points, but it attracted mainly junior members of staff and not those academics who were set in their ways of teaching and needed to adjust to OBE practices (Jansen & Christie 1999:133). It was commonly found that there are certain individuals, usually at junior levels, across all faculties, who appeared to have less of a problem admitting that they needed assistance with their teaching and sought this at an individual level by either asking for advice, material, requesting the observation of a lesson and attending staff development courses. In one of the institutions, a faculty other than medicine has as part of its probation requirement, a report from the staff development officer based on an observation of one or more lessons.

All medical faculties report a significant amount of resistance or reluctance from academics to attend staff development training and a variety of possible reasons were offered.



A staff development manager expressed the following perception:

They feel, we're academics – we know what we're doing – we're experts – we don't need training.

In another institution, a person responsible for staff development reported:

If I get 10 members for a training session, then I'm doing well, but when I'm doing a course on lecturing, I get 30 people because that's what most of them are doing. That is the one thing that I would like to take off my training agenda, but it is the one thing that they come to.

Another faculty manager reported:

There are still some members who have not attended a single training course, even when we were training on implementation of the new curriculum, and these are mostly people who are committed to private practice.

It appears that a possible reason for the non-attendance of staff development programmes was that many found the complete paradigm shift with the new curriculum unfamiliar and threatening, as an institutional manager stated, “you feel safe with what is known.” With the new curriculum, lecturers are working in different contexts and that requires developing new teaching styles. It seems to be very difficult to get senior academics, especially HODs, to attend staff development courses, and yet this was imperative if they were to provide the leadership in teaching in terms of the new curriculum. Part of this “may be due to reluctance to admit that they do not know.”

He went on to explain:

What we've found is that some of the old faculty who used to be good lecturers according to the students, are not fairing so well now and vice-versa – different personality types are coming to the fore.

The apprehension to ask for help could be pervasive in a faculty or in departments where a safe space is not created that supports and encourages requests for help. In one elite institution, it was reported by an institutional manager that new staff felt afraid to ask for help or admit feeling lost:

It is an admission that they shouldn't be here, and the same applied for students, so they pick up very quickly that you need to look competent.

There were some examples of good practice relating to staff development. One was of a systematic process of conducting a comprehensive staff training needs analysis to inform the courses to be offered. Another was the membership of the person responsible for staff development on as many curriculum development committees as possible, to get curriculum developers to reflect on the educational significance of the decisions they make, for example, "why are orals being used as the method of assessment in terms of the outcomes specified?" A further efficient practice was the use of internal experts to offer some of the staff development courses. An example given was of a lecturer, who uses the whole brain model in teaching, offering training to peers on its application.

An innovative practice to improve staff development was the establishment of a committee consisting of highly respected, retired professors and other members, including the education officer, who analyse and provide positive and negative feedback on the final block assessment test. This analysis would examine, for example, the technical structure of multiple-choice

questions that were poorly answered and feedback was given on the analysis of items in terms of Bloom's taxonomy, such as the percentage of the items relating to recall, application, critical thinking and problem solving. The individual responsible for staff development explained:

We are actually training staff through a feedback mechanism on their own material – and this is starting to work.

There has been a shift in staff development towards training on computer and web-based materials development in some institutions, but a participant reported, "the foundation training on teaching and learning is not being done." Although two of the institutions were offering postgraduate courses on teaching, either through contact or distance education, the enrolment of staff from its medical faculty was either nil or very low.

Many contextual differences in a medical faculty make it difficult to introduce the same staff development strategy, used widely in other faculties, in the medical school. An example of this is a programme that takes young Black academics and pairs them with a senior academic for three years during which time they are studying for a PhD they carry a light teaching load, get a salary, get funded for one conference a year and in their third year they get funded for a semester overseas. The mentors get an amount of money that gets paid into their research funds. It is difficult to introduce this type of scheme in the medical faculty because of the clinical service responsibilities of many staff on joint establishment and because many of the senior staff do not have the academic qualifications or necessary skills to mentor students at a PhD level.

Previously, it was not possible to de-link hospital and university levels of joint appointees, so when the Department of Health required particular competencies, for example, in terms of clinical experience, the specific competencies required by the university could be different in terms of

teaching and management experience. The possibility of de-linking these levels provides universities with the opportunity to employ junior Black and female staff, who have the necessary clinical qualifications, at a lower level in the university establishment, and plan for and support their growth and development as a means of growing their own timber, and move them up the university staff establishment ladder. However, this is not widely practiced. A deputy dean explained how the current practice could promote greater equity:

Previously, a senior lecturer had to be at a senior specialist level, but that has been de-linked, so that it has made it possible to appoint a senior specialist at a lecturer level if he does meet the university requirements for a senior lecturer – this is advancing equity as it has no salary implications for the individual, except at professorial level.

The university is responsible for the promotion of an individual according to the university teaching ranks. Therefore, a joint appointee may be awarded a promotion from a lecturer to a senior lecturer, but this has no benefit in terms of remuneration, except at the level of Head of Department where the individual is appointed as Professor and Head of a particular department.

Retention of staff was particularly a problem among clinical specialities where individual practitioners could earn more in private practice, especially in areas of high demand, and among members of designated groups that were in high demand by other HEIs attempting to rectify skewed staff profiles. All medical schools agreed that this is a serious problem, with the HAIs experiencing the movement of highly qualified staff into the private and government sectors and into other HAIs that offer higher positions and better salary packages. The HDI also reported losing highly qualified staff to the government, the private sector, as well as to other HAIs. This mobility trend is particularly significant for Black staff and women, and this makes succession planning by institutions to redress equity imbalances at the more

senior levels difficult to manage. A participant labelled the practice “cheque-book equity,” where better resourced institutions could buy the services of Black and female staff who were in high demand from less well-off institutions that could do little to retain such staff. A member of a faculty management that has the intention and need to improve its staff equity profile said:

The pool is small and we know who the best people are, so if we want a Black person, we make an attractive offer. You get the person and his or her entire network of contacts.

Staff retention is reportedly affected by other factors, such as general staff morale in the faculty and hospital, working conditions, the implications of financial constraints, and emigration of medical doctors that is a serious problem for South Africa. The government invests large amounts of money into the long and costly training of medical doctors, and given the uneven distribution of medical doctors in the country, the exodus of medical doctors needs to be stemmed. A manager in a medical faculty reported that, “a survey conducted last year among medical graduates was that about a third of them wanted to go overseas to work.”

It appears that the emigration rates of White doctors is higher than that of Black doctors, but it is important to explore the reasons for this exodus with a view to implementing retention strategies. A dean of a medical faculty reported:

I would expect that there would be fewer African graduates emigrating than other groups, but the reasons for emigrating have to do with job satisfaction, salary and working environment.

Another participant, who believed that doctors emigrated because of their poor working conditions, proposed that one way to retain doctors is to improve the entire health care system.

According to this faculty manager:

This requires paying attention to details, such as having a hospital where there's staff, nurses, painted walls, clean surroundings, dignity and no cockroaches. This is in stark contrast to private hospitals where patients who can afford it pay large amounts of money for facilities and treatment. Public health has always been seen as a charity exercise.

It is pointed out (DoE 2001a: 31) that the fact that many graduates emigrate:

Suggests that the values and practices of some medical schools may be at variance with the values and principles and the broader objectives that underpin the transformation agenda in higher education and the needs of the country.

This suggests the need for a re-examination of the criteria used to select students for medical training that are in greater alignment of health human resource development for South Africa.

#### **5.3.2.4 *Private work***

Previously, clinicians were allowed to be in full-time employment with the provincial DoH and to undertake a limited amount of private work, termed limited private practice. This had its advantages in that clinicians were able to supplement their low public sector salaries and those in management posts in academic medicine were able to practice their clinical skills. However, this concession was abused and clinicians then had to apply to the DoH for permission to do private work outside of official working hours. This is commonly known as remunerative work outside the public service (RWOPS) and resulted in many clinicians leaving academic medicine. The DoH is currently seriously considering reintroducing limited private practice

and a member of faculty management concerned about staff retention on account of low public sector salaries said, “ we are by law not even allowed to top up salaries.”

The challenge will be to effectively control private practice in a way that will ensure that registrars receive quality training and supervision, that research continues and that successful skills transfer occurs, both for staff development and succession planning. An institutional manager reported a case of an HOD who had not produced a single postgraduate student in the past 10 years. There is a serious staff shortage in all medical schools with some posts being frozen if there are insufficient funds available to fill the post. This has serious implications for both teaching, such as time that the lecturer has available for student consultations, as well as research. A member of executive management in one university commented:

Our vision is to be an excellent research institution but that may not be in line with the agenda of a particular lecturer who would have to reduce the number of hours he spends in his private practice in order to do research.

There were various comments expressed about private practice during the study. It is apparent that the effect of staff shortages is exacerbated by private work that clinicians undertake. One comment by an executive manager of a medical faculty was:

Private practice affects everything – not just equity. People go off at 14h00 – I don’t think there’s inequity in that ...they go off equally – Blacks, Whites, women, men – walk around the car park at 15h00 and most of the HOD bays are empty, and the younger consultants follow the lead. There’s a whole trickle down effect of indiscipline... there’s also the problem of monitoring and controlling RWOPS.

### **5.3.2.5 National Health Laboratory Services (NHLS)**

There is a constant shifting of structural arrangements that affect the functioning of medical schools and that require response. An issue of current concern is that pathology services have shifted to the National Health Laboratory Services (NHLS). A deputy dean remarked:

The development of the NHLS with regard to pathology is the cause of huge distress and concern for the pathologists and the university. We are prepared to take over people on our establishment, provided we get the appropriate funding from the DoE.

The consequence of this move is that pathologists previously employed as joint appointees of DoE and DoH, and located within academic departments in medical schools, are now employees of the NHLS that is concerned primarily with service. The pathologies form an important part of the MBChB curriculum and an arrangement needs to be made about the teaching and research functions rendered by the pathologists to the universities. A member of executive management of a university explained:

The university will have to buy time from the NHLS for people they would like to be involved in teaching and research programmes. Part of the problem is that there is no consensus among universities about the kind of model they would like.

From the equity perspective, there is an urgent need to train more members of designated groups in the pathologies (cf. Table 3.27).

There are on-going discussions about the nature of the links between the NHLS and medical professional training. The challenge will be to provide incentives that will promote research and human resource development in the pathologies, given the prevailing inequities.



A concern expressed by a member of a medical faculty was:

We've lost control over the academic and research activities of people transferred to NHLS – that is not even a joint appointment system.

#### 5.3.2.6 *Staff Nationality*

Due to the small pool of qualified specialists from designated groups, there is a significant number of non-South African Blacks in permanent posts in academic medicine. Interviewees expressed different views about this, with some believing that non-South African Blacks provided important role models for South African Blacks and that the employment of non-South Africans was essential in filling the demand for qualified staff in academic medicine. Others believed that non-South Africans were occupying posts that could be filled by local staff and were in this way blocking the upward mobility of South Africans. There appears to be a significant level of xenophobia relating to the appointment of non-South African Blacks, as one African manager named a university that had:

Colourised its faculty by appointing many Nigerians and Ghanaians ...that does not address the issue of equity in terms of Black South Africans who have been oppressed by apartheid.

The DoH and the Department of Home Affairs have introduced policies to address this issue. Institutions are not permitted to fill a post beyond a certain level with a non-South African, unless evidence is provided that the post was procedurally advertised and that, firstly, no suitable South African candidate could be found and, secondly, that no suitable candidate could be found from the neighbouring SADC countries. Then only is permission granted for the post to be filled by a non-South African. A counter argument is that even after following such a procedure, the filling of a post by a non-South African

means that the particular post is blocked to South Africans who develop the necessary skills in later years, as these are permanent appointments and the staff turnover in particular fields of specialisation and levels of employment in academic medicine are very low. It is recommended that the appointment of non-South Africans be on a short-term contract basis of about five years, with one of the explicit key performance areas to be succession planning.

Currently, there are 402 Cuban and 44 other foreign doctors employed (DoH n.d.:7) and these non-nationals are playing an important role in service and are, reportedly, often more committed to service rendering than local clinicians involved in private practice. A respondent from a national ministry articulated this view:

Cuban doctors in South Africa are indicating clearly according to their interaction that they are people who clearly understand service needs – many already speak the local languages where they are practicing – the interesting thing is that some of the South African doctors who belong to other groupings cannot even speak Zulu that is spoken by more than 70% of the population.

### ***5.3.2.7 Gender stereotypes and trends***

Interviews revealed that there were strong gender stereotypes, prejudice and discrimination, although there were in a few instances mitigating arguments in support of the discrimination, reflective of particular contextual realities. Articulation of such views and practices in this study provide a greater understanding of the particular gender dynamics in academic medicine. A significant finding that emerged during this study is the difference between the experiences of Black and White women in medicine. This is seldom acknowledged in the literature where there is an assumption that the problems women in medicine face are basically the same. It is important to discuss both the common and particular experiences of Black and White female medical doctors described by participants.

A common and primary reason reported by women for choosing either particular areas of specialisation, part-time or clinic work was to enable them to juggle their roles as wives and mothers with their professional careers. Male participants acknowledged that the double role of professional women influenced their career choices. However, there was a strong view, particularly but not exclusively among men, that women were biologically predisposed to particular fields of specialisation that had stronger traits of nurturing and caring, such as Paediatrics, or to “softer options”, such as Dermatology (cf.3.2.2).

The classic example cited was Orthopaedics (cf. 2.2.3). One male respondent explained:

Women don't go into this particular surgical discipline because Orthopaedics is a strenuous manual job – pulling on bones, setting it, popping joints out, and I don't see a woman having the physical strength or skills that are needed for that particular job. But having said that, there's a sub-speciality called Hand and Microsurgery that requires delicate skills and women can easily fit into that.

The study revealed that there were a few women in fields such as Orthopaedics and Cardio-thoracic Surgery and they were highly successful (cf. 2.2.3). Another male respondent commented:

Women don't go into surgery because the male chauvinists who are in the profession don't allow them to.

Both men and to a lesser extent women, held strong gender stereotypes relating to medical professional practice. A comment reflective of the depth of gender stereotypes was by a male respondent who in earnest stated:

I imagine that if I could choose between a female and a male plastic surgeon for an aesthetic job, I would go for the woman.

On probing possible ways how women could be encouraged to enter male-dominated clinical specialities, such as Orthopaedics, in order to ensure service delivery, given the apparent inevitable feminisation of the medical profession, a recommendation was that to break gender stereotypes in specialities, a female specialist from the private or public sector, in an area in which one is trying to attract female registrars, could be invited to deliver a few guest lectures and she could be influential as a role model. A dean recommended:

If during the selection process, there is, for example, an application from a female wanting to specialise in Orthopaedics, it is necessary to confront the stereotypes by asking the applicant how she would cope with the more manual aspects of the job.

Care should be taken that questions posed are not discriminatory in terms of the *Labour Relations Act* (S.A. 1995b) and the *Employment Equity Act* (S.A. 1998a).

The extent to which such views were factual, that is that women are biologically predisposed to certain types of specialisation, or strategic, to enable women to cope with their roles of child-bearing, child-rearing and domestic care, or whether strong gender stereotypes have discouraged the entry of women into male-dominated fields, require further exploration, but it is highly possible that the resultant gender trends are due to a combination of all of the above (cf.2.2.3). A male respondent from faculty management stated:

It's not that women cannot manage the work in the major surgical disciplines. It's either that they are prevented from doing so or choose a lighter route that would allow them to combine their multiple roles.

Carol Gilligan (1982:66) argues that women work from a different moral basis from men. A female deputy-dean provided elaboration in terms of her personal experience:

I, for instance, didn't do a rotation in surgery because I hate blood. I don't like the idea of actually cutting somebody, but if I come to the scene of an accident and have to suture somebody, that I can do, but actually getting somebody onto a table and having to cut through the person's tummy – I just don't like it – but I think that one must not generalise because it's not the same for all women.

Women reported finding it very difficult “to break through the glass ceiling to managerial, professorial and associate professorial levels.” A general reason given was that of research output. At one university they are commencing on a pilot project in which 15 female volunteers at a senior level will be, according to the organiser:

Put though an intensive year of research writing in writing groups, but also in things like stress management, how to act assertively and effectively on committees that are male dominated... to see whether that can have an impact on moving them through the glass ceiling.

An observation made by a male executive faculty manager, based on his personal experience in a faculty of medicine, was:

Women actually have to adopt male characteristics in order to achieve some semblance of success – they have to become aggressive, domineering, self-opinionated. I know of two female heads of departments that have had to adopt such a posture that men are belittled in their interactions with them.

In all institutions women in the medical faculties reported even greater difficulty in succeeding to higher levels as the focus was to achieve greater representation of Blacks at senior levels and the upward mobility of Black men was far greater than that of women, including Black women.

Another male participant observed of women doctors, “Once they marry, women tend to become clinic doctors and go into preventative medicine – they seem to get away from outpatients.” The participant reported his personal experience of training in another country many years ago where female students had to sign an undertaking that they would not become pregnant while in training. The rationale was that if the student became pregnant and left medical school, she would have wasted the place of another student. Another example provided was of a department that had a majority of young female doctors and it was reported that at any one time, there were always either one or two of them on maternity leave, and given the policy by the DoH of not providing temporary replacements, it meant that the department was continuously understaffed, the workload of the others increased and the levels of productivity of the department decreased.

The specific mobility trends of female doctors in South Africa require greater analysis, especially in terms of race, and it should not be assumed that international gender trends apply to the South African experience. A female participant described the strong patriarchal culture in African society that commonly prescribed traditional roles of wives and mothers that female doctors had to fulfil, in addition to the demands of being a medical doctor. She provided an example of a female colleague whose husband:

Insists that since she is married to him, then she must prepare the food – she must wash his shirts and iron them, even though she has domestic help.

Another African female respondent described how her career rise had resulted in her earning more than her husband:

This threatened his manhood and I constantly try to play down my professional achievements for the sake of my marriage...he says things like “ you may be important at work but remember in this house you are nothing.”

These are extreme examples that cannot be generalised for all African female doctors. A few reported supportive relationships, such as:

My husband and mother-in-law encouraged me to continue in practice and to specialise, in times when I found combining these roles very difficult, personally frustrating, and I felt guilty that I was neglecting my children.

Another interesting phenomenon reported was the frequent refusal by especially older Black male patients to being treated by a young Black female doctor. One commented:

But the funny thing was if a White female doctor came to do the examination, the male patient wouldn't say a word.

### **5.3.3 Managing student equity**

In the early 1990s, the equity imperative emerged as a fundamental principle on the transformation agenda of higher education and institutions became increasingly aware of the need to achieve a greater degree of equity in their student profiles. English- medium HAIs, having a better equity base, showed greater increases in the number of African students admitted in this period than the Afrikaans HAIs, which had virtually no Black students. As shown in Table 3.2 in this study, from 1988 to 1993, the percentage of African students, in terms of total institutional headcount enrolments, increased from 1% to 5% at Free State, 0% to 4% at Pretoria, 0% to 1% at Stellenbosch, 7%

to 17% at UCT, 11% to 23% at Natal and 11% to 19% at Wits. The percentage of African students for the same period remained at 100% at the University of Transkei and changed from 82% to 81% at Medunsa.

In equity discussions, it is important to shift the focus away from first year admission and total enrolment statistics to pass rates and graduation rates, as the attrition rates of Black students is excessively high. A university registrar explained:

Equity and access should not end up with admissions – is the milieu of the university conducive to nurture, guide and counsel students to make sure that they are given a chance to reach their maximum potential... because of the funding that is attached to students that are coming in – we get many Black faces in HAIs but many of these students never graduate – we need to unpack this to see statistically how many African students graduate, based on the number that were admitted.

This was one of the reasons that the DoH proposed a central admissions facility for all medical professions, but according to a respondent from a national ministry, “this was vehemently opposed by the deans of medical faculties as an infringement of institutional autonomy.” The DoH is therefore working towards obtaining statistical feedback through the DoE and this exemplifies the nature of the tensions in the structural arrangement between the DoH and DoE in the training of medical doctors.

A member of the faculty management explained the resistance by medical schools to a central admissions office:

You get a lot of resistance if you are told who to take – one from students because they may not have chosen to come here and are put here regardless of where they come from – when I just see how the internship ends up with a fight every time. I think that we must become a place of choice – not a place of punishment.



### ***5.3.3.1 Transformation of medical schools' student profiles***

Between 1988 and 1993, the student admission profiles of the faculties of medicine in the HAIs more closely resembled their institutional total enrolment profiles in terms of African student intake than the HDIs, including Natal (cf. Tables 3.2 & 3.8). Table 3.4 shows that the percentage of African students admitted into medical schools in 1994, a year later, was 1% at Free State, 4% at Pretoria, none at Stellenbosch, 23% at UCT and 19% at Wits. In comparison, Transkei had 78% African students admitted into its medical programme, Medunsa had 63% and Natal had 52%. In the latter three institutions there was a significant over-representation of Indian students admitted.

By 2000, institutional student profiles showed that the percentage of African students in terms of headcount enrolments was approximately 39% at Free State, 23% at Pretoria, 6% at Stellenbosch, 27% at UCT, 39% at Wits, 36% at Natal, 98% at Transkei and 83% at Medunsa (Cooper & Subotzky 2001: 265). However, the percentage African students headcount enrolment for their medical schools in 2000 was 17% at Free State, 12% at Pretoria, 1% at Stellenbosch, 30% at UCT and 13% at Wits. The percentage of African students at Transkei in 2000 was 68%, 80% at Medunsa and 46% at Natal (Table 3.15). A member from a national ministry voiced the concern, "there are enough talented Black students out there to fill places in medicine – it's an excuse that there aren't suitable candidates out there."

The purpose of citing these statistics is to point out the discrepancy between institutional and faculty profiles and to demonstrate that the disparities are for most institutions becoming wider rather than narrower with time. The increase in the number of African students in institutions is, in most instances, not accompanied by a similar increase in the number of African students in the faculties of medicine (cf. Table 3.10). The issue is whether faculties of medicine should be allowed to continue, without regulation and

interference of institutional autonomy, with their current admission patterns, given the limitation of spaces to study medicine.

However, the above trends cannot be reduced to resistance on the part of institutions to admit Black students. A participant pointed out that the nature of the programme, its content, delivery methods and assessment in a particular faculty of medicine had the effect that:

People outside end up with a perception of how easy or difficult it is to pass at this faculty – so the faculty gets a reputation that most of the Black students don't get through or there's a high failure rate. This results in prospective Black students seeking admission elsewhere first.

Another view was that institutions acquire a reputation about how tolerant or intolerant they are about non-payment of fees and this affects the attractiveness of the institution for different students.

The medical schools of Medunsa and Unitra were also criticised by a national ministry for not sufficiently diversifying their student populations in terms of the intake of White students. The claim of HDIs is that they are redressing historic inequities in a manner that is compensatory to the lack of transformation in some of the other medical schools. An institution that was cited often in the study by respondents at all levels was that of Stellenbosch that increased its total enrolment of African students in its medical school to 1% of its 958 students in 2000. Table 3.15 provides a clear indication of the nature and extent of the prevailing race inequities.

The issues relating to student equity are complex and the discussion that follows aims to highlight such complexities. However, a fundamental issue that is suggested by the above data is the definition of equity in terms of student access both by institutions and medical schools. Establishing a common understanding of equity would be facilitated by the provision of an explicit definition and guidance from a national level. There is, for example,

a need to clarify whether equity in the South African context needs to disaggregate the category Black in all equity considerations, and statistical analyses to avoid a disproportionate representation of one group of students within the Black category.

#### **5.3.3.2 Demand for limited available spaces**

Traditionally, medicine has attracted applications from students with the best matriculation grades and the demand for entry into all medical schools exceeds the supply of places available. The historic distribution of students by race in the eight medical schools was historically determined by their ideological foundations, with the historically White Afrikaans-medium institutions of Pretoria, Free State and Stellenbosch admitting predominantly White Afrikaans speaking students; the historically White English-medium institutions of Cape Town and Wits admitting predominantly White English speaking students and the historically disadvantaged institutions of Transkei and Medunsa admitting mainly African students. The exception is the University of Natal, a historically White English-medium university whose medical school was established for the purpose of training mainly African medical doctors. These historic training patterns have resulted in a highly skewed profile of the current pool of medical doctors and medical specialists, as shown in Table 3.27.

The trend in medicine in terms of demand for spaces is different from that in many other fields of study where institutions engage in aggressive recruitment strategies to fill the numbers of available spaces in each programme. In medicine, the demand for places to study is very high. There is competition among medical schools for the students with the best matriculation grades. This is particularly in the case of African and Coloured students where the pool of students with very good grades in Mathematics and Science in the matriculation examination is small.

A reason for the continued high demand is the high status attached to being a medical doctor in all communities. A Black female member of faculty management remarked:

There is still that mentality as when we grew up that if you are a medical doctor, you are going to be respected by society...maybe we are to blame as parents because we still encourage our children to do medicine if they get a good pass.

However, given the length of training and the opportunities available in other three to four-year training programmes, such as Information Technology and Engineering, which also require excellent grades in Mathematics and Science, but where upon completion graduates earn far more than a medical doctor, there is over time likely to be a decrease in the demand to study medicine. An example given by an executive faculty manager was of:

A mining house that gives a student a huge bursary, a monthly allowance and guarantees the student a job on completion of a four-year course... medicine is looking unattractive because of the length of study, the community service and the fact that the wages in the public sector are very low.

There is likely to be a shift in student demand patterns for study of medicine in terms of race and gender, as observed by a faculty respondent:

I don't think that medicine is seen as a glamorous, high status profession anymore amongst Whites. It's less attractive for White men while it's relatively more attractive for White women in the scale of status professions.

One African respondent from a faculty of medicine remarked:

When we were young we had limited career choices. I couldn't do engineering if I wanted to... it must go back to high schools where

pupils are provided with good career guidance and taught that with the new government you have a wide range of opportunities. You don't just choose medicine because you did very well in matric when actually, deep down in your heart, you do not want to be a doctor.

For institutions requiring similar high matriculation grades for students of all races, and not providing adequate concession for the poor schooling of the majority of African pupils, there is unlikely to be any significant shift in the admission of African students from non-Model C schools into their medical schools. Given the limitation on the number of spaces available to study medicine, there needs to be careful monitoring of student intake.

The number of places that each medical school makes available for first year admissions has not been increased for many years. This is an example of economic determinants resulting in practice that is in direct contradiction to the goal of increased participation rates of the NPHE (DoE 2001a) and the principle of equity of access outlined in the *White Paper 3: Transformation of Higher Education* (DoE 1997). While other faculties within institutions are implementing strategies to widen access and increase participation, medical schools are constrained to maintain the status quo.

As a dean remarked:

Normally it is agreed upon for the number we are training not to exceed the number of intern posts and that number is static. So when the Vice-Chancellor or Department of Education puts pressure on us to increase... - there's nothing we can do about it – we can't increase our student numbers because of the bottleneck at the time of graduation.

### **5.3.3.3 Admission requirements**

The basic admission or entry requirement for all MBChB programmes is a matriculation endorsement/exemption certificate and stipulated minimum

grades in particular subjects, such as Mathematics and Science, or a specified number of points calculated according to a particular subject weighting system. A distinction needs to be drawn between the terms admission and selection, as used in this study and as generally applied in HEIs. Admission refers to the administrative process of sorting out those applications that meet the minimum entry requirements for entry into a particular programme. Selection involves the application of specific criteria used to pick out from the total number of applicants who meet the minimum criteria, the number of applicants for which there are spaces available.

The study showed that there was great similarity among medical schools in their admission requirements, specifically in terms of Mathematics and Science as required subjects for admission. There was only one institution that considered a student for admission into medicine if Biology instead of Science was taken as a matriculation subject.

A member of the faculty management that considered Biology instead of Science viewed this as a means of widening access and explained:

Most students wanting to study medicine study both Physical Science and Biology at school, but this concession allows access for those students who did not have the opportunity to study Science at school or had not considered studying medicine when they selected their matric subjects. Only about 5% of our students enter through this route.

This would require the student to study first year basic Science courses and concurrently attend tutorials to acquire the basic Physical Science content taught in high school.

A difference in the admission criteria found in this study is the requirement of a language prerequisite grade by some institutions, while language is not included in the admission requirements set by other institutions. Another difference is the stipulation by some institutions of a minimum aggregate,

often based on five subjects, while in other institutions the aggregate was not considered.

A language, Mathematics and Science as entry requirements is similar to the British A-level requirements, and many participants maintain that the matriculation-based admission criteria are still the most reliable indicator of academic success. The variation in subject criteria and entry requirement grades may be linked to institutional and faculty missions, but the variation suggests a need for a better understanding of entry requirements that are reliable predictors of the potential to be a good doctor and to succeed in meeting the specified outcomes of each MBChB programme.

There is an acute shortage of students studying Mathematics and Science and this profile is racially skewed. Kahn (2000: 13) provides important insight into the extent of race disparities with regard to the matriculation examination. The study showed that there was an overall decrease from 1997 of the number of students enrolled for the matriculation examination, from 559 000 to 490 000, with the number of students passing Mathematics and Science on the higher grade remaining constant, although there is a steady increase in the number of students passing these subjects on the standard grade. The study shows that of the 38 500 students who wrote Mathematics on the higher grade, 19 300 passed of whom approximately 3 900 were African students not attending former Model C schools. Of the 55 700 students who wrote Physical Science on the higher grade, 23 300 passed of whom approximately 4 700 were African students who had not attended former Model C schools.

A view expressed in the NPHE (DoE 2001a: 39) is that the admission requirements of most medical schools are targeted at the academically brightest applicants rather than those who have the potential but have been denied the opportunity to develop their potential due to the poor schooling in Black areas. However, due to the limited number of places, only those with good grades are selected. On requesting an understanding of the average minimum matriculation grades that a student from an educationally

disadvantaged background would have to obtain to be selected for the study of medicine at the institution, the head of the student admissions office said that, “such a student should have about 2Bs and 4Cs.”

If most medical schools have a requirement of a “C” in higher grade Mathematics and Science as entry requirements for MBChB study, according to the results of Kahn’s study, the pool of African non-Model C students eligible for medical school entry would be far lower than 4900. These statistics need to be viewed against the large number of Science and technology related fields in universities that require higher grade passes in Mathematics and Science for admission, as well as the approximately 1500 medical school places that would require above average passes in these subjects.

An important finding by a SAUVCA investigation (Kotecha 2000:3) is that the senior certificate examination fulfils none of its 3 key functions adequately, namely:

- it is not a reliable indicator of competencies required in the workplace
- it is not a reliable predictor of competencies required in higher education or a predictor of probable success in higher education
- it does not serve the needs of half of all learners attempting the examination

To compensate for the poor senior certificate results, all institutions visited had different forms of foundation or bridging programmes that frequently did not require an endorsed matriculation certificate for admission and that increased access for particularly Black students coming from educationally disadvantaged backgrounds. Two of the programmes were geared more towards Science and Mathematics courses and the other was linked to a broader range of courses. The rationale behind these programmes is that they



would provide students from educationally disadvantaged backgrounds, including those who had not met traditional university entrance requirements, with academic training and support so that by the time they complete the programme they would have developed to their fullest potential to compete on a more equal basis for places in programmes with students having had a good educational background. An advantage of these programmes in some instances is that they allow students to earn credits for what they have passed and to be transferred to the mainstream courses they select. A good practice observed was the systematised counselling support for personal, academic and vocational problems, offered to all students throughout the foundation programme in one institution.

It is anticipated that such programmes are going to become an important means for increasing the number of students in higher education, as they are to be funded by the state. However, to date, in most institutions, these programmes do not form an alternate access route into medicine for students with an inferior formal schooling due to the high demand from students with excellent grades for places to study medicine. The challenge lies in using these access programmes as a means of identifying Black students with potential for acceptance into the MBChB programme, with the acknowledgement that this would require the rejection of applications from White students with better grades.

Many participants in this study argue that very little can be achieved at university level without something constructive being done to improve the quality of education at the school level. This would include increasing the number of students choosing to study Mathematics and Science through the provision of better career guidance, qualified teachers and facilities such as laboratories. An executive manager of an institution severely criticised a current school practice:

There is an automatic promotion of pupils, except under exceptional circumstances when pupils are required to repeat the year. This was introduced for financial and not educational reasons. Pupils, not

having acquired a firm grasp of basic Maths and Science concepts, will not want to study these subjects for matric, and if they do so, are unlikely to do well. We are expected at university level through foundation programmes to remedy what should have been done at school.

Some medical schools, in collaboration with other departments, work with communities to improve health care services and assist support schools in the communities. An example of this is a fully equipped Science bus from one institution that is on a continuous rotation to rural schools to support teachers, demonstrate practical lessons, and through such activities create awareness about the University and Faculty. Another is an example of a medical students' clinic project, run on a voluntary basis by students, which offers good role models for the secondary school pupils in the communities. There are other Science and Mathematics teacher up-grade programmes aimed at improving the competencies of high school teachers in an effort to improve the pupils' exit-level competencies in these subjects.

#### ***5.3.3.4 Selection procedures***

Medical schools calculate the number of first-year MBChB places they have available based on the informal agreement among the eight medical faculties. This needs to include spaces for students who have failed and will have to repeat their first year, and graduates and undergraduates who have performed exceptionally well in their uncompleted programmes in the previous year. Variations exist among institutions on the guidelines they use to constitute this mix of students at intake and there are approximately 1200 students admitted for MBChB study among the eight medical schools annually.

The criteria and selection procedures vary among institutions, but the process privileges academically good students from educationally advantaged backgrounds unless clear targets are set for different race groups. There is only one medical school that is committed to admitting students in

accordance with the population demographics, but a member of the executive management of the institution said:

If we have 80% Africans in the population of our country, then we aim to produce 80% African medical doctors. We've got the right policy but it is sometimes difficult to maintain... the problem is that matric is not passed according to racial demographics.

In most medical schools the criteria set for Black students are slightly lower than for White students and in one institution the criteria are essentially the same. There are elaborate methods used to determine cut-off points, administration of interviews and application of alternate admission tests in many HEIs aimed at identifying potential in terms of increased throughput rates, and two medical faculties have systematically researched the outcomes and demonstrate a high correlation between their selection criteria and academic success, in terms of throughput between six to eight years.

Even after applying lower and more flexible admission criteria, a particular medical faculty in a historically Afrikaans HAI ascribed the low percentage of African students to its history and the related perceptions. The participant, who is a member of the faculty management, explained:

The university carries a historic resistance for Black people to study here, so the first Black students that we got when we opened access in the 1990's was by default...they would come to us when no other medical faculty accepted them. The fact that we didn't get the top Black students has a secondary effect. These students then sit at the bottom of the class and then it becomes a problem of being stigmatised as students who struggle...this is compounded by the language issue.

A good practice reported was the allocation of 20 equity bursaries to academically strong African students. This results in a steady throughput and this strategy attracts applications from other African students who may have

previously perceived the institution as not supporting the access of such students.

Given the high demand for student places and the few spaces available, the criteria applied by most medical schools privilege students from educationally advantaged backgrounds and these are generally White and Indian students, the majority selected having “A” symbols in all or most subjects studied. Pressure to achieve greater equity by admitting more African students results in medical schools competing for the best African school leavers, increasingly from Model C schools, having the required subjects, namely Mathematics and Science. The fundamental problem lies in the conceptualisation of equity, as an executive faculty manager remarked:

We now get students applying from academically good schools...we are beginning to see students coming to us from ex-Model C schools and private schools – that’s good and might change our position...we don’t separate Black students into African, Indian and Coloured.

A participant interviewed from a national ministry challenged the excuse that there are not enough suitably qualified African candidates to fill the places in medical schools and believes that:

Medical faculties artificially inflate their admission requirements – I’m not convinced that you need to be a straight A student to pass the undergraduate MBChB programme. I think that if the pupil comes through school with Cs or above in the necessary subjects, the chances of succeeding at medical school – if the curriculum is appropriate, should be very good.

The difference lies in the variation of the cut-off points for African students by different medical schools. An argument by a member of faculty management is that HDIs and Natal, that have admitted mainly Black students since inception, have always had to exercise greater flexibility in terms of relying on matriculation results but have also subscribed to the

principle of different cut-off points for different race groups that are often much lower than the cut-off points for African students set by HAIs.

The faculty management person remarked:

I've seen from my own experience at Natal Medical School – the students with Cs in Maths and Science did fine – they're highly competent practitioners today...

One of the main reasons for the low numbers of African students taken into some of the institutions in the study is because there is generally no differentiation between the different Black groups, resulting in a significantly large number of Indian students as compared to African students gaining admission into the MBChB programme (cf. Table 3.4).

#### 5.3.3.4.1 *Social class*

The comment in the NPHE (2001a: 39) illustrates the problem of redressing inequities of access on the basis of race without adequate consideration of social class. It also points to the need for a greater co-ordinated effort between the DoH and the DoE in guiding access policies in medical schools.

The NPHE states that:

The Ministry is also concerned that the selection practices and values of institutions may militate against increasing the access of Black and women students to particular fields of study, especially in Science, engineering and technology programmes. This can best be illustrated by the fact that the Government has found it necessary to send Black students – over 200 to date – to Cuba to be trained as medical doctors. Why could they not have been placed in South African medical schools?

Of interest was the division in support by race of the government's decision to send students to Cuba to train as medical doctors, with support expressed by only Black respondents and criticism expressed mainly by White respondents, irrespective of whether they were in an HAI or HDI. This points to the ideological variance among different role-players in their approach to equity. One respondent from faculty management commented:

What they're really saying is that we want to give opportunities to poor Black students – I don't think that they're saying that we're not training enough Black doctors for the country – what they're really saying is that if medical schools can't find a way of training these very disadvantaged Black students, then we'll find a way of doing it. I certainly think that they've got it wrong – I think that it's a misguided policy. It's not about the total numbers – it's about who gets trained.

This view raises the important issue of what constitutes equity in the South African context. The urban-rural divide is symbolic of class inequities. Does the commitment to social inequity accommodate class, in addition to the obvious focus on race and gender? Affirmative action as a redress mechanism to increase participation of Africans in medical schools is a necessary yet insufficient condition for effectively redressing historic inequities in terms of access to both training to be medical doctors as well as access to health care services in South Africa. It is contended in this study that greater equity cannot be achieved without inclusion of social class as a primary and fundamental dimension in the equity agenda in the South African context.

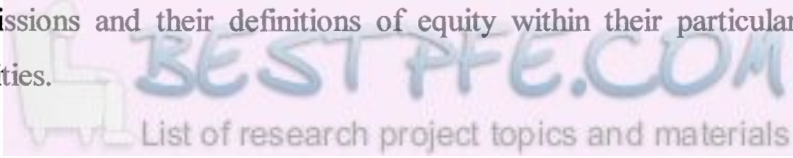
In 1964, Daniel Patrick Moynihan, the Assistant Secretary of State in the United States, published a policy paper in which he wrote, "The present pathology is capable of perpetuating itself without assistance from the white world." His assertion was that affirmative action on its own was insufficient to redress historic disadvantage among Blacks. He proposed that efforts needed to be focused on eradicating poverty.

An important issue relates to the definition of disadvantage adopted (cf. 2.3). Management structures at all levels would need to reach consensus on whether race or class is to be used as the criterion for determining disadvantage. Proponents of race being used as the basis of affirmative action argue that all Blacks in South Africa have been oppressed by apartheid, and that redress based on disadvantage as a group will accelerate the development of a “critical mass of black intellectuals and researchers” (Asmal 2001:1).

Proponents of class being used as the basis for affirmative action claim that not all Blacks have been or continue to be disadvantaged in the same way or extent, and argue that individual levels of disadvantage need to be taken into account for purposes of redress. Such an approach would address issues such as poverty in the urban-rural divide, but selecting students from the most disadvantaged communities to study medicine would require a complete change in selection criteria, greater academic support and would result in lower throughput rates (Lehmann 2000:5), and would seriously disadvantage institutions in terms of the current and proposed funding formulae. Asmal (2001:1), in his address marking the launch of the NPHE, made this comment:

The Economist magazine’s recent survey confirms what our President has long said: that South Africa is two nations, poor and rich. After apartheid, when this two- nation status is no longer kept in place by violence but by the workings of inertia and of continuing privilege, the higher education system, in large measure, continues to reproduce the inequities of the past. This must end.

The issues raised are complex, with ideological principles diametrically opposed to contextual realities, such as financial constraints experienced by every government department, institution of higher education and medical school. The selection process in medical schools may be linked to their institutional missions and their definitions of equity within their particular situational realities.



#### 5.3.3.4.2 *Identifying potential*

Currently, academic potential is gauged by the same traditional criteria, namely that of matriculation grades, although two of the institutions are also applying numeracy and literacy tests developed by UCT, as a means of identifying potential and the need for academic support, such as language development. In an institution applying these tests, students who score poorly on the language test are compelled to register for a language course in their first year. A head of a student support unit commented, “students generally perceive this as adding to their workload, rather than as a means of academic support.”

Although the majority of interviewees believe that the matriculation results are still the best available predictor of academic success in medical schools, it needs to be considered whether matriculation grades are the most valid and reliable indicator of the potential to be a good medical doctor in terms of the outcomes stipulated by new curricula in medical schools? Many of the new curricula place emphasis on critical thinking, problem solving, student-centred learning and practical skills, whereas the manner in which school teaching, learning and assessment is structured differs in the majority of cases from approaches in the new medical curriculum. Even if the matriculation examination was a reliable indicator of academic potential in the past, its reliability in relation to the new curricula requires re-evaluation. Further, even if the matriculation examination is found to still be a reliable indicator to predict potential to complete the programme in the minimum prescribed period to ensure the highest possible throughput rates, the degree to which it is a discerning predictor of the kind of medical doctor each institution is aiming at producing, needs to be explored. These are important considerations, given the varying degrees of inferior school education for the majority of pupils in the country that in the short term appears unlikely to change significantly. However, the proposed Further Education and Training Certificate (FETC) in 2005 is likely to increase access of students into higher education but not necessarily into medicine.



Two faculties of medicine consider other criteria, such as leadership skills and sports achievements, and this may give African students some advantage in addition to academic grades. However, although it is known of one medical school that includes in its biographical questionnaire items that would indicate the level of disadvantage, such as, “ did you study by candlelight, was there a laboratory in your school and did you have access to a library?” no such questions were included on the application forms of any of the institutions in this study. This is a useful means to redress class inequities, although questions have been raised about the authenticity of the responses.

However, it is becoming more difficult to assess educational disadvantage as there is an increasing number of students attending private or former Model C schools and they can compete on an equal footing with their White counterparts. A member from a national ministry remarked:

If we take a child from a rural area who managed to get a D – he might be better than someone in an urban area who gets an A, because in the rural areas some of the pupils have never seen a laboratory, many study under candlelight, some of them have no access to a library and some still have to walk very long distances before they get to school.

The fundamental problem is to identify a way of assessing potential to be an academically competent student if equal educational opportunities had been given, and to assess personal characteristics and commitment to develop into a good medical doctor. A question is whether there is a standard in terms of academic ability, personality and commitment against which a good doctor could be judged? An executive member of a faculty described a trial that showed that no universal standard exists.

Lay people were asked what they think should be the characteristics of a good doctor:

The responses varied... somebody would explain to you that they wanted someone who was a good surgeon – somebody who could make a decision or has good hands ... another would describe an altruistic missionary doctor who doesn't care if he never gets money and sits around and holds their hands. Different personality types go into medicine... you get extroverts, introverts, practical people, high academics, people who go in for the finances, people who go in for the ego trips, people who go in for altruistic issues, and there's scope for everybody.

A member of a faculty management said:

We need a way to test suitability to be a doctor in terms of whether the student is a doctor at heart – because it's not really IQ that matters. This is why we find many doctors who have completed their degrees with very good marks and yet are horrible physicians.

The effect of interviews as part of the selection process on particularly Black students requires further investigation. One medical school reported that the practice had been dropped because it added to the stress of students in the period before their final matriculation examination, they were often coached for an interview and therefore the results did not reveal the student's personality, and that is was an expensive practice. However, in another medical school, two interviews were used for a particular group of students from a lower rank of M-scores.

Although the majority of the participants supported the continued use of the matriculation scores for selection into medicine, until a better predictor of success was found, there were many sceptic comments on the reliability of the matriculation scores as indicators of academic potential.

One institutional manager said, “I am starting in the last three years to think that the matric exam is not a tertiary education entry exam any more, but it’s still the best that we’ve got to use.”

Similar difficulties in using Standard Nine marks were reported by two medical schools. The chairperson of a student selection committee described the dishonesty associated with this practice, “Not all principals are very trustworthy – at times they lie on paper and put the official stamp on it.” Also, assessing student potential at the age of 18 years is difficult as students mature during the five to six years of training. A faculty manager remarked, “The selection criteria set are really arbitrary – it doesn’t really identify the good doctor from the bad one.”

Another participant from another medical faculty made a similar comment:

One cannot select at school level a good medical doctor because they are very vulnerable at that age and totally “unformed”...they develop in the six years into an adult who is not necessarily the same little person that we admitted as a scholar.”

Commenting on the difficulty of identifying a reliable method for student selection and the flaws associated with interviews, alternate selection tests and traditional matriculation rankings in identifying potential to be a good medical doctor, which is not necessarily the same as a good medical student, a manager in a faculty commented:

The final conclusion up to now is that anything goes. Probably a lottery is cheaper – you can take a quick pick and put in 200 numbers – it seems that it makes very little difference in selecting people who would make fine medical doctors.

### *5.3.3.5 Student support*

From an equity perspective, student support relates to sensitivity towards the wide range of needs that members of designated groups may have, based on their educational, social, personal, financial and cultural backgrounds, and structuring a student support system that would adequately meet these needs. Interviews revealed an emphasis on academic support, mostly at the first year level, that was available for all students, and fragmented understandings and support in terms of other needs.

#### *5.3.3.5.1 Academic support*

A challenge in providing academic support was to find a way to identify academic strugglers earlier in the year. In most medical schools the first test for first year students that could be written after two months, is the first indicator of a need for academic support, but it was felt that continuous assessment in the new outcomes-based curriculum could alleviate this problem to some extent. A practice that needs improvement is the focus of formal academic support programmes in only the first year of study, with students thereafter seeking academic support on an individual basis. From an equity perspective, this is inadequate as especially those students from an educationally disadvantaged background need more than one year to overcome to a reasonable extent their educational disadvantage.

One of the challenges is to get students who are struggling academically to attend academic support programmes. Even when such students are referred by academic staff, they appear reluctant to do so, “believing that all they need to do is to study harder”, and it is often found that students who are coping but wish to improve their grades present themselves for academic support. Arranging academic support programmes is difficult due to the heavy workload of students in MBChB. An example cited was of the first year students who have an almost full time-table from 8:00 to 17:00 for five days of the week, so additional academic support programmes have to fit into a 45 minute free slot in the time-table. One suggestion was that

academic support should be compulsory for students performing poorly in the first three years and thereafter it could be voluntary, but a shortage of academic development staff was reported in all institutions.

The attrition rate is reported to be the highest in the first year of study and among African students. Multiple reasons are cited for this trend, among them being the poor schooling of students, the sudden adaptation to university that included the sudden freedom of choice to attend lectures, less rote learning and “spoon-feeding”, and more independent study involving problem-solving and critical thinking skills. An executive member of management of a university spoke about the very high failure rate of African students in Chemistry:

For the very first time, most of the students were exposed to practical chemistry. Things like pipettes, burettes ...for them these things have always been theoretical...they are seeing and handling them for the first time.

An interesting comment was that although the academic success of students depended to a great extent on the attitudes of students in their first year, it also depended on the attitudes of the HODs and lecturers of the general subjects taught in the first year. Respondents felt strongly that the content of the general courses in Chemistry and Physics needs to be customised to be of relevance to the training of medical doctors (cf. 5.3.5.4).

Interviews indicate that students require more than the first year to fully adjust to university teaching and learning, and often students from educationally disadvantaged environments have a higher incidence of struggling in the first three years, but once they have successfully completed the first half of the programme, have little difficulty in the clinical years (cf.2.4). This suggests that medical schools should seriously re-examine their policies on academic exclusion to allow students from educationally disadvantaged backgrounds the opportunity “to catch up.”

As the head of an academic development centre reported:

The best academic development programmes, mentors and tutors cannot make good 12 years of poor schooling and five years of poor Maths and Science teaching in one year.

Academic support could be co-ordinated by a support department, or by the faculty or academic department, and, most commonly, senior students are employed as mentors and tutors. However, greater understanding is required about good practices in organising student academic support, as the study showed that in many faculties this was not systematically organised and monitored, and was therefore having minimal effect. It is also necessary to gain some insight into the most effective way to organise support partnerships in terms of whether they should be diversity-sensitive or diversity-blind. A member from a national ministry commented:

Students who come in with low grades can make good doctors, given a supportive environment – not the old system where there was a class for those who were needy and where students attending such assistance classes were labelled and seen as outcasts – it should be an integrated system of support and guidance to nurture these students.

Among the good practices observed were the concurrent offering of “enrichment programmes” for all students experiencing academic difficulties, in some institutions attendance being compulsory for all students failing a course, and in others attendance being voluntary but included as mitigation in academic exclusion.

A unique practice observed in a faculty was the administration of the same bi-annual test to all students at all levels in the faculty. This was aimed at ensuring that knowledge increased during the year and throughout the programme for individual students. This reportedly had value for both students and staff, and was one way in which academic strugglers could be identified.

#### 5.3.3.5.2 *Financial support*

Black students experience serious financial problems. The African head of a division responsible for assisting students having financial difficulties commented:

You need to have come from such a background to understand how someone could come to university without having a cent – I studied through such problems. The need for financial aid is generally greater among African students than any other group - three quarters of the African students who enter have financial problems.

Although institutions claim that no student is excluded for financial reasons, probing revealed that this applied to only those students who had shown good academic progress. A problem for many students, but more so for African students, is that they find the adjustment in first year at university very difficult and they struggle academically in the first year and are likely not to be awarded financial support by the university and thus excluded. As found in the study by Bowen and Bok (1998), Black students take longer to graduate, often with lower grades (cf. 2.6).

Institutions varied in terms of their timing in awarding financial aid to students and the criteria used in the means tests that they applied. Financial problems are reported to be a major cause of stress for many students and this has a negative effect on their academic progress. A good practice reported by one institution was the inclusion of the application form for financial aid together with the application form for admission. The student was informed of the success of the application and of the nature and amount of financial aid that had been awarded. In an institution where this was not the practice, some students managed to rake up the required registration fees but had no money for meals.

A case reported was:

One student had relied on the charity of friends in the residence for leftovers, but when during the vacation they had gone home and he was forced to remain in residence because he had no money, he also had no food. He came to our office for help after he had not eaten in four days. What chance does such a perpetually hungry student have of performing to his optimal academic potential?

There is a National Student Financial Aid Scheme (NSFAS) through which undergraduate students can get a loan of up to R16 000 per annum, on condition that good academic progress is made. This amount has to be paid back only when the students start working and earning more than approximately R28 000 per annum. However, as previously discussed, many students from educationally disadvantaged backgrounds struggle academically during their first three years and may find their financial assistance cut on account of this. The total demand for financial assistance exceeds the money available and financial aid allocations often have to be supplemented by the institution from its central budget or from external donations.

Difficulties were experienced around decisions of who was deserving of financial aid and all institutions dealt with each case individually. Some of the difficulties related to the means test used to determine financial need, for example a NSFAS loan based on the gross family income.

A participant responsible for financial aid commented:

You would be horrified to see how many insurance policies are deducted from most incomes. I think its thoroughly disgusting that a person earning R5 000 a month has half a page of insurance policy deductions on the payslip and is left with no money to live on.



Another comment by a person responsible for student affairs at a different university:

A person says he earns R500 a month, but has all his children in private schools. You need to find out whether there is a need for financial assistance...You also have to decide who the legal dependents are... in rural areas people bring up nieces and nephews, and grandparents bring up grandchildren.

Many students entering university with the intention of studying medicine, but whose Mathematics and Science matriculation grades are not very good, are advised to do a B.Sc degree as a possible alternate entry route. The head of a unit dealing with student affairs described one of the consequences:

These students enter university to actually study medicine, but we in a way mislead them to do something else to prove their academic ability. The result is that they accumulate a large debt, even before entering medicine, so when they finally complete they need to work where they can earn the greatest money, normally in private practice, and postgraduate study is out.

Many provincial departments are providing subsistence bursaries that cover tuition and residence fees to financially needy students, the majority being African.

A good practice reported by a dean was:

In the Northern Province where health care services are poorly developed, the province is divided into regions and in each region six bursaries are awarded to students to study medicine. If there are insufficient students in one region, the bursary is allocated to a student from another region, with a written undertaking that the student will serve in the district for which the bursary was awarded for a particular period of time.

Financial support for Black students studying medicine is also received from the Medical Education for South African Blacks (MESAB) fund in the form of academic bursaries and mentor funding. Perceptions about the effectiveness of the different ways in which mentor support was organised, with one respondent reporting that each student mentors a maximum of 10 students but this does not always work well because “students use this as an opportunity to have a good time and this needs control.” Another problem experienced is that the payment received by mentors through this scheme varied greatly from what was generally paid by the institution to mentors, resulting in the dissatisfaction of other academic mentors. The rate of pay of mentors is an important issue as it affects the quality of the mentors that could be attracted. In one institution the only way that academically bright students could be attracted to be mentors was to seek funding from external sources and to double the payment that the university offered.

#### *5.3.3.5.3 Social support*

However, beyond academic and financial support, there needs to be sensitivity about the possible experiences of an African student from a rural, poor community having to enter a predominantly White faculty. During the interviews, this level of sensitivity was found among only a few, mainly Black, management staff who had themselves grown up in such an environment.

A faculty manager who displayed such a deeper level of sensitivity remarked:

Maybe in a Black university cultural shock may not be that great – students will find people to identify with, for example someone from your village. When Black students come to a White university, they are in a strange environment because most are from rural environments. There is traffic, busy streets and for the first time they’re rubbing shoulders with Whites – we don’t fully understand this. There are very few of these Black students who have actually

interacted with a White person before – now for the first time they are supposed to sit together, talk to each other and eat together – that’s stressful.

Management needs to be sensitive to the fact that such a cultural shock could also be true for White students who have never interacted with Black people before, although if they are in the majority, this becomes less of an issue. The inclusion of diversity awareness courses for all students and staff is likely to foster more harmonious relationships in teaching and learning contexts, such as group activities, as well as more broadly in promoting harmonious relationships in faculties and residences.

An African respondent from a faculty commented:

We come from a communal background that is more relationship orientated, and suddenly students find themselves in an academic environment that is more individualistic and distant.

One institution reported the need for something like a crisis centre where female students can go for rape counselling and reporting of cases of sexual harassment, and although the feeling was that there were incidents of sexual harassment, the reported cases were low.

#### *5.3.3.5.4 A challenge: understanding and integrating student support*

Equity needs to be discussed at such a deeper level. In terms of academic and social success, would it be better to have students of different race groups in separate residences, separate classes due to language differences and separate small groups for the new problem-based, or problem-orientated learning approach? Cognisance must also be taken of the fact that students are expected to work in multi-disciplinary teams in different community contexts.

A faculty manager commented on the need for more Black staff in a predominantly White faculty:

Black students need to find people they can identify with and who can act as role models and provide support. This will help students survive the stress and cultural shock that they go through when coming into university.

Faculties that have implemented their new curricula have had to grapple with such issues and much can be learnt from their experiences. A challenge identified was to know how to structure support for students in an integrated and effective way, as a dean explained:

There is very little in even the literature to suggest how to support students who come from very small towns, very small schools, who have never been in the city before and who have financial, academic and social problems, and have at the same time to adapt to their new circumstances. They often don't know how to manage time as they find being at university a wonderful, exciting new opportunity and cannot work out how much time to spend on study and to socialise – some have never seen a computer before so computer- assisted learning has limited value.

A criticism is that not enough is being done in terms of sharing such experiences and engaging in rigorous debate on such issues.

#### ***5.3.3.6 Medical students: gender and race trends***

It was found that strong gender stereotypes exist in the field of medicine, more among men but to a lesser extent among women as well, and the challenge lies in finding effective ways of breaking such stereotypes. These stereotypes range from the view that women are more suited to the caring occupations, such as Nursing and Community Health, but not to Obstetrics

and Gynaecology or Orthopaedics (cf. Table 3.27). The extent to which this is a stereotype or factual is debatable, but given that there are increasingly more women than men being admitted into medical schools and that there is a gendered difference in the areas of postgraduate training, there is a need to ensure human resource development in all fields of medical training.

Already, statistics show that the number of men, especially White men entering medicine has decreased. Currently, all medical schools have more female than male students registered, and only at Medunsa is the number of male students admitted into the MBChB programme greater than the number of female students. The fact that these are mainly Black students suggests that race may be a significant variable in student demand to study medicine.

This may be because the opportunity to train as a medical doctor was only available to Black students many decades after White students had such an opportunity. It was pointed out that although women are entering medicine in increasing numbers, one needs to look carefully to see whether this is true for Black women as well.

A more detailed account of race and gender trends that are applicable to students was included in the discussion on staff equity (cf. 5.3.2.7 and 5.3.2.8).

#### **5.3.4 Postgraduate training**

Equity in terms of postgraduate training in areas of specialisation in medicine is important if there is to be an increase in the pool of Black and female specialists that medical schools can draw from to improve the equity position in their staff profiles.

There is generally a widespread lack of understanding of the dynamics of registrar training outside the faculties of medicine. One example is the view that because registrars are in employment and receive salary, it is far easier for them than for students in other fields to continue with postgraduate

training. This may be so, but the length of programme, financial debt levels of students, limitations in terms of availability of posts, and salaries in the public sector are factors that need to be drawn into the discussion of why there is greater difficulty in changing the equity profile of medical specialists as compared to other fields of study. The creation, recruitment, selection and training programme of clinical postgraduate training is briefly described and some of the challenges outlined.

#### ***5.3.4.1 Inequities in registrar training***

From around 1999, the number of female students entering medicine increasingly exceeded the number of male students in all medical schools, except Medunsa, and in all medical schools the total female enrolment exceeds the male enrolment (cf. Table 3.14). However, female students are entering postgraduate training in lower numbers than male students and prefer certain fields of specialisation. This will increasingly affect the pool of specialists available for employment in academic medicine.

The under-representation of Blacks and women in certain areas of specialisation is influenced by various factors. One factor is the length of the specialisation programme, that is, the four to five year M.Med. degree that follows an already long five to six year undergraduate degree, followed by community service and internship. Another factor is the large debt that students accumulate during the long and expensive course of study, and if a bank loan was obtained, the graduate is obliged to repay the loan before being granted a further loan for postgraduate study, which is often required as the salaries paid to registrars is frequently insufficient to cover their undergraduate loan repayments, family support obligations, tuition fees and living expenses. A dean remarked:

African doctors graduate with a lot more debt and indebtedness to families and extended families that made sacrifices for them to become doctors, than White or Indian doctors.

Conversations during the interviews highlighted, on numerous occasions, the importance of understanding diversity of experiences in terms of the South African context.

A remark by a female Black member of a medical faculty management was:

If you're a doctor, you're expected to have money. During your training everybody from your extended family put in R5 or R10 – now if your uncle dies, you're expected to take care of things because you're a doctor and should have money.

A Black faculty manager recollected his personal experience:

I had to contribute towards my two other brothers who were still at school and build my parents a decent house because they didn't have a decent house, before I could think about specialising. There was little encouragement of Blacks to specialise. White superiors were not very sympathetic – there was the perception that Blacks had been given the opportunity to do an MBChB so that they could go to mission and rural hospitals to serve – they had no business specialising. Blacks did not have role models to encourage them to specialise – I had to contend with half the pay that my White colleagues were earning and was not paid a transport allowance that others got – so where were the incentives to specialise.

One of the main factors affecting decisions not to specialise is that doctors earn more as general practitioners in private practice and often, even more than they would earn as specialists in the public sector. Many Black students have a large financial debt that needs to be repaid after completion of undergraduate training as NSFAS does not offer loans for postgraduate training. Even if the student can get an additional loan to continue with postgraduate studies, this loan needs to be serviced in terms of interest and students find this difficult.

Another mitigating factor is the need for stable personal relationships. At around 26 to 28 years of age when internship training is completed, graduates feel the need to marry and have children. This appears to be of greater importance for women than men. A faculty manager proposed:

Greater flexibility could be introduced into the field of postgraduate training and work that would allow women the opportunity of combining their private and professional roles. In postgraduate training, the rule that requires four years continuous training could be amended to, for example, two years so that a woman wishing to start a family or be with her child for a period after the baby was born would be able to, and she could return after two to three years to complete her postgraduate training. Work hours could also be structured to provide women with the choice to work either mornings or afternoons and not have night duty... and what do we say to a male student who wants to follow the same study arrangement that would allow him to be with his child, but more likely in private practice?

The comment about private practice, which may have been added in jest, denotes the serious concern that private practice raises for effective management in medical schools.

#### ***5.3.4.2 Creation of registrar training posts***

The report by the DoH on *Postgraduate Training of Medical Doctors in South Africa* (2000) provides important insight into the direction, distribution, gaps and difficulties associated with postgraduate training of specialists. Currently, there are 2500 registrar posts in South Africa and the recommendation is that the number of posts should not be increased, but that frozen posts be unfrozen (DoH 2000: 16-17). The Medical and Dental Professional Board (MDPB) determines the standards and minimum requirements for entry into postgraduate studies, the course content, duration of study and exit evaluations. It is also responsible for allocating registrar



posts to medical schools based on certain criteria, such as the availability of training opportunities, number of trainers and facilities for postgraduate training.

Two problems highlighted in the report are that motivations for registrar posts are often based on a teaching hospital's service load rather than the health needs of the country, and the provincial DoH's decision to fill vacant posts is dependent on fiscal priorities (DoH 2000:6-7). An example provided was of about 60% of a hospital budget being spent on personnel costs, including salaries of nursing and administrative staff. If there is overspending in the overall budget or stringent budget cuts, the filling of registrar posts could be negatively affected. In a few cases, accreditation by the HPCSA to some institutions was threatened by the lack of the required number of consultants to meet the ratio of one consultant to two registrars. This exemplifies the inextricable link between economic constraints and human resource development.

#### ***5.3.4.3 Recruitment and selection for registrar posts***

Due to the high costs of advertising registrar posts in the media, registrars are commonly appointed through the recommendation of the head of department (HOD). There is a small availability of registrar posts and names of applicants are placed on a waiting list, sometimes for years, before a post becomes available. Internal processes ranged from having the posts internally advertised, there being a selection process, the recommendation having to be approved by a committee of faculty, to being left to the discretion of the HOD. One reported incident was of an HOD claiming for years that there were no applications, other than from one specific race group, until there was intervention from the Vice-Chancellor "who put out the word that we were looking for African registrars, and suddenly we had four applications." This serves to illustrate the need for a more formal, transparent process in appointing registrars in all medical schools if there is to be better equity in the pool of specialists available for appointment in medical schools.

#### ***5.3.4.4 Training programme for registrars***

To train as a specialist, the candidate must be registered with a university for an M.Med. degree and complete a minimum of four to five years training in a numbered registrar's post or in a supernumerary position under the guidance of a consultant in that particular speciality. Completion of the M.Med. degree requires that the candidate complete a primary examination in Anatomy and Physiology, complete a minimum of four years' training as prescribed by the HPCSA, demonstrate the acquisition and successful application of professional skills related to that speciality to the satisfaction of the supervisory consultant and submit a dissertation on a topic in that field. However, to register with the HPCSA as a specialist and to practice as a specialist requires that the applicant be registered for an M.Med. degree, pass the primary examination through either the university or the College of Medicine, complete the minimum training time stipulated by the HPCSA and write the College of Medicine qualifying examination, without having to complete the dissertation.

#### ***5.3.4.5 College of Medicine and M.Med. examinations***

Many students choose to write the College of Medicine examination and this practice has financial implications for the university in terms of the subsidy received for completed degrees.

There were differences of opinion regarding the involvement of the College of Medicine in postgraduate training, reflecting the deep-seated effects of a particular historic legacy. A White faculty manager strongly opposed to the College of Medicine explained:

The College of Medicine is made up of professors from existing medical schools and they started an old boys' club. This is one of the vestiges of the British Empire that has still survived. It may be appropriate for a country that does not have medical schools to

ensure standards, but in a country that has eight accredited medical schools, there is no reason for the College of Medicine.

There appears to be a perception that the College may be discriminating against Blacks, but a Black faculty manager asked the question, “How do we know that a particular university is not discriminating against Blacks?”

Many participants saw value in the College of Medicine examinations. As one faculty manager explained:

It is an internationally recognised qualification – you can walk into any country tomorrow – not that we are training for export – but if you want your graduates to be internationally respected, then they must be through that internationally accredited body.

A faculty manager from another institution reported on other values of the College examinations:

The College of Medicine provided a way of standardising the level of specialisation across the country and is cost-effective as it does not mean having to set up an entire examination for just one student. In a course such as ENT (Otorhinolaryngology), you may have just one candidate every year or two years.

A respondent from an institution that could not be accredited by the General Medical Council (GMC) of Britain due to the poor condition of its academic training hospital, saw the College examinations as an opportunity for its postgraduates to gain international recognition, even if their undergraduate and postgraduate programmes could not be accredited.

A major difference between completing the M.Med. degree or College of Medicine examination to register as a specialist with the HPCSA, was that the former required a thesis in addition to a theoretical examination and the latter a theoretical examination only. The following comment about the

origin of the M.Med. degree was interesting because it depicted the historical split among the same race group on the basis of language:

The thesis was introduced by universities... previously the M.Med. was like the College theory exams with no thesis. The M.Med. was created by Afrikaans institutions to build capacity among Afrikaans speaking people because the College was a White Jewish college with Wits and UCT offering the College exams.

Stacey (1977:22; 33) reports on a level of collegiality in health that relates to the power of professionals to control the terms, conditions and content of their work and that their occupational and work commitment is a function of such professional organisation, varying directly in strength and frequency as occupational organisation varies. Findings in this study relating to the College of Medicine, selection of postgraduate students and the problems associated with private practice support Stacey's hypothesis.

#### ***5.3.5 Curriculum development***

The curriculum emerged as one of the key concerns in the management of equity. According to a member from a national ministry, "a curriculum needs to be structured in a way that copes with educational disadvantage." A fundamental principle of the NQF is recognition of prior learning and portability of courses. The differential and independent manner in which medical schools are developing their new curricula will result in little or no articulation between the curricula of different medical schools and students would therefore, not be able to move from one faculty of medicine to another without a significant loss of time, and would probably have to start again at the first year.

The medical training programme, including internship and community service, is approximately eight years. This means that students who go through the entire programme without having to repeat a year would likely be about 26 years of age before they enter the labour market. All medical

faculties have a social responsibility to ensure that their new medical curricula, in terms of the length of the programme, content, structure, revised entry prerequisites and support, are sensitive to the life circumstances of their learners, including their financial positions, and to the health care needs of the country. A member of a national ministry emphasised:

One must look at the curriculum as a whole and one must pay attention to how students' performance can be promoted through a curriculum that is sensitive to students' past learning deficits and experiences.

It is important for staff and students in faculties to undergo training relating to sensitivity on diversity. For medical students this could form a module in the new curriculum so that there would be an understanding of the need for the shift to primary health care, the need for community service, why some students may struggle in the class/group with conceptual understanding and the impact of cultural differences on group dynamics. Some of these issues are included in one student orientation programme and in one course module, but the issues are not confronted in a direct, systematic way.

#### ***5.3.5.1 Philosophy of curriculum design***

The general perception is that curricula are or have been changed, but this was primarily in compliance with the requirements of the SAQA Act (S.A. 1995a). A significant finding was that the nature of the changes implemented in the curriculum were geared to improving the explicit or implicit philosophy and mission of the faculty within its institutional context, and in the HAIs this was more often linked to goals of excellence and international competitiveness, rather than to equity and redressing historic imbalances. This can best be illustrated by a brief description of the philosophy underpinning curriculum development in a particular institution.

The curriculum in this particular faculty places great emphasis on the basic Sciences. The belief is that there are many different ways to train medical

doctors and there are many different kinds of medical doctors needed in the country, such as superintendents of hospitals, health planners and primary health care doctors. A member of the faculty management explained:

We also want to train some who will be scientists, researchers and specialists. We expect 50% of them to become specialists - a slightly higher proportion currently do. Our aim is not to train pattern recognisers who can recognise the patterns of symptoms, make a diagnosis and follow a management procedure. Our aim is to train physician scientists – we want to train people who are thinking about the Science that underlies the clinical thing and are going to advance Science. They're going to be thinking, "Why does the thing that I'm seeing not fit the pattern? What could be different here?" A lot of them hopefully are going to be discovering new knowledge and going to be doing research.

This particular philosophy demands high academic merit for success. The question that this raises is what contribution such a faculty could make, beyond the contribution that it is currently making, for increasing access and successful participation of African students, particularly the majority who are from educationally disadvantaged backgrounds. Even if there is external pressure to impose targets, would the nature of the curriculum support students with high levels of educational disadvantage? The issue of equity in medical schools cannot be reduced to a numbers game. There is a need for all stakeholders, internal and external to do a reality check of the nature of existing medical schools and then in a concerted and co-ordinated manner decide on strategies that will increase, in a meaningful way, the number of African doctors and specialists in South Africa. As a respondent from the DoE remarked:

There's been sufficient time now for our medical schools to give attention to responding to changing the student body through an appropriate and responsive curriculum.

A discrepancy in the perceptions about a particular group of students is, in the opinion of the researcher, attributable to differences in institutional philosophies underpinning the curricula. In one medical school an executive manager reported:

We have quite a high drop-out rate of students who come from certain schools. This turns out to be Indians from certain schools in Natal more than from anywhere else, because the style of learning in those schools is very much rote learning and you cannot get through our curriculum with rote learning.

However, an executive manager from another medical school reported, "Indian students are academically very strong. They may have been politically isolated, but not academically."

The extent to which a curriculum philosophy, such as the one described above, as compared to the more traditional curricula approaches, meets the national health care needs is a matter for consideration. As a respondent from the national DoH suggested:

There should be a shift in the teaching strategies to prepare students for innovative health care, logical reasoning and problem solving...to be creative and effective in their work environments.

An example given of a changed teaching strategy, in line with a problem-based/ orientated learning approach, was suggested by a respondent from the national DoH:

If you are teaching a section on protein energy malnutrition, students could be asked to go to the wards and observe a child with that condition and list the observable symptoms, rather than singing the signs and symptoms in the classroom, saying what we are going to look at is the hair, changes in the skin-discolouration, ....

Some raised concern about what was earlier referred to as the Africanisation of the curriculum. All except one of the participants interviewed felt strongly that there was a need for curricula to maintain a good balance between international competitiveness and local relevance, as a faculty manager commented:

We live in a global community and cannot pride ourselves on having produced professionals who are only competent for our own circumstances.

Although there was agreement that irrelevant and excessive content, such as in Anatomy, needs to be carefully examined, the general feeling was that the curriculum should be internationally recognised. A faculty manager from another university remarked:

I think that the desire to study in what might be called an international, world class, globally recognised curriculum is just as great among African students as it is among other students and I don't think that students are going to choose a medical school that is somehow identified as being more appropriate to South Africa. I don't think that students choose medical schools with any knowledge of their curricula – it's based on their marketing.

#### **5.3.5.2 OBE and equity**

A large majority of the interviewees spoke about the need for the new curriculum to be sensitive to the diversity in the student population, but no practical examples were provided of this. A member of faculty management suggested:

I think that the junior years of the medical education programme should be structured to give attention to the specific needs of students from under-prepared backgrounds.



Little or no consideration has been given to how new modes of teaching and assessment will impact on the learning of students from educationally disadvantaged backgrounds, even in those medical faculties in which the new curriculum had been implemented for the past few years. One manager responsible for supporting curriculum development anticipated:

Small group learning should be better as students can learn through active interaction with their peers, but this needs to be empirically tested. The advantage obviously [of small groups] is that disadvantaged students struggle to ask questions or to show their ignorance or to keep up in large classes and they're more likely to be open to participatory answers in small groups. We're also more likely to pick up problems earlier because each group has the same facilitator for a whole block of 10 weeks.

However, another participant commented, "The way we select students ends up with students who are very individualistic – often very pushy people." If medical students tend to be more individualistic, consideration needs to be given to whether this presents a challenge to the teamwork and group work required by the problem-orientated approach that most new curricula are adopting.

A respondent responsible for training academic staff in teaching, using the new curriculum, provided useful insight into the value of small groups for students for whom the medium of instruction was not their first language:

In small groups you actually use the language – you don't just sit in class and wonder what these strange words are – you actually engage with and use the terminology, and peers supplement this understanding. The best way to learn is to teach someone else, so if you could get this peer support of teaching each other, it would add value.

A common finding was that although faculties had theoretically shifted to a problem – orientated learning approach in terms of curriculum policy and structure, fragmented practices had changed, such as the introduction of continuous assessment. A manager in a faculty that had introduced the new curriculum commented:

Although during orientation students are orientated towards good practice of small groups... until third year there are still big classes, up to 250 students in a class, except for courses like Anatomy where students are divided into small groups. Even during the weekly tutorial groups where students were supposed to have formed their own small groups and worked on case studies, in most instances the tutorial session in which students are supposed to raise questions becomes just a revision lecture. The problem lies with the implementation of the new curriculum, as there has not been the required didactic shift in the early years.

The success of the small groups is directly dependent on the composition of the groups and institutions using small groups reported struggling with this. The common group size is around eight students and one institution initially divided students into groups trying to ensure that there was representivity in terms of graduates, race and gender, but found that students were often unhappy and often requested having their groups changed. Experimenting with an alphabetical distribution of students to groups also did not work so students are now allowed to select their own groups, with guidance on what the desired mix should be, and there appears to be greater student satisfaction as decisions are often based on external factors, such as belonging to the same lift-club. Interventions are made if, for example, single sex groups are formed. Combining very academically strong and very academically weak students is counterproductive to learning and results in frustration for both. An important comment by a curriculum developer in a faculty, linked to the selection of students to study medicine, based on their matriculation results was:

The only group that works well is a group that is equally motivated. A strong student who is not motivated is a bigger drawback than a weak student who is well motivated.

A conclusion drawn from many of the discussions was that economic factors influenced the design and delivery of the MBChB curriculum, in some instances to a greater extent than the SAQA legislation, and that a well-designed curriculum on paper did not necessarily result in the envisaged change in practice. As a faculty manager reported:

Using a problem-orientated learning approach does not mean that we need to keep to paper case studies – we actually have real patients, but community based education is very expensive. If the DoH had to say, “we’d fund some of the transport costs of students into the community”, that would give us a massive boost. At this point in time, if you can’t get a sponsor, your students haven’t got the money and your university doesn’t have the money either, we eventually end up sitting back in the classroom.

Curriculum design also appears to be influenced by the financial resources of the university to select aspects of design from a range of overseas institutions after curriculum survey trips, such as that reported by a curriculum developer:

We’d heard about PBL in the 80’s and visited about 50 different medical faculties across the world and found that both staff and students enjoyed it.

Another practice is to buy parts or whole programmes from overseas universities and to then adapt them to the South African context. Another curriculum developer observed that, “there were some very strange cases, such as a little boy falling into a frozen river.”

A question that should be raised is whether there is not sufficient collective expertise within medical schools to design programmes and case studies that are constructed totally within South African contextual realities? What difference would it make if students across all medical faculties were exposed to a common curriculum so that issues such as portability of credits, curriculum quality and institutional collaboration is enhanced?

#### **5.3.5.3 *Length of curriculum***

The decision by some medical schools to reduce the six-year curriculum to a five-year curriculum is supported by the DoH that is proposing increasing the internship period to two years, in addition to the one-year community service. There is a need for curriculum developers to closely examine how changes in the length of the curricula are likely to be experienced by the different groups of learners and introduce strategies that will enhance learning of especially those students from educationally disadvantaged backgrounds and different learning styles.

A respondent from the DoE pointed out:

When you clearly have a homogeneous student body, it makes these decisions easier, but when the student body is mixed in terms of prior learning, then it becomes more difficult... one must look at the curriculum as a whole and pay attention to how student performance can be promoted through a curriculum which is sensitive to students' past learning deficits and experiences.

Both University of Pretoria and Medunsa are currently committed to maintaining their six-year MBChB programmes but a respondent from one of the institutions pointed out:

This would add to the financial debt of the student and ultimately influence the selection of the institution, although a six-year

programme may be beneficial for students from educationally disadvantaged backgrounds...yet a five-year curriculum will appear more attractive to people who feel more pressured financially.

The University of Witwatersrand plans to introduce a four-year postgraduate medical curriculum for 50% of its new intake. The remaining 50% would be matriculants who enter a five-year programme but are joined in the second year by students having completed a three-year Bachelor's degree. The Wits model of curriculum development, aligned more closely to the American model of medical training, marks a radical shift in MBChB curriculum design and the philosophy underlying the shift needs a brief description.

The belief is that there's a much larger pool of Black graduates than Black school leavers and many of these graduates have gone into Science without a clear idea of what career they want to follow, and are often stuck without professional direction. Currently only between 5% and 10% of the admissions to medical schools are graduate students to ensure that they do not decrease access opportunities for school leavers.

A member of the faculty management explained:

Admitting 50% graduates annually into the MBChB programme is aimed at attracting the more mature Black graduate who has had the undergraduate years to overcome some of the historic educational disadvantage, make the necessary adjustment from school to university and acquire the necessary independence, motivation and study skills that are likely to improve the throughput rate of Black students.

Admission of students to medical school according to the population demographics, as in the practice of one faculty in the sample, is in line with an affirmative action model, whereas the University of Witwatersrand approach is more aligned to the equal opportunities model described.

#### ***5.3.5.4 Curriculum content and presentation issues***

In this study the curriculum clearly emerged as the most common and frequently discussed issue by respondents and this may be due to the fact that most institutions are currently involved with changes relating to either the development or implementation of the new curriculum. Issues raised around curriculum are not as closely linked to the management of equity in medical schools but some of the pertinent discussions are presented in this section.

##### ***5.3.5.4.1 Shifting the mindset***

In one of the first interviews conducted, a participant enquired:

What is the need to change the curriculum? We've trained successful doctors in the same way in the past two hundred years. I need to be convinced that changing the curriculum and the way I teach my students is going to result in them being better doctors at the end of the day.

The answer to this question lies in the fundamental principles of outcomes-based education (OBE) within the particular historic context of South Africa. One fundamental principle is designing a curriculum in terms of the skills, knowledge and attitudes that need to be acquired by the learner in order to competently do the job, and to assess the students' competencies according to the stipulated outcomes.

The reasons for inclusion of specific topics in traditional criteria in relation to the competencies to do the job require constant reflection on their relevance in terms of the stipulated outcomes.

A curriculum designer commented on a practice, which although it does not relate directly to medicine, serves clearly to illustrate this point.

Do you realise that all our physiotherapists and nurses have to acquire the skills to dissect a dogfish to actually get a degree in physiotherapy or nursing, and if you can tell me the relevance of that, even under broad-based education – that I don't think can be found in the dogfish. The reason is because some of the guys can teach the dogfish...who are the beneficiaries of this poverty in thought... the students, and the students hate it.

A member of a national ministry explained that a new curriculum alone would not achieve much in relation to the changes in and quality of public health care provision. It was emphasised that what was required was a complete change in mindset across all levels in the institution so that the new curriculum would result in a change in the way we teach, the way students learn and how their learning is assessed. The need for a shift in mindset of both staff and students was a recurring theme in interviews. While lecturers often displayed reticence to shift from the traditional didactic model of teaching, the assumption cannot be made that students naturally would want such a shift, as a faculty manager commented:

In a system that emphasises a lot of provision of information, students are not going to voluntarily and necessarily take on what they see as more work.

Redesigning curricula presents HEIs with the opportunity to think laterally in terms of how programmes can be structured, delivered and assessed. A member of the national DoH discussed the possibility of teaching some modules and topics in the same class to all students in health care professional training, which included the range of allied health professions, in line with the multi-disciplinary primary health care team approach

envisaged by the DoH. Examples provided of possible common curriculum content were basic epidemiology, health promotion principles, primary health care principles, mental health care, basic fundamental principles of management and ethical fundamentals.

To achieve the required shift in mindset will require strong leadership that would be able to sell the idea for the new curricula to staff and students in all levels of the faculty.

#### 5.3.5.4.2 *Language of instruction*

Language competency is used as a selection criterion for medicine by more than one faculty. In another that has a majority of African students, English writing and communication skills is a course offered as part of the first year curriculum and is likely in the new curriculum to be integrated horizontally and vertically across the entire MBChB curriculum. Griesel (2000:24) states that, “ The reality is that, with English becoming the undisputed language of instruction, command of English is a *sine quo non*.” For the majority of African students, English is often their second or third language and they progressively and incrementally develop language communication skills throughout their training. The consequences of poorly developed language skills on aspects such as assessment require research, as a respondent responsible for education development in a faculty commented:

...the analysis showed that the low achievement on certain MCQs (multiple choice questions) was not on account of the students' poor learning, but was due to technical construction of the items, such as the language that was used

The new curricula in all faculties need to consider language disparities in all aspects of the design and build in mechanisms to improve students' language comprehension and application to increase the academic success rates of



students from disadvantaged backgrounds. Compounding this disadvantage is the growing trend in new curricula towards information technology communication (ITC), partly because it is a growing international trend and is more efficient in terms of utilisation of resources, but the impact of this trend, particularly for those students who may never have sat in front of a computer previously, needs to be considered and supported. ITC offers a more individualistic, depersonalised method of teaching and learning and there is a need to understand the relationship of variables of race, gender and class to such new methods within a changed curriculum paradigm.

According to a manager that used ITC to a large extent:

Information technology offers motivation to equity because the material is no longer there just for the privileged. Disadvantaged students would be able to engage with the content at their own pace, time and how often they wished to. It is recognised that disadvantaged students would need support programmes on using information technology, such as how to research a topic.

The number of patients and the range of clinical conditions seen in academic hospitals are decreasing, partly because of the reduction in the number of beds in all academic hospitals and the development of community health care facilities. According to a head of an impressive skills laboratory:

The use of the skills laboratory increases the opportunities for students to acquire general clinical skills, such as suturing and setting up a drip in simulated settings, before conducting the procedures on patients. As part of this skills laboratory, students have access to CDs (compact discs) on different topics that describe and demonstrate procedures, explain theory and provide for application and self-assessment of learning. Students use these CDs for various purposes, such as revision before a clinical block assessment, reinforcement

during the block and to gain an overview of the learning material prior to commencement of the block.

In terms of equity, prior training for use of electronic based learning material is essential, as many students from disadvantaged educational backgrounds have never had access to a computer. Language competency is a cross-cutting prerequisite for academic success, including using ITC.

#### *5.3.5.4.3 Core and faculty specific modules*

The core modules included in each MBChB programme are guided and accredited by the HPCSA, but the characteristics of such core modules is determined by the faculty. Some of the issues relating to such decisions are explored in the discussion on Anatomy (cf. 5.3.5.4.4). What became apparent during the study is that there is little sharing of understanding of practice or commonality in core course provision among the different faculties of medicine.

Different medical schools have included unique components in their curricula and it is unclear whether the choice of these modules is as a result of the available expertise within the faculty or if it is viewed as essential to the training of doctors. For example, at one institution there is a module on Law and Ethics as part of the Bioethics course in Family Medicine that examines issues such as the Code of Conduct of HPCSA, the South African Medical Association (SAMA) and professional conduct relating to HIV/AIDS. The rationale was that students need to understand when a doctor may be charged for negligence and be sensitive to common pitfalls, as explained by the individual responsible for the course:

There are an increasing number of medical doctors being found guilty of misconduct by the HPCSA, about 31 in 2000 and their names and practice numbers are published in the government gazette,

ultimately bringing disrepute to their alma mater, particularly if there is a consistently high number of them from one institution over a period of years.

#### 5.3.5.4.4 *The case of Anatomy*

The case of Anatomy in the new curricula requires exposition as it clearly demonstrates the factors influencing curriculum design. Medical training in South Africa is based on the British model that traditionally viewed Anatomy as the bastion of medical training. However, factors such as a shortage of cadavers led to faculties in the United Kingdom rethinking the value of Anatomy and drastically reducing the number of hours that students needed to spend in dissection halls. A curriculum designer, who was a head of a Department of Surgery in one faculty described the current status of Anatomy internationally and raised some very interesting arguments:

In many countries around the world the number of hours spent on dissection in an Anatomy hall is zero... does dissecting a preserved specimen give one a representation of the human body...does this help one fix the Anatomy by understanding the relationships and structure so that one can put function into it?

The view expressed was that it does help, but the current 400 hours to 700 hours spent on Anatomy in South African medical schools was “an overkill and you can do it in another way.” Currently, most medical faculties have reduced the number of hours spent on Anatomy to about 250. This reduction in the hours has “provided faculties with the opportunity of reducing the length of their curricula and introducing new subjects, such as Molecular Biology.”

However, the head of Anatomy of a medical school intending not to drastically reduce the number of hours spent on dissection, and if required to

rather decrease the number of hours spent on lectures, provided a variety of reasons for maintaining the number of hours that students spent in dissection halls. Many international cases, such as in Melbourne and Stanford, were cited where the experiment to reduce the time spent on Anatomy or to offer it as an elective had failed and the traditional course had to be reintroduced.

This head of Anatomy quoted Galen, the official doctor of the gladiatorial amphitheatre in Pergamon in the Second Century AD:

*A doctor without knowledge of Anatomy has no more value than an architect without a plan.*

The reduction of the number of hours of Anatomy in most new medical curricula raises the issue of the possible impact this will have on postgraduate training where Anatomy and physiology constitute the primary examination, as well as what then is the value of Anatomy in the various postgraduate programmes other than Surgery and Anatomy? These issues were not explored in the study.

#### 5.3.5.4.5 *Cultural sensitivity*

Equity relates not only to the students and staff in medical schools but to the communities that they work in. Although an important strategic objective of the DoH is to build a comprehensive and integrated primary health care system, adequate attention to cultural sensitivity is included as part of only one curriculum. In this programme students are formally taught about community values and norms to facilitate student entry into communities and are accompanied to and assessed on their community interaction skills to enable them to work effectively cross-culturally and with mutual respect.

The co-ordinator explained:

Students are formally taught how to behave, for example, greeting is important whether you know the person or not... that when you knock at someone's door, you may be a doctor but you are a visitor. In this module we make students aware of the patient foremost as a person and then as a patient.

This participant felt that there was a need for basic communication training in the predominant language of the communities that the faculty was working in. However, although this could be useful, it was not practical, as students during their internship and professional practice are placed in different parts of the country that has 11 official languages, therefore inclusion of a specific Black language in the curriculum would not be feasible.

#### 5.3.5.4.6 *Attitudes and values*

Recognition of the overall development of the individual was viewed as a responsibility of one faculty and a member of the management explained:

In order to ensure that our graduates are experts in their fields and are not failures in terms of human relations skills, an innovation has been to include humanities subjects into the MBChB programme.

Another participant listed Practice Management and Communication as modules in the new curriculum and commented, "Universities are no longer a place where you just come to get knowledge – you also come to develop as a person."

Of interest were responses from only female interviewees of the need for inculcation of humility and empathy.

A comment in this regard by a deputy dean was:

We forget that patients are human beings like us – they are our sisters, they are our fathers – we think that now we are nursing sisters or medical doctors – we are better human beings. At any rate, even if we were to become ill, we would go to a private hospital. We've told ourselves that we're different from patients, so we treat them as lesser human beings according to the way we see them in relation to ourselves.

What requires discussion among the academic medical fraternity is the importance of developing a sense of humility and empathy in medical students, especially in view of the community contexts in which students will be working, across divides of race, class, gender and ethnicity. A reason forwarded for the lack of empathy was the workload. A deputy dean remarked, "If you are overworked, you become irritable – you become less sensitive and then you could lose your inherent sense of empathy."

#### **5.3.5.5 *General observations***

An interesting observation was the tendency of respondents to describe, compare or express scepticism, without being asked, about the curriculum development initiatives of other institutions. The fact that many of the comments made were factually incorrect indicates the lack of information sharing among faculties of medicine in developing their MBChB programmes, although visits among institutions were mentioned.

Another interesting observation was that there were significant differences in what national ministries, such as DoH, viewed as possible outcomes of implementation of the new curricula compare with what is in reality occurring. A further interesting observation was the discrepancy between what the national ministries believed, from hearsay, what was happening in

particular institutions and what was actually not occurring. An example was a comment from a national source that a dean from a particular institution had reported that there had been a significant increase in the number of Black students admitted to medicine in the past few years. The assumption was that this related to African students whereas the statistics show that there had been an increase in the number of Indian students, but no significant increase in the number of African or Coloured students in that medical faculty. These two cases point to the need for improved, more formalised channels of communication between national ministries and faculties of medicine, and for a more systematic process in monitoring transformation in medical schools in South Africa.

All revised curricula claim to promote training in community-based settings, but an institution admitted that although this was desirable, financial constraints linked to transporting students to satellite training venues restricted the extent to which training could be done in satellite training sites. The faculty was actively seeking ways of reducing expenditure, such as providing simulated community training at the main medical campus.

A member of the faculty management team reported:

We go into communities, but not as often as we would like to and now have the community-based sections locking onto the skills lab where students are taught skills. We would love to see students going into the communities to practice the skills, but that's flopping at the moment – we haven't got the funds to get students out into communities. There's a certain part of the year when we virtually have to move out every week, but we can't because we just don't have the funds to do that.

These examples are included, not as criticisms of national structures or institutions, but to indicate the manner in which institutions, due to financial constraints, continue to mediate their positions of viability, relevance, social responsibility and transformational demands.

### 5.3.6 Research output

Institutions place great emphasis on their research output as research is traditionally used as a criterion in judging the quality of institutions and is a means of revenue generation. There are no direct incentives, such as promotion provided by the DoH to undertake research. One respondent from university management explained, "Often research is regarded as an additional burden to teaching and clinical responsibilities." The proposed new funding formula aims to use funding as a structural lever to encourage postgraduate training to increase the critical mass of graduates with higher level and research skills. However, in medical schools, the number of postgraduate students in clinical specialities is fixed by the DoH and although there are fragmented pockets of research excellence, the research outputs of academics in medical faculties is low, more especially among Blacks and women.

There are a variety of reasons for this. A director of research at a university explained that there is a need to expose people to research earlier and to change their attitudes towards research:

Medical people generally don't conduct research, not because they don't want to do it but because there is no need to do it. After an undergraduate degree, you can get a good job and be well paid without doing research.

In terms of opportunity costs, private practice is more lucrative than research. Another factor affecting the low research activity among clinicians is their non-familiarity with it. Although most academic staff in medical schools are specialists, they often have not personally undertaken any research unless they have in recent years completed an M.Med. degree to qualify as a specialist. Writing the theoretical examination of the College of Medicine requires no research component and there is also no research component forming part of the undergraduate programme.



A deputy dean in a faculty remarked:

For me – we can't all be researchers. I think that I'm a good physician – I love teaching but I hate research. Maybe I was never really taught or told more about research to appreciate it.

One of the major reasons for the low research output by faculties of medicine has to do with the emphasis by the DoH on service delivery and not research. A faculty manager commented:

If you look at people who are producing papers all the time, they are poor clinicians – people who are committed clinicians tend to produce little research. In many cases the management teams in faculties of medicine are themselves not active researchers and fail to promote research activities.

As a member of management of another faculty remarked:

We need to give credit to those who are committed to teaching, to those who are committed to clinical work and to those who are committed to research because to me, I think that it's impossible to do all of them.

Women, on qualifying as doctors, are often for some years thereafter involved in child-bearing and child-rearing responsibilities, and may have the added responsibility of domestic care. They therefore specialise at a much later age than men and have lower publication records. Clinical medicine also appears to favour a more quantitative rather than qualitative research paradigm that some female respondents reported preferable.

Of importance to South African society, in view of its changing mortality and morbidity patterns, is the need for an increase in medical research. This

requires firstly, a joint strategy by DoE and DoH within the context of current realities of health care training and delivery. Various other recommendations emerged from the study, among them being the need for mentoring, increasing and strengthening departmental research thrusts and legitimising a variety of research methodologies.

According to Peters (1996:139), it is necessary to recognise that:

Power relations permeate the most ordinary scientific research. Scientific knowledge arises out of these power relations rather than in opposition to them. Knowledge is power, and power knowledge. Knowledge is embedded in our research practices rather than being fully abstractable in representational theories.

In terms of equity, this necessitates interrogation of traditional assumptions of what the nature of excellent and relevant research is in the South African context and who, why and how has the dominant discourse of research been defined and developed.

### **5.3.7 Institutional climate**

Changing the institutional culture in a way that supports and enhances the development, growth and participation of Blacks and women is essential. An executive member of a university remarked:

This needs to extend to beyond lip-service to equity and policy pronouncements to the integration and value of difference in building a new institutional culture in many institutions.

The institutional culture impacts on both staff and students, often in a subtle way, and although the study found high levels of commitment to equity at managerial levels, there were various reports of racial prejudice at lower levels in the organisation.

A senior Black manager at a university provided this description:

We get Africans in here but they don't stay. Retention is a big problem and one of the reasons for this is that Afrikaans is used as the language of communication in most academic departmental meetings. This makes African academics feel uncomfortable and one can sense the attitudes towards you...attitudes are difficult...you can easily change structures, rules and regulations, but attitudes remain unchanged. If you are one among 10 to 20 people and you feel uncomfortable, then obviously when you get opportunities, you go.

One of the clearest indicators of racial tensions still prevailing in institutions were reports of problems experienced in integrating residences and where some institutions have reverted to permitting segregated hostels that appear to be more satisfactory to students of all race groups.

Anticipated institutional mergers on the basis of geographic proximity or financial efficiency could have negative outcomes for equity, unless the government is able to obtain the necessary legislative authority to intervene in certain institutional processes, such as student selection and language policy.

#### **5.3.7.1 *Quality and quality assurance***

The mission and vision of an institution influence to a large extent the manner in which it interprets and manages equity. Linked to this are different notions of quality that emerged during the interviews. The most common view was that of excellence as quality. As a member from a national ministry commented:

Quality is paramount whether you are talking about academic support or relevant research or blue-sky research...I don't think that by bringing more Black students into a university, technikon or medical school in particular- that you're undermining excellence.

The abstraction and elusiveness of the concept quality result in tensions in academia. A White academic, responsible for research capacity-building and described as a stickler for quality, was reportedly perceived to be obstructionist and racist. Another report relating to the quality of clinical research was that studies employing quantitative rather than qualitative methodologies are rated more highly by research evaluators.

Notions of the quality of the programmes appear to be perceptually linked to the institutional resources and infrastructure that are very different for HAIs and HDIs. There was a strong view among respondents from the HDI as well as some of its graduates employed in HAIs that the level of disadvantage was the result of historic discriminatory funding and therefore it is the responsibility of the state to affirmatively fund HDIs. A manager from an HDI commented:

At the heart of equity there should be an equalisation of educational infrastructure so that we no longer have to struggle with low quality laboratories, low teaching staff and a shortage of lecture theatres... so that we can become centres of excellence like Howard University in the States.

One institution that was perceived by a few respondents in other institutions of being of a lower quality, “because students who fail their first year here can go there and pass”, had some different responses from within the institution, although there were acknowledgements of a lack of resources. One response was:

There is a perception that the quality of our graduates is inferior – but our students have good practical skills. If you go into the rural areas, you will find that our students can take blood, put up a drip, take blood pressure – often students from other institutions have a better theoretical knowledge but lack the practical skills and you have to

start teaching them from scratch. Often, students from the most educationally disadvantaged communities with the lowest levels of cultural capital and requiring the greatest academic support, gain access into historically the most disadvantaged universities.

Denigration of notions of quality to individual frames of references and hegemonic understandings in academic medicine must be guarded against in the transformation towards equity in medical education and training.

In implementing new curricula, quality assurance needs to be systematically structured and concurrently introduced to evaluate the effectiveness of teaching and learning in the various contexts and new modes of delivery and assessment. In terms of equity, there needs to be an examination of how innovative strategies are impacting on the learning of different groups of students in terms of race, gender and educational background. The quality assurance mechanisms themselves need to be quality assured in terms of reliability and validity of the instruments used.

Quality assurance has great value in refining and improving teaching and learning, especially when a new curriculum is being introduced. A manager from an institution that does an evaluation twice a year explained:

We use the findings to solve problems immediately and to change some modules by shifting the content to other modules. There were reports on problems with group work, so we had 10 sessions for students and staff on group work.

An example of good practice was the triangulation of five different methods used to quality assure the teaching and learning in a block. These included the external statistical and qualitative analysis of the final block examination in terms of students' performance, quality of test items and construction of the test paper, a written report by the class representative after consultation

with peers, the report from the external examiner and a report by the block chair. The reports encourage a SWOT analysis that focuses on the strengths, weaknesses, opportunities and threats, and all reports are sent to the Dean's office for analysis.

However, especially in medicine, given the competing interest of service delivery and the reluctance of academic staff to attend staff development training programmes, there is a need to consider carefully the degree of regulation that should be introduced to improve and monitor teaching and learning while ensuring that it does not become a policing or window-dressing exercise. A faculty manager explained:

We are picking up from the student evaluations that students are becoming increasingly frustrated and are battling, but there's very little we can currently do about it as the evaluations are voluntary, so the lecturers with the serious problems do not even do the evaluations and the results of the evaluations are confidential between the lecturer and the unit (administering the evaluation). We are going to place a huge emphasis on student-centered learning so teaching evaluations are going to become compulsory and transparent – lecturers will be forced to disclose the results of their evaluations.

One of the challenges for medical schools is to design quality assurance processes that are able to reliably evaluate the quality of teaching and learning in the various teaching contexts.

A university manager had the following to say in this regard:

A single instrument cannot be used for a large lecture, clinical ward round and community context. It cannot be a “one size fits all” idea.

378. 68 Naid

g2570 -

RequesterNote: Received in accordance with Copyright Act 1978. Please post / ship to Bellville campus ( old 6670 )  
RequestedServiceType: LOAN

Naidoo, Kethamonie.

The management of equity in medical schools in South Africa / [S.l. : s.n.], 2002.

Volume / Issue:

Lending Unit: 2570 Expiry Date: 20090513

Return Address:

Lender's Request ID:



3122016

Requester's Request ID



3122012

Requesting Unit: 6300

Requested: 20090505 Need Before: 20090617

Name of Institution: Inter-Library Loans, CAPE Peninsula University of Technology, Bellville Campus

Delivery Address: Symphony Street, P.O. Box P.O. BOX 1906, Bellville, 7535

Patron ID: 6300-30018657 Patron Name: Cermak, Radomir

1799060  
1944172

Bestfile.com

As part of the process to enhance the academic progress of Black students and women, it is necessary to use race and gender as variables in the analysis of feedback responses. There are various aspects that need to be quality assured, such as the competence and attitude of lecturers, the effectiveness of the academic support mechanisms, the structure, content, teaching and learning in a particular course, and issues of institutional climate. Consideration needs also to be given to whether such evaluations are obligatory or voluntary and the procedures to be used to remedy negative practices.

#### **5.3.7.2 Role of the HPCSA**

The Health Professions Council of South Africa (HPCSA) is a statutory body, established in terms of the *Health Professions Act, 1974* (S.A.1974), and has 12 professional boards functioning under its jurisdiction (HPCSA: n.d.:1). It determines standards of professional education and training, and sets and maintains fair standards of professional practice. The HPCSA has applied to SAQA for registration as an Education and Training Quality Assurance (ETQA) and to have each of the boards as a Standards Generating Body (SGBs), which in the case of medicine would be the Medical and Dental Professional Board (MDPB).

As from 2000, the MDPB assumed responsibility for a new system of evaluation of the education and training of medical and dental students at South African universities. The board appointed a panel of experts to accredit each faculty/ school to offer undergraduate and postgraduate education and training, based on a process of self-reflection for which guidelines were provided. This constitutes the external quality assurance process in medical schools that provides the public with a measure of confidence in the competencies of medical practitioners.



### 5.3.7.3 *Language policy*

Language is a sensitive political issue that needs to be guided by a national policy directive. The language policy of institutions affects equity targets in terms of student intake and attrition. In a faculty in which the study was conducted, the medium of instruction is English, another is a parallel-language medium university and the other has no explicit language policy in its medical school. In the latter faculty, “lecturers deliver their lectures in the language that they are most comfortable with.” A manager from this faculty commented:

An attempt was made to require lecturers to answer students in the language in which the question was posed, but this resulted in complaints from students that responses were watered down. Most Afrikaans-speaking lecturers are bilingual but most English speaking lecturers are not, but the reality is that so many lecturers are so much more comfortable in Afrikaans – they live in Afrikaans, they work in Afrikaans, they are Afrikaans – they find it so much more difficult to switch over to English...but by the time our students graduate they are bilingual.

The parallel-medium instruction institution entailed all lectures being offered in both English and Afrikaans. Although the practice may not be the most cost-efficient, it accommodates language difference. A negative aspect of such a policy is that it segregates students by race as the English class is predominantly Black and the Afrikaans class is predominantly White. A manager from this institution remarked, “This does not promote integration and there are instances of suspicion and mistrust that one group is favoured above the other.”

A Black participant from an English-medium university explained:

Language has been used as an instrument of exclusion and our government and policy makers have failed us in a way because they have not been able to enforce a language policy that will engender greater access for our people. A flexible language policy or Afrikaans language policy impacts negatively on the majority of Black students. Most Black students would have gone through school using English and all of a sudden they have to contend with Afrikaans tuition. They might have done Afrikaans in high school, but we're talking in terms of scientific language where you've got to start thinking about scientific terms in Afrikaans – that's a re-learning process that is very stressful.

#### **5.4 CONCLUSION**

Inequities in medical education and training are severe, pervasive and systematically reproduced through specific policies and practices in medical schools and although inequities of race and gender are being addressed, either through intent or evolution, the issue of class remains the greatest source of social inequity, both in terms of student training and health care delivery.

The findings in this study suggest that the management of equity in medical schools is complicated, multi-layered and dependent on a number of interrelated and interlinked factors as well as various independent variables. Current inequities are a direct result of apartheid, capitalism and patriarchy, but in the South African context apartheid has exacerbated class and gender inequities in medical training and health care delivery.

Located within HEIs, dually regulated by the DoE and DoH and influenced by globalisation, faculties of medicine are constantly shifting, adjusting and

realigning their priorities, policies and practices to mediate the tensions that arise from their historic contexts, external influence and institutional visions. The DoE is using funding as a structural lever to increase the participation and throughput rates of students at undergraduate and postgraduate levels. There is also pressure from wider society and government, through the DoE and DoH, to demonstrate social transformation with respect to their student and staff profiles. However, faculties of medicine are constrained by fixed number of training posts at postgraduate and undergraduate level, a serious shortage in the pool of specialists from designated groups for employment in academic medicine and severe financial constraints.

Faculties of medicine are responding by aggressively competing for staff and students from designated groups and their success is directly related to their accumulated and acquired resources. The traditional criterion for student selection remains essentially the same, that is it uses the results of the matriculation examination to identify potential for academic success in the MBChB programme in the shortest throughput time. This privileges Black students from educationally advantaged schools and the opportunities available for the majority of Black students from disadvantaged and inferior schools, often located in poor, rural communities in which the DoH is committed to providing health care services, has not significantly improved.

Interviews, document analysis and observations suggest a commitment towards greater equity and social transformation. However, equity is simultaneously a political and personal issue and differing ideologies of providing equal opportunities or affirmative action strategies within economic realities influence the manner in which inequities are being addressed at a faculty level. People make change happen, and in the management of equity, the personal beliefs, attitudes and prejudices of decision-makers at the national, institutional and faculty levels influence the policies and practices implemented in achieving greater equity. This could range from the belief that there are not enough Black candidates with the

required academic competencies to meet the rigours of medical training, to a belief that men are more suited to certain fields of specialisation. Important in managing such processes is the need to formalise related decision – making so that choices made are not based on unilateral decisions but are the result of negotiated processes designed to achieve intended equity outcomes.

Economic determinism shapes transformation in terms of equity in medical schools and generally in higher education. External and internal funding allocations strongly influence faculty choices about the quality, structure, support and mode of delivery of the educational programme. Economic factors also play an important role in the choices that individual students and staff make, such as staff decisions about faculties they wish to work in based on the availability of resources, student choices about the faculty they wish to study in based on factors such as the tuition fees, financial support and length of the study programme. Even the choices of postgraduate students to specialise are linked to level of student debt and private and public sector salaries and working conditions.

Choices of students about the institution they select to study in are also linked to the historical and current access opportunities and for many African students with lower matriculation grades, the HDIs provide greater access opportunities due to their lower selection criteria. HEIs remain to a great extent locked in their historic positions of privilege and advantage and compete within historic paradigms. Within the higher education transformation imperatives of quality, equity, access, efficiency, effectiveness and redress (DoE 1997), HAIs attempt to shift their transformation towards the greater equity, access and redress displayed by HDIs, and the HDIs attempt to initiate changes towards greater quality, effectiveness and efficiency that were the organising principles of HAIs, without either giving up their former ideological positions. This is not to suggest a dichotomy in terms of imperatives between HAIs and HDIs, but a constant internal negotiating and realigning of policies and practices in terms

of these imperatives. These shifts affect external and internal stakeholder perceptions and influence the institutional and faculty culture, such as the language policy, and such factors impact on the experiences of members of designated groups within these communities.

HDIIs currently contribute significantly to the training of African students in medicine and in the development of African staff in academic medicine. HAIIs contribute significantly to training and research in maintaining international competitiveness. There is a need to build capacity and facilitate skills transfer in areas such as research, where capacity is concentrated in HAIIs. Both HDIIs and HAIIs have roles to play in the transformation of medical education and training in the short to medium term in South Africa, until the playing fields are more level. It is only when student and staff profiles in all eight medical schools demonstrate compositions that closely resemble the population demographics, when institutional cultures celebrate diversity, such as language and nationality, can they be considered as South African medical schools.

There is a fragile balance of power and interplay between government responsibility and institutional autonomy, between the DoE and the DoH in regulating the training of medical doctors, and between the institutions and emerging structures, such as the NHLS. There are also other bodies, such as the HPCSA and College of Medicine, that play important roles. In order to achieve meaningful transformation in relation to equity in medical schools and equity in public health care delivery, there needs to be collaboration, cooperation and joint prioritisation of equity goals to guide the process of transformation in medical faculties. Ultimately, all of these structures are committed to the same transformation goals and the challenge lies primarily with the DoH and DoE in formalising collaborative working arrangements to jointly direct training in medical schools. Issues such as research output, teaching commitments, service rendering, community development, private practice and redressing inequities of class, race, and gender in undergraduate

and postgraduate medical training require interrogation, clarity, debate and consensus of all stakeholders in enhancing equity in medical schools. In order to do this there is a need for in-depth research and a reliable database that includes variables of race, gender and class. Included in the need for broader discussion and debate is the need to factor into the analysis an issue such as HIV/AIDS that is likely to have a serious negative impact on society.

Currently, there is no single driver to provide guidance to faculties of medicine regarding their transformation initiatives, little co-ordination among the medical faculties and fragmented monitoring and accountability, as often the inequities in the medical faculties are subsumed and blurred by discrepant equity shifts at the institutional level. The result is grossly divergent trajectories, such as curriculum development and length of programmes. Differentiation is advantageous, but extremities in differentiation could impact negatively on broader national goals, such as the multi-disciplinary team approach in the transformation of public health care or the portability of credits from one medical faculty to another in terms of the NQF.

The use by the DoE of the funding formula to direct change in higher education has little relevance in terms of the context of medical education and training described in this chapter. The challenge lies in identifying appropriate incentives at a national level to direct change at a specific and contextually different discipline level within higher education that will promote the development and training of medical doctors in line with national goals.

## **CHAPTER 6**

### **SYNTHESIS OF FINDINGS, RECOMMENDATIONS AND CONCLUSION**

#### **6.1 INTRODUCTION**

This study provides insight into the management of equity in medical schools in South Africa, both from a qualitative and a quantitative perspective, within national legislative and policy frameworks. Conceptualisations, perceptions, management principles and management practices relating to equity in medical schools are distilled from in-depth interviews with key individuals in management positions who are involved in decision-making around equity issues that emerged in this study. Statistical data relating to staff and student profiles in medical schools provide the empirical evidence for establishing the extent and nature of prevailing inequities, and for testing the authenticity of some of the perceptions articulated by managers during the interviews.

This chapter provides an overview of the main themes that emerged from this investigation on how the achievement of national equity goals is being managed in medical schools in South Africa. Based on these findings, four main recommendations are made that could promote the achievement of equity in medical schools in South Africa in a holistic and integrated manner. A few topics for future research are identified and some of the limitations of this study are discussed.

## 6.2 OVERVIEW OF INVESTIGATION

Against the background of the transformation frameworks of the DoE and DoH, explication and justification for why this study is necessary, its main aims, the research problem and the research plan are provided in Chapter 1. The point is made that the entire education and training of medical doctors at the current time in South Africa is an issue of critical social importance due to the anticipated increased demand for health care, primarily on account of illnesses such as HIV/AIDS and tuberculosis (cf. 1.1).

In establishing a theoretical framework for this investigation, the concept of equity is explored in greater detail in Chapter 2. The two predominant equity models, namely Equal Opportunities or Good Faith and Specific Affirmative Action, are described and in Chapter 5 it is concluded that medical schools employ both approaches in varying degrees in student and staff selection (cf. 2.3). It is argued in Chapter 2 that equity outcomes, such as attrition, throughput and graduation rates, are more reliable indicators of equity than measures of access, such as admission and total enrolment statistics (cf. 2.6). It is further asserted that socio-economic class should be incorporated as a fundamental factor in an integrated analysis of race, class and gender in equity discussions in higher education (cf. 2.7.1). The importance of training medical doctors in a manner that is both locally relevant whilst at the same time globally competitive is acknowledged, but in terms of national health care needs the significance of ensuring that such local needs are met as a first priority is emphasised.

Chapter 3, in describing the context of higher education and medical education deduces that although prevailing inequities of race, gender and class in medical schools are related to their historic institutional and faculty origins and philosophies, equity trends are specific to an individual faculty of medicine and are often unrelated to the equity trends manifested in that university or in another faculty of a similar character (cf.3.5). The existing information gap regarding academic staff in medical schools is identified and



during the investigation relevant statistics were collected and analysed for medical schools in the sample (cf. 3.4.2).

In chapter 4 the research design is described and the advantages and disadvantages of the various qualitative and quantitative methods of data collection are discussed. Reliability and validity are more difficult to establish in qualitative research, which is the main method of data collection for this study, and therefore the triangulation of different methodologies is useful for enhancing reliability and validity (cf.4.3.2).

Chapter 5 presents and describes the qualitative findings of this investigation and aims to portray the deep-seated, complex nature of prevalent inequities that are masked in simplistic statistical overviews. The main issues concerning the management of equity in medical schools that emerge from the interviews are briefly described and these represent the broad areas that need to be managed if equity in medical schools is to be more effectively and holistically improved (cf. 5.2 – 5.3).

### **6.3 SUMMARY OF EMERGING THEMES**

Statistical and qualitative findings in Chapter 5 suggest the following five major, interconnected themes that emerge from this study:

#### **6.3.1 Historical determinism**

Current inequities in medical education and training, medical specialists and public health care provision are a direct result of the particular historic legacy of apartheid in South Africa. In a fiscally constrained climate, immediate and adequate redressing of such inequities by government is not possible and therefore there is greater reliance on institutional and individual commitment to equity transformation imperatives (cf.3.4.2).

Universities and individually committed staff are having to make-up for academic deficits resulting from the inferior school education received by approximately 70% of the population. There are few students studying Mathematics and Science at school, poorly qualified teachers, lack of resources such as laboratories, textbooks, water and electricity, and reports in the interviews demonstrate the need for innovative and creative methods for academic development and student support (cf. 5.3.3.4).

The pool of specialists from designated groups, as a direct consequence of historic inequities in access to medical schools, is extremely low. The high demand for such specialists in public health care and academic medicine is difficult to meet, given the low remuneration offered by these sectors in comparison to private practice incomes (cf.3.4.2.3).

### **6.3.2 Power dynamics**

Power dynamics extend to beyond legitimate authority, with findings in the study pointing to subtle, intangible contestations of power rooted in a variety of sources, such as historical institutional foundational philosophies, economic advantage and differing ideologies. According to Jordan and Weedon (1995:11) all signifying practices, that is, all practices that have meaning involve relations of power.

At the national level, lack of co-ordination and collaboration between the DoH and DoE is linked to each wanting to maintain its particular position of power and influence in medical education and training. This has profound consequences for transformation, as little progress has been made through the current DoE/DoH structural arrangements that remain unchanged. This is best illustrated by the fact that the recommendations made in this study are similar to those made by the NCHE Health Science Working and Reference Group in the report entitled *A Future Organisational and Financial Model for the Health Sciences* (NCHE 1996b: 9-11), and yet none of the recommendations appear to have been adopted. Commissioned and

independent investigations on transformation in medical education have limited practical value if they are unable to influence policy.

A wide range of findings in this study point to political, ideological and material contestations of power, the most significant among them linked to issues of language (cf.5.3.7.3), postgraduate training, including the College of Medicine (cf.5.3.4), and gender stereotypes regarding areas of medical specialisation (cf.5.3.2.7).

### **6.3.3 Economic determinism**

A strong assertion made in this study is that most of the transformation initiatives in medical schools, at both individual and systemic levels, are directed by fiscal imperatives, and that it is economics and not the transformation and development principles outlined in the *White Paper 3: Transformation of Higher Education* (DoE 1997) that is the main driving force in the process of transformation in medical schools. Many examples of best practice have been identified in each of the institutions and these are described in the previous chapter, but these are fragmented initiatives that are not part of a holistic framework for managing equity.

University and faculty criteria for access into the MBChB programme remain largely traditional in favour of securing the maximum government subsidy related to student throughput rates (c.f 5.3.2.3). Admitting large numbers of African students having inferior educational backgrounds and who will often require more time to graduate poses negative economic consequences for institutions.

Decisions of African students to enter postgraduate programmes are linked to issues of financial debt and pressures to contribute financially to extended family demands (c.f. 5.3.3.1). Similarly, decisions of specialists to remain in academic medicine or to move into private practice are also in many instances linked to economic determinants (c.f. 5.3.3.3), as are the number of

registrar posts available and the number of posts in academic health complexes (c.f. 5.3.3.4).

#### **6.3.4 Differing ideologies**

Although there is, at least at the levels of management surveyed in this study, a strong commitment to equity, there is no consensus on what needs to be done or how it should be done, across national departments of education and health, institutions and their faculties of medicine, resulting in some similarities and other stark differences in proposed and implemented changes in medical schools (c.f. 5.3.2.4). The differences observed may be linked to the divergent philosophical interpretations of equity, specifically among the leadership at national, institutional and faculty levels, in terms of the good faith or specific affirmative action models (c.f. 2.2.). Historic experiences of institutions (c.f. 5.3.3) also appear to influence individual understandings of equity and the nature of the redress mechanisms required.

There are divergent views related to notions of quality and standards (c.f. 2.3; 3.2.1.1; 5.3.7.1), research and training in terms of international competitiveness versus national relevance (c.f. 5.3.4) and higher education responsibilities regarding national social transformation and developmental objectives (5.3.4.4). An interesting observation was the motivation for institutional and faculty equity initiatives, which in some instances related to social responsibility functions and in others appeared to be linked to strategic posturing and externally imposed imperatives for transformation (cf.5.3.1).

#### **6.3.5 Management practices**

Successes and failures in the achievement of equity were continually linked to the effectiveness of the management practices. Two key observations confirmed repeatedly are that equity initiatives were either for reasons of compliance or social responsibility, and that perceptions about how well equity was being managed in a particular faculty differ greatly among various managers within that faculty or in that institution (c.f. 5.3.1). In

many instances divergent perceptions could be linked to race and gender differences of respondents (c.f. 5.3.1).

Some of the good practices observed in this regard were equity as a strategic objective incorporated as a fundamental organising principle in all institutional plans; proactive, visionary leadership; participative decision-making; decentralised equity management with a formalised, centralised monitoring mechanism; broad and effective information dissemination and information feedback systems (c.f. 5.3.1).

## **6.4 RECOMMENDATIONS**

The following four main recommendations are premised on the view that managing equity in a systematic, holistic and integrated manner at the national, institutional and faculty levels will significantly improve the serious inequities that prevail in medical schools.

### **6.4.1 Financing and managing medical service, teaching, training and research in academic health complexes**

***Recommendation:*** *There should be a single, separate budget allocated to medical schools for staff appointments and student training. The management of service rendering in the academic training hospital, and the teaching, training and research in the university should be under the joint control of the national DoE and national DoH. This would necessitate the establishment of a joint DoE/DoH structure at national level to have final responsibility for medical schools.*

***Remarks:*** Currently, there is competition between the national ministries of health and education for a larger proportion of the GDP, and between the provincial DoHs for larger proportions of the health budget. While national DoH has responsibility for creation of internship and registrar posts, provincial DoH has the responsibility for the creation of clinical posts (cf.5.3.4.2). The recommended arrangement would diffuse power and

financial struggles, facilitate more effective and higher quality training of medical doctors, and lead to transformation in medical schools being directed in line with national transformation goals.

#### **6.4.2 Defining and managing equity in medical schools**

***Recommendation:*** *The proposed joint management structure (c.f. 6.4.1) should provide clarification, co-ordination and monitoring at a national level of what constitutes equity and common redress mechanisms appropriate for medical schools.*

***Remarks:*** While the Constitution (S.A. 1996) and NPHE (DoE 2001a) make provision for affirmative action, students from educationally disadvantaged communities rarely gain access into medical schools, even through foundation programmes. The category Black masks the continuing low representation of African students and staff, especially at senior levels, and nationality remains an issue, especially in postgraduate training. According to Meek (1996:11), differing conceptualisations are not a problem so long as each concept is clearly explicated, for then it is controllable. Diversity is a concept especially vulnerable to misinterpretations and misunderstandings, as are the related concepts of differentiation and homogenisation, and only by clearly specifying theoretical positions, notions and concepts can we avoid confusion, prevent misunderstandings and further our knowledge on the dynamics of higher education (Meek 1996:11). There has been no significant mindset shift from traditionally applied selection criteria. Explicit guidance from such a national joint management structure would have the potential to resolve such issues.

#### **6.4.3 Maintaining a comprehensive and accurate Management Information System**

***Recommendation:*** *A comprehensive, continuously updated national database of all South African medical doctors by race, gender, area of*

*specialisation and location of practice should be maintained to accurately ascertain training needs, and to track trends and shifts. Annual statistical analyses should also be conducted on student applications and admissions, and failure, drop-out and graduation rates of students, by race and gender, in the eight medical schools. Other information, such as residential areas, school details and recruitment and selection criteria should also be analysed.*

Remarks: The need for and importance of accurate statistics is recognised by the DoH (DoH n.d: 6; 12; 32) and it is imperative to move the monitoring of equity beyond the statistical dimension to include qualitative data, such as those listed above to address factors underlying quantifiable manifested inequities in medical schools.

Co-ordination of such a system should be the responsibility of the DoH but delegation of particular tasks could be undertaken by the HPCSA, the National Health Information System of South Africa (NHISSA) and through the Regional Health Management Information System (ReHMIS) as well as by the medical schools (Heywood & Magaqa 1998:118-120).

#### **6.4.4 Adopting a framework for policies and practices in medical schools**

**Recommendation: *Policies and practices in medical schools should be aligned to national strategic transformation frameworks and equity goals of higher education and health***

Remarks: Currently, policies and practices in medical schools are in many cases aligned to those of the institution, but in some instances differ significantly from those of the broader institution, for example the language policy (cf. 5.3.7.3). What is not happening and is urgently required is the alignment of equity-related policies and practices in medical schools to national transformation goals of higher education and health (DoH n.d; DoE

2001a). Prerequisites would be adoption of the above three recommendations (6.4.1 – 6.4.3) and the refinement of conflicting goals by the proposed joint management structure, such as the need for increased participation rates by the DoE and the restricted available training spaces at undergraduate and postgraduate levels in medicine.

## **6.5 FURTHER RESEARCH**

This study identifies three areas for possible future research:

- An exploration of an appropriate medical curriculum in terms of aspects such as course content, length of curriculum and training sites within South African education, training and health needs. This could inform issues such as student access, curriculum relevance and design within the national OBE framework (cf.5.3.5)
- Investigating multicultural differences in the life experiences of medical students in training that influence their support needs and career decisions. Statistics suggest possible race and gender based explanations for the differences in group participation trends (c.f. 5.3.3.5)
- Conducting a feasibility study on partnerships between private health care and academic health complexes. Students need to be trained to use the latest medical technology, indigent patients require medical resources found only in private hospitals, and medical schools struggle to retain specialists who often find the working conditions in and income from private practice more attractive than those in the public health care system (5.2.3)



## **6.6 LIMITATIONS OF STUDY**

The main limitations of this study are:

- The sample of institutions, although representative of historic type, is drawn from the Gauteng province. This has the advantage of ensuring commonality in terms of provincial administration links with the functioning of the three medical schools, but poses a limitation in that medical schools in other provinces may experience a few dissimilarities to the faculties of medicine in Gauteng
- The qualitative findings are based exclusively on interviews with individuals in senior management and are therefore not reflective of perceptions of the wider staff and student communities in medical schools
- People with disabilities have historically experienced severe discrimination and are included as a category for social redress in national equity policies. This study has not included the issue of disability due to lack of available data and thus perpetuates the marginalisation of people with disabilities in equity discourse
- Statistics for staff in medical schools are presented to establish an empirical basis for the claims of race and gender inequities. However, these were difficult to obtain and there may be inaccuracies in the information received

## **6.7 CONCLUSION**

The medical profession, including its education and training, functions as a microcosm of the broader society that it serves through its replication of general race, gender and class divisions. The context of medical education

and training in South African medical schools is inherently and significantly different from the broader higher education context because the number of available training posts is prescribed and restricted by the DoH, although the responsibility for university education and the training of medical doctors is that of the Ministry of Education.

The training of medical doctors in an equitable, appropriate and relevant manner must be seen as a high priority for all sectors of this government and the universities, as at no previous time in the history of this country has there ever been such a real yet unmanageable threat, due to illnesses such as HIV/AIDS, of eradication of a nation. Government at the highest level must acknowledge that a new management and financial dispensation for the training of medical doctors and specialists needs to be negotiated. The proposed funding formula and the transformation goals outlined in the NPHE (DoE 2001a), in many instances, are inappropriate and irrelevant for medical schools.

Equity is currently not a central organising principle for transformation in most medical schools, although there is commitment at the levels of senior and executive management towards achieving greater equity. Rather, medical education, as with education broadly, is not concerned with equity *per se*, but with social, cultural, political, economic and moral issues revealed and acted out in educational policies and practices. Equity needs constitution as an unbroken, binding and reinforcing thread woven across educational concerns if social justice is to supersede interests of formal education (Purpel 1999:11).

Universities are in a process of continuous oscillation between the polar extremes of fiscal efficiency and social responsibility. Therefore admitting, for example, large numbers of African students from poor rural communities who would have a problem paying fees, who would often require more than the minimum prescribed time to complete the programme, and who would

require large amounts of academic, financial and other forms of support, is not an economically viable option in terms of a declining government subsidy linked to student throughput rates. Other diverse and fragmented initiatives relate to curricula design, length of programmes and selection criteria that are diametrically opposed to the NQF principles, and this suggests greater guidance rather than regulation from a national level.

Institutional autonomy is the cornerstone of academic freedom and democracy, and government's interference to regulate equity needs to be kept to the essential minimum. The current strategy to steer institutional transformation through funding incentives is a good one – but inappropriate for medical education. The recommended joint, equal DoE/DoH management structure (cf. 6.4.1) should provide explicit guidance, time-frames and financial incentives within a separate financial dispensation for undergraduate and postgraduate medical education, and staffing in medical schools. Accurate information and rigorous and vigilant monitoring of equity in medical schools should be a function of such a joint structure.

South Africa needs doctors drawn from all communities across the country to be trained to return to empower their communities in accordance with their knowledge, skills and attitudes gained through appropriate medical curricula. This should not be to the exclusion of doctors of other national, racial or ethnic groups working outside their own communities, but a facilitating factor in health care promotion is understanding the language, norms and values of the communities you work in. The creation of the functional link between national goals and HEI implementation strategies is long overdue.

## BIBLIOGRAPHY

African National Congress (ANC). 1994. *A Policy Framework for Education and Training*. Braamfontein.

Amselle, J. 1996. Legislative Background: Recent Action on Affirmative Action, in *Congressional Digest: The Pro and Con Monthly*, (75):6-7.

Anderson, P. & Williams, J. 2001. *Identity and Difference in Higher Education: Outsiders Within*. Aldershot: Ashgate.

ANC – see African National Congress

Arnott, A. & Kubheka, Z. 1997. *Access, Enrolment and Pass Rates in Mathematics and Science in Secondary Schools*. [S.i] NARSET report.

Aronowitz, S. & Giroux, H. 1985. *Education Under Siege*. South Hadley: Bergin & Garvey.

Asmal, K. *Speech by the Minister of Education, Professor K. Asmal, at the launch of the NPHE*. 05 March 2001. <http://www.polity.org.docs/speeches>.

Badat, S., Barends, Z. & Wolpe, H. 1993. *The Post-Secondary Education System: Towards Policy Formulation for Equality and Development*. Cape Town: UWC-EPU.

Badat, S. 1994. *Differentiation and Disadvantage: the Historically Black Universities*. Cape Town: EPU.

Beale, M.A. 1994. *Apartheid and University Education, 1948 –1959*. M.A. thesis, University of the Witwatersrand, Johannesburg.

Beckham, E. F. 2000. *Diversity, Democracy and Higher Education*. Washington D.C.: AAC&U.

Bell, C. & Roberts, H. (eds.). 1984. *Social Researching: Politics, Problems, Practice*. London: Routledge & Kegan Paul.

Berg, B.L. 1995. *Qualitative Research Methods for the Social Sciences*. Boston: Allen & Bacon.

Bergman, B. 1996. *In Defence of Affirmative Action*. New York: Basic Books.

Bird, A. 1994. Equity and Access: A Union Perspective, in Kaplan, B. *Changing by Degrees? Equity Issues in South African Tertiary Education*. Cape Town: UCT Press.

Blackwell, J.E. 1987. *Mainstreaming Outsiders: The Production of Black Professionals*. New York: General Hall.

Blakemore, K. & Drake, R. 1996. *Understanding Equal Opportunity Policies*. London : Prentice Hall

Blankley, W. 1994. The Abyss in African School Education in South Africa, in *South African Journal of Science*, (90):54.

Blasé, J. 1998. The Micropolitics of Educational Change, in Hargreaves, A., Lieberman, A., Fullan, M. & Hopkins, D. (eds.). *International Handbook of Educational Change*. Boston: Kluwer Academic.

Bogdan, R.C. & Biklen, S. K. 1992. *Qualitative Research for Education: an Introduction to Theory and Methods*. Boston: Allyn & Bacon.

Bosman, M.C. 1997. *Anatomae: Heri Hodie Cras*. Inaugural Address at Medunsa, 28 August 1997.

- Botha, H. 1997. *A Guide to the New Labour Relations Act*. Pretoria: PractitionerIR.
- Bowen, W.G. & Bok, D. 1998. *The Shape of the River: Long-Term Consequences of Considering Race in College and University Admissions*. New Jersey: Princeton U.P.
- Boyer, E.L. 1985. Trends in the United States, in *The Future of Higher Education*, edited by Jaques, D & Richardson JTE. Surrey: Society for Research into Higher Education.
- Bram, L.L. (ed.) 1991. *Funk & Wagnalls New Encyclopaedia, Volume 3*. New York.
- Brennan, J., de Vries, P. & Williams, R. 1997. *Standards and Quality in Higher Education*. London: Jessica Kingsley.
- Brewer, J. & Hunter, A. 1989. *Multimethod Research: a Synthesis of Styles*. Newbury Park, CA: Sage.
- Brink, A.J., Bradshaw, D., Benade, M.M.M. & Heath, S. 1991. Women Doctors in South Africa: a Survey of their Experiences and Opinions, in *South African Medical Journal*, 80(12): 561-565.
- Budlender, D. 1998. *Women and Men in South Africa*. Pretoria: Central Statistics.
- Bunting, I. 1994. *A Legacy of Inequality: Higher Education in South Africa*. Cape Town: UCT Press.
- Burgess, R.G.(ed.) 1989. *The Ethics of Educational Research*. New York: Falmer Press.

Caldwell, D. 1992. *No More Martyrs Now: Capitalism, Democracy and Ordinary People*. Johannesburg: Conrad.

Calitz, F. 1997. *South African Certification Council Annual Report and Financial Statement*. Pretoria: South African Certificate Council.

*Cape Argus*, 1997, 2 January:6

*Cape Argus*, 1999, 19 September:21.

*Cape Times*, 1999, 2 July:1

Caplan, L. 1997. *Up Against the Law: Affirmative Action and the Supreme Court*. New York: 20<sup>th</sup> Century Fund Press.

Carter, S. 1992. *Reflections of an Affirmative Action Baby*. USA: Perseus Books.

Cassell, C. & Symon, G. (eds.). 1995. *Qualitative Methods in Organisational Research: A Practical Guide*. London: Sage.

CHE – see Council on Higher Education.

*The Citizen*. 1999. Universities Challenged, 27 November:12.

Clark, B.R. 2000. Developing a Career in the Study of Higher Education, in Smart, J. *Higher Education: Handbook of Theory and Research*. New York: Agathon.

Cloete, N., Muller, J., Makgoba, M.W. & Ekong, D. (eds.). 1997. *Knowledge, Identity and Curriculum Transformation in Africa*. Cape Town: Maskew Miller Longman.

Cloete, N., Kulati, T. & Phala, M. 1999. *Leadership and Institutional Change in Higher Education*. Pretoria: CHET.

Cloete, N. & Bunting, I. 2000. *Higher Education Transformation: Assessing Performance in South Africa*. Pretoria: CHET.

Coffey, A. & Atkinson, P. 1996. *Making Sense of Qualitative Data: Complementary Research Strategies*. London: Sage.

Colborn, R. P., Kent, A.P., & Leon, B. 1995. The Changing Medical Student Population at the University of Cape Town, in *South African Medical Journal*, 85: 4

Collins, H. 1992. *Equality Matters: Equal Opportunities in the '90s: Background and Current Issues*. London: Library Association.

Cooper, D. 1998. *Massive Transformation at the Level of Students at South African Universities and Technikons: Minimal Transformation at the Level of Staff*. Paper presented at the workshop on The Employment Equity Act: implications and challenges for higher education. 29 November – 1 December 1988.

Cooper, D. & Subotzky, G. 2001. *The Skewed Revolution – Trends in South African Higher Education: 1988 – 1998*. Cape Town: UWC-EPU.

Council on Higher Education (CHE). 2000. *Towards a New Higher Education Landscape: Meeting the Equity, Quality and Social Development Imperatives of South Africa in the Twenty First Century*. Pretoria: CHE.

DACST – see Department of Arts, Culture, Science & Technology.

De la Ray, C. 1998. *South African Women in Higher Education: A Review of their Experiences*. [S.i.] FAWESA.



Dennerstein, L., Ewing, J. & Leher, P. 1990. Women in the Professions of Medicine and Law, in Jones, D.R. & Davies, S.L. (eds.). *Women in Higher Education: An Agenda for the Decade*. NSW: University of New England.

Denzin, N.K. & Lincoln, Y.S. 1994. *Handbook of Qualitative Research*. California: Sage.

Department of Arts, Culture, Science and Technology. 1997. *White Paper on Science and Technology: Preparing for the 21<sup>st</sup> Century*. Pretoria: DACST.

Department of Education. 1997. *Education White Paper 3: A Programme for the Transformation of Higher Education*. Pretoria.

Department of Education. 2001a. *National Plan on Higher Education*. Pretoria.

Department of Education. 2001b. *National Working Group: Indicators and Benchmarks for Universities and Technikons in South Africa – September 2001*. Pretoria.

Department of Education. 2001c. *Information on the State Budget for Higher Education*. Pretoria.

DoE – see Department of Education

Department of Health. 2000a. *White Paper for the Transformation of Health Systems in South Africa*. [http://www.polity.org.za.govdocs/white\\_papers/health\\_01.html](http://www.polity.org.za.govdocs/white_papers/health_01.html). 00/08/29.

Department of Health. 2000b. *Post Graduate Training of Medical Doctors in South Africa*. Pretoria: DoH Academic Health Service Complexes.

Department of Health. n.d. *Health Sector Strategic Framework: 1999 – 2004*. Pretoria.

Department of Health. 2001a. *Department of Health Annual Report 2000/2001*. Pretoria: Formeset.

Department of Health. 2001b. *Medical School Student Trends 1994-2001: Presentation to the Parliamentary Portfolio Committee on Health*. 1 August 2001.

Department of Labour. *Draft Employment Equity Bill, 1997*.

<http://www.polity.org.za...bills/1997/equity.html>

DoH – see Department of Health

DoL – see Department of Labour

D' Souza, D.1991. *Illiberal Education: The Politics of Race and Sex on Campus*. New York: Free Press.

Dunne, M. 1996. The Power of Numbers: Quantitative Data and Equal Opportunities Research, in Morley, L. & Walsh, V. *Breaking Boundaries: Women in Higher Education*. London: Taylor & Francis.

Edwards, J. 1995. *When Race Counts: The Morality of Racial Preference in Britain and America*. London: Routledge.

Elam, A. M. (ed.). 1989. *The Status of Blacks in Higher Education*. New York: NAFEO.

Elam, J. C. (ed.). 1989. *Blacks in Higher Education: Overcoming the Odds*. London: NAFEO.

Escobar, M. 1994. *Paulo Freire on Higher Education*. Albany: State University of New York . .

- Ezorsky, G. 1991. *Racism and Justice: The Case for Affirmative Action*. London: Cornell U.P.
- Fleming, J.E., Gill, G.R. & Swinton, D.H. 1978. *The Case for Affirmative Action for Blacks in Higher Education*. Washington, D.C.: ISEP.
- Flick, U. 1992. Triangulation Revisited: Strategy of Validation or Alternative? in, *Journal for the Theory of Social Behaviour*, 22: 175-178.
- FOTIM. 2001. *Preliminary Report on Access in the FOTIM and Free State Regions*. Johannesburg.
- Foucault, M. 1981. *The History of Sexuality, Volume One: An Introduction*. Harmondsworth: Pelican.
- Freeman, K. (ed.). 1998. *African American Culture and Heritage in Higher Education Research and Practice*. London: Praeger.
- Freire, P. 1994. *Pedagogy of the Oppressed* – translated by M.B. Ramos. New York: Continuum.
- Gibbons, M. 1998. *Higher Education Relevance in the 21<sup>st</sup> Century*. Washington: World Bank.
- Gilligan, C. 1982. *In a Different Voice: Psychological Theory and Women's Development*. Cambridge: Harvard University.
- Glazer, B. & Strauss, A. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. Chicago: Aldine.
- Gordon, I. 1957. *Report on the Government's Intended Action to Remove the Faculty of Medicine from the University of Natal*. Durban: Hayne & Gibson.

Graglia, L.A. 1995. Affirmative Action: Have Race- and Gender- Conscious Remedies Outlived their Usefulness? in *ABA Journal*, May.

Graham, H. D. 1992. The Origins of Affirmative Action: Civil Rights and the Regulatory State, in *ANNALS*, AAPSS, September:523.

Gregory, S. T. 1995. *Black Women in the Academy: The Secrets to Success and Achievement*. New York: University Press of America.

Griesel, H. 2001. FE and HE: The Challenge of Articulation – the Logic of the FETC Framework, in *The Challenges of Access and Admissions*. [S.I.]: SAUVCA.

Habermas, J. 1974. *Theory and Practice*. London: Heinemann.

Harrison, S. & Qose, M. 1998. Health Legislation, in Health Systems Trust (HST). *South African Health Review*. Durban.

Health Portfolio Committee. 2001. *Admission of Medical Students: Briefing*, 29 May: <http://www.pmg.org.za>.

Health Professions Council of South Africa. 1999. *Education and Training of Doctors in South Africa: Undergraduate Medical Education and Training*. Pretoria: MDPB.

Health Professions Council of South Africa. n.d. *Information Brochure: Council Members, Committee Members and Professional Board Members*. Pretoria.

Health Systems Trust (HST). 1998. *South African Health Review*. Durban.

Helms, L.B. 1998. Affirmative Action in Medical Education: A Legal Perspective. *Academic Medicine*, 73(3):231-236.

Heywood, A. & Magaqa, V. 1988. District Health Information Systems, in *South African Health Review*. Durban: HST.

Hoare, Q. & Smith, G. 1971. *Antonio Gramsci: Selection from Prison Notebooks*. New York: International.

Hooks, B. 1981. *Ain't I a Woman: Black Women and Feminism*. Boston: South End.

Horrell, M. 1968. *Bantu Education to 1968*. Johannesburg: Institute of Race Relations.

Howell, C. 2001. Employment Equity for People with Disabilities: Developing a Framework for Higher Education Transformation, in *The Employment Equity Act: Implications and Challenges for Higher Education*. Pretoria: CHET.

HPCSA – see Health Professions Council of South Africa.

HST – see Health Systems Trust

Hudson, C.P., Kane-Berman, J & Hickman, R. 1997. Women in Medicine: A Literature Review, 1985 –1996, in *South African Medical Journal*, 87(11):1495-1498.

Hurd Mead, K.C. 1979. *A History of Women in Medicine: From the Earliest Times to the Beginning of the Nineteenth Century*. British Virgin Island: Longwood Press.

Jacobson, C. 2001. Bitter Pill for Patients as Doctors Resign. *Sunday Times*. 18 March 2001:1.

Jaques, D & Richardson, J.T.E. (eds.). 1985. *The Future of Higher Education*. Surrey: Society for Research into Higher Education.

- Jansen, J. & Christie, P (eds.). 1999. *Changing Curriculum: Studies on Outcomes-based Education in South Africa*. Kenwyn: Juta.
- Jones, D. 2000a. To be in the Context of "21<sup>st</sup> Century." *Business Day*, 30 June:2.
- Jones, D. 2000b. Education Report draws Praise, Fire. *Business Day*, 20 July:2.
- Jones, D. 2000c. Education Dinosaurs Head for Bedrock. *Business Day*, 21 July 2:7.
- Jones, D.R. & Davies, S.L. (eds.). 1990. *Women in Higher Education: An Agenda for the Decade*. NSW: University of New England.
- Jordan, G. & Weedon, C. 1995. *Cultural Politics: Class, Gender, Race and the Postmodern World*. Oxford: Blackwell.
- Kallaway, P.(ed.). 1984. *Apartheid and Education: The Education of Black South Africans*. Johannesburg: Ravan.
- Kahn, M. 2001. Constraints, Views and Perspectives: A Perspective on Student Demographics in the Area of Mathematics and Physical Science, in *The Challenges of Access and Admissions*. [S.I.]: SAUVCA.
- Kane-Berman, 1997. Women in medicine – priestesses and healers or second- class doctors, in *SAMJ*, 87(11): 1495-1496.
- Kane-Berman, J. 2000. *Admission of Women to Medicine*. Position paper prepared for the Committee of Medical Deans.
- Kanpol, B. 1994. *Critical Pedagogy: an Introduction*. Westport: Bergin & Garvey.

Keller, G. 1993. *Academic Strategy: The Management Revolution in American Higher Education*. Baltimore, MD: John Hopkins UP.

Kgoale, M.M. 1982. The Development of University Education for Blacks in South Africa with Special Reference to the Transvaal (1900-1970). M.Ed. thesis, UNISA, Pretoria.

Kotecha, P. 2001. Context – Access and Flexibility: Challenges for FET and HET, in *The Challenges of Access and Admissions*. [S.I.]: SAUVCA.

Kraak, A. 1997. Globalisation, Changes in Knowledge Production, and the Transformation of Higher Education, in Cloete, N., Muller, J, Makgoba, M.W. & Ekong, D. *Knowledge, Identity and Curriculum Transformation in Africa*. Cape Town: Maskew Miller Longman.

Krefting, L. 1990. Rigor in Qualitative Research: The assessment of Trustworthiness, in *The American Journal of occupational Therapy*, 45(3):214-222.

Kuran, T. 1993. Seeds of Racial Explosion, in *Society*, September/October.

Kvaerner, K.J., Aasland, O.A., & Botten, G.S. 1999. Female Medical Leadership: Cross Sectional Study, in *BMJ*, 318(1):91-94.

Landman, W.A., Mouton, J. & Nevhutalu, K.H. 2001. *Chris Hani Baragwanath Hospital Ethics Audit*. [S.I]: EthicSA.

Lee, B.A. 1989. Recent Supreme Court Rulings Could Disrupt or Halt Affirmative Action Recruiting and Hiring in Academe, in *Chronicle of Higher Education*, June 28.

Lee, J. 1996. Legislative Background: Recent Action on Affirmative Action, in, *Congressional Digest: The Pro and Con Monthly*, June – July (75):6-7.

- Lehmann, U., Andrews, G. & Sanders, D. 2000. *Change and Innovation at South African Medical Schools: An Investigation of Student Demographics, Student Support and Curriculum Innovation*. Durban: Health Systems Trust.
- Lillemore, K.D., Ahrendt, G. M., Yeo, C.J., Herlong, H.F. & Cameron, J.L. 1994. Surgery – Still an “old boys’ club?”, in *Surgery*, August 254 –261.
- Macfarlane, D. & Majola, B. 2002. Unisa Strife: Now it’s Pityana vs Asmal. *Mail & Guardian*, January 11-17:5.
- MacGregor, K. 1997. Plan for Black Universities to rise above their Second-class Legacy. *The Sunday Independent*, 3August:6.
- Maphai, V. 1994. Equity: the Philosophical Context, in *Changing by Degrees? Equity Issues in South African Tertiary Education*, edited by B. Kaplan. Cape Town: UCT.
- Marcus, L. R. 1999. The Micropolitics of Planning. *The Review of Higher Education*, 23(1):45-64.
- Marshall, C. & Rossman, G. B. 1989. *Designing Qualitative Research*. London: Sage.
- McIntyre, D.; Baba, L. & Makan, B. 1998. *Equity in Public Sector Health Care Financing and Expenditure in South Africa*, in South African Health Review. Durban: HST.
- Meek, V.L. et.al. (eds) 1996. *The Mockers and Mocked: Comparative Perspectives on Differentiation, Convergence and Diversity in Higher Education*. Oxford: Pergamon
- Meek, L.V. 2001. *Uses of Higher Education Policy Research – Inaugural Public Lecture*. NSW: University of New England.



- Meer, F. 1990. *Black Woman Worker*. Durban: IBR.
- Miles, M.B. & Huberman, A.M. 1994. *Qualitative Data Analysis: An Expanded Sourcebook* (2<sup>nd</sup> ed.) California: Sage.
- Mithaug, D.E. 1996. *Equal Opportunity Theory*. London: Sage.
- Moens, G. 1985. *Affirmative Action: the New Discrimination*. Australia: Centre for Independent Studies.
- Monare, M.2002. Asmal's Treatment of Unisa a Travesty-Pityana. *Pretoria News*. 11 January:1.
- Moolmal, H. & Edwards-Miller, J. 1998. *Production of Doctors in South Africa*, in *South African Health Review*. Durban: HST.
- Morley, L. & Walsh, V. 1996. *Breaking Boundaries: Women in Higher Education*. London: Taylor & Francis.
- Mouton, J & Muller, J. (eds.) 1998. *Theory and Method in Social Sciences Research: Advances and Innovations*. Pretoria: HSRC.
- Naidoo, K., Potts,L., & Subotzky, G. 2001. A National Survey of the Progress of Institutions in the Formulation of Employment Equity Plans, in *The Employment Equity Act: Implications and Challenges for Higher Education*. Pretoria: CHET.
- Naidu, E. 1999. Life and Death Struggle of Universities. *Saturday Argus*, 19 September 1999:21.
- Naidu, E. 2000. Asmal not Bound to Accept Proposals. *The Star*, 18 July 2000.

National Commission on Higher Education. 1996a. *A Framework for Transformation*. [S.I.]: NCHE.

National Commission on Higher Education. 1996b. *A Future Organisational and Financial Model for the Health Sciences*. NCHE: Health Science Working and Reference Group.

NCHE – see National Commission on Higher Education

Ngcai, S.1997. Academics Fight over the Soul of Universities: Chickens will come Home to Roost in Incompetent Doctors, Engineers, in *Cape Argus* 2 January:6.

Nonnemaker, L. 2000. Women Physicians in Academic Medicine: New Insights from Cohort Studies. *New England Journal of Medicine*: 399-405.

NUSAS. 1954. *Africans in Universities*. [S.I.:s.n.].

NUSAS. 1957. *The concept of a University*. [S.I.:s.n.].

Oakley, A. 1976. Wisewoman and the Medicine-man: Changes in the Management of Childbirth, in *The Rights and Wrongs of Women*, edited by Mitchell, J. & Oakley, A. London: Penguin.

Oxford English Dictionary on Historical Principles. 1973. S.v. 'equality' and 'equity'. Oxford: Clarendon.

Pahliney, K. 1991. An Investigation of Discrimination against South African Women Educators. M.A. dissertation: University of Natal.

Pavlich, G & Orkin, M. 1993. *Diversity and Quality: Academic Development at South African Tertiary Institutions*. Johannesburg: CASE.

Peron, J. 1992. *Affirmative Action, Apartheid and Capitalism*. Johannesburg: Free Market Foundation.

Peters, M. 1996. *Poststructuralism, Politics and Education*. Westport: Bergin & Garvey.

Pick, W. M., Nevhutalu, K., Cornwall, J.T. & Masuku, M. 2001. *Human Resources for Health*. Pretoria: DoH.

Piper, D.W.(ed.). 1981. *Is Higher Education Fair?* Surrey: Society for Research into Higher Education.

Polity Press. 1994. *The Polity Reader In Social Theory*. Cambridge: Polity.

Prater, O.L. & Miller, B. 1989. The Status of Black Americans in the Professions of Law and Medicine, in Elam, A. M. (ed.). *The Status of Blacks in Higher Education*. New York: NAFEO.

*Pretoria News*. 2001. Exodus of Doctors not being Stemmed – Study, 26 April.

Pretorius, C. 2000. Educate or Die: Writings on the Board for Universities, in *Sunday Times*, 23 July 2000:15.

Price Waterhouse. 1996. *Affirmative Action in South Africa: A Special Report*. Johannesburg: Price Waterhouse.

Pringle, R. 1998. *Sex and Medicine: Gender, Power and Authority in the Medical Profession*. Melbourne: Cambridge U.P.

Purpel, D.E. 1999. *Moral Outrage in Education*. New York: Peter Lang.

Quanta, C. 1995. *Who's Afraid of Affirmative Action: A Survival Guide for Black Professionals*. Cape Town: Kwela.

Ramphela, M. 1994. Equity Policy: A Framework of Questions, in Kaplan, B. (ed.). *Changing by Degrees: Equity Issues in South African Tertiary Education*. Cape Town: UCT Press.

Reinharz, S. 1992. *Feminist Methods in Social Research*. New York: OUP.

Retief, F.P. 1982. Training of Black Doctors in South Africa, in *South African Medical Journal*, 61: 238.

Robbins, D. 1999. Universities Challenged, *The Citizen*, 27 November:12.

Rohrs, H. 1987. *Tradition and Reform of the University under an International Perspective: an Interdisciplinary Approach*. Frankfurt am Main: Verlag Peter Lang.

Rosenfeld, M. 1991. *Affirmative Action and Justice: A Philosophical and Constitutional Inquiry*. New Haven: Yale U.P.

SAMJ – See South African Medical Journal.

Schatzman, L. & Strauss, A.L. 1973. *Field Research Strategies for a Natural Sociology*. Engelwood Cliffs, NJ: Prentice Hall.

Seale, C. 1999. *The Quality of Qualitative Research*. London: Sage.

Seidel, J. & Kelle, U. 1995. *Computer-aided Qualitative Data Analysis: Theory, Methods and Practice*. London: Sage.

Shapiro, Y. & Jacobs, J. 1999. *South African Graduate Statistics: Profiles and Recent Trends*. Pretoria: HSRC.

S.A. – see South Africa

SADHS – see South African Demographic and Health Survey

Singh, P. 1999. SA Universities may have to Merge. *The Cape Times*, 2 August:1.

Soderlund, N., Schierhout, G. & Van den Heever, A. 1998. *Private Health Sector Care*, in South African Health Review. Durban: HST.

South Africa. 1959a. *Extension of University Act 45 of 1959*. Cape Town: Government Printer.

South Africa. 1959b. *Fort Hare Transfer Act 64 of 1959*. Cape Town: Government Printer.

South Africa. 1974. *Health Professions Act 49 of 1974*. Cape Town: Government Printer.

South Africa. 1995a. *South African Qualifications Authority Act 58 of 1995*. Cape Town: Government Printer.

South Africa. 1995b. *Labour Relations Act 66 of 1995*. Cape Town: Government Printer.

South Africa. 1996a. *Constitution of the Republic of South Africa, Act 108 of 1996*. Cape Town: Government Printer.

South Africa. 1996b. *Termination of Pregnancy Act 92 of 1996*. Cape Town: Government Printer.

South Africa. 1997a. *Green Paper on Affirmative Action and the Management of Diversity, Notice 851*. Pretoria: Government Printer.

South Africa. 1997b. *Higher Education Act 101 of 1997*. Cape Town: Government Printer.

South Africa. 1997c. *Medicines and Related Control Amendment Act 90 of 1997*. Cape Town: Government Printer.

South Africa. 1997d. *Medical, Dental and Supplementary Health Service Professions Amendment Act 89 of 1997*. Cape Town: Government Printer.

South Africa. 1998a. *Employment Equity Act 55 of 1998*. Cape Town: Government Printer.

South Africa. 1998b. *Skills Development Act 97 of 1998*. Cape Town: Government Printer.

South Africa. 1998c. *Tobacco Products Control Amendment Act 33 of 1998*. Cape Town: Government Printer.

South Africa. 1999a. *Skills Development Levies Act 9 of 1999*. Cape Town: Government Printer.

South Africa. 1999b. *Basic Conditions of Employment Act 75 of 1999*. Cape Town: Government Printer.

South Africa. 2000. *Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000*. Cape Town: Government Printer.

*South Africa Demographic and Health Survey (SADHS)*. 1998. Pretoria: MRC/DoE.

*South African Medical Journal*, 1979, 864.

*South African Medical Journal*, 1997, 47(11):1513 – 1515.

Sowell, T. 1989. Affirmative Action: A Worldwide Disaster, in *Commentary*, December.

Spees, E. R. 1989. *Higher Education: An Arena of Conflicting Philosophies*. New York: Peter Lang.

Stacey, M. et.al. (eds).1977. *Health and the Division of Labour*. London: Croom Helm.

*The Star*. 1999. Changes Coming Thick and Fast at Universities. 7 June:12.

St Leger, C. 1997. Black Students Swell Medical School Ranks. *Sunday Times*, 27 April:14.

Strauss, A. & Corbin, J. 1994. *Basics of Qualitative Research: Grounded Theory Methodology: an Overview*, in, Denzin, N.K. & Y.S. Lincoln. *Handbook of Qualitative Research*. California: Sage.

Strydom, A.H. & van der Westhuizen, L.J. 2001. *A Guide for Institutional Quality Assurance and Management Based on Self-evaluation in Higher Education*. Bloemfontein: UFS.

Subotzky, G. 1997. *The Enhancement of Graduate Programmes and Research Capacity at the Historically Black Universities*. Cape Town: UWC- EPU.

Subotzky, G. 1999a. *Staff Composition in Higher Education: a Statistical Overview of the Position of Women in Higher Education in South Africa*. Paper presented at the workshop on The Employment Equity Act: implications and challenges for higher education. 29 November - 1 December 1999.

Subotzky, G. 1999b. *Recent Changes in the Composition of Staff in South African Higher Education Institutions: Some Shifts, but Mainly Business as Usual*. Paper presented at the workshop on The Employment Equity Act: implications and challenges for higher education. 29 November - 1 December 1999.

*Sunday Independent*, 1999, 16 September:2.

*Sunday Times Business Times*, 2001, 1 July:2.

Taylor, P.V. 1993. *The Texts of Paulo Freire*. Buckingham: OUP.

Teichler, U. 1988. *Changing Patterns of the Higher Education System: The Experience of Three Decades*. London: Jessica Kingsley.

Tekian, A.1997. A Thematic Review of the Literature on Underrepresented Minorities and Medical Training, 1981-1995: Securing the Foundations of the Bridge to Diversity, in *Academic Medicine*, 72(10):140-146.

Thomas, A. 1996. *Beyond Affirmative Action: Managing Diversity for Competitive Disadvantage in South Africa*. Pretoria: Knowledge Resources.

Turaki, Y. 1992. *An African Response to the Question of Apartheid*. Potchefstroom: Institute for Reformational Studies.

University of the Witwatersrand. 2000. Internal Reconciliation Commission. Johannesburg: WITS.

Unterhalter, B. 1985. Discrimination Against Women in the South African Medical Profession, in *Social Science Medicine*, 20 (12):1253 –1258.

Urofsky, M.J. 1991. *A Conflict of Rights: the Supreme Court and Affirmative Action*. New York: Charles Scribner.

Van Vught, F.A.(ed.). 1989. *Governmental Strategies and Innovation in Higher Education*. London: Jessica Kingsley.

Vroeijenstijn, A.I. 1995. *Improvement and Accountability: Navigating between Scylla and Charybdis – Guide for External Quality Assessment in Higher Education*. London: Jessica Kingsley.



Weedon, C. 1987. *Feminist Practice & Poststructuralist Theory*. Oxford: Blackwell.

Weiner, R., Mitchell, G & Price, M. 1998. Wits Medical Graduates: Where are They Now?, in *South African Journal of Science*, 94 (2):59-63.

*West's Encyclopaedia of American Law, Volumes 1 and 4*. 1998. New York.

WHO – see World Health Organisation.

Williams, W.E. 1989. Scholarship and Affirmative Action, in *National Review*, May 5: 36-38.

Wits – see University of the Witwaterand.

Wolcott, H. 1994. *Transforming Qualitative Data: Description, Analysis and Interpretation*. California: Sage.

Wolpe, H. 1991. *Education in a Future South Africa: Policy Issues for Transformation*. London: Heinemann.

Wolpe, H. & Unterhalter, E. 1991. *Introduction* in E. Unterhalter et. al.(eds.). *Apartheid Education and Popular Struggles*. Johannesburg: Ravan.

World Health Organisation. 2001. *Report on the Workshop on Global Health Workforce Strategy: Annecy, France, 9-12 December 2000*. Geneva: Department of Organisation of Health Services Delivery.

Zelditch, M. 1962. Some Methodological Problems of Field Studies, in, *American Journal of Sociology*, 67: 566-576.

Zuma, J. 2000. *Deputy President Jacob Zuma at the 50<sup>th</sup> Anniversary of the Natal University's Medical School, Durban 29 July 2000*.

<http://www.Polity.org.za/govdocs/speeches/2000/sp0729a.html>

## APPENDIX 1

### EXAMPLE OF AN EXTRACT FROM A LETTER TO A VICE- CHANCELLOR REQUESTING PERMISSION TO CONDUCT RESEARCH

**Per Fax:**.....

24 August 2001

Dear Professor.....

I, the undersigned, Kethamonie Naidoo, a doctoral student at the University of South Africa (Student Number: 398 361 7) hereby request your permission to conduct interviews with you and members of your management staff, particularly in the faculty of medicine.

This research project is towards the fulfilment of the requirements of a D.Ed degree in Educational Management. The title of the dissertation is *The management of equity in medical schools in South Africa*. The purpose of this study is to explore how equity in medical schools can be more effectively managed in order to promote the achievement of the national equity goals of higher education and health. To date statistical data have indicated shifts and trends regarding student and staff mobility patterns. This study aims to add a qualitative dimension by identifying the challenges and best practices in promoting equity in terms of access, throughput, retention and outcomes in medical schools and seeking explanations for the prevailing inequities.

I would therefore like to, in addition to executive managers of the university and faculty of medicine, interview heads of portfolios such as academic development, quality assurance, student admissions, postgraduate studies, curriculum development and community development. It would be most useful to have the contact details of an individual who would be able to assist me with arrangements for the interviews.

Your permission to conduct interviews at your University will be sincerely appreciated.

Yours sincerely

K.Naidoo (Ms.)

**APPENDIX 2**

**EXAMPLE OF AN INTERVIEW GRID**

**Interviewee:**.....

**Position:** Dean

**University:** Pretoria

**Date:** 3 September 2001

	Staff		Students		Curriculum		Research		Policies
	Race/gender		Attrition		Length		Incentives		Appointments Procedures
	Supernumary posts		Foundation		SAQA/OBE		Capacity building		Admissions M-score
	More female students		Language		Quality		M.Med.		HPCSA/ QA Student feedback
	Frozen posts		SATS		Relevance		Institutional research		Strategic planning
	Retention		RPL		CBE		Support		Articulation of policies
	Nationality		Finance		Process		Funding		Joint appointments
	Development		Exclusion		Major changes		Publication record		Affirmative action

## APPENDIX 3

### EXAMPLE OF AN EXTRACT FROM AN INTERVIEW

**Question: There are serious inequities in terms of race and gender at the postgraduate level. What in your opinion are the main reasons for this and how can the equity position at this level be improved?**

An M.Med. student has to have a post with the DoH and the DoH has financial constraints, so every post that is vacated is first scrutinised to decide whether they will allow us to fill the post.

We are allowed to have 253 specialists according to our size, the number of beds etc. We have 162 filled – all the other posts are frozen. We are allowed to have 313 postgraduate students – we're only allowed to fill 261 – so there's no possibility of growth.

**Question: Could the selection process at postgraduate level be improved?**

The selection process has changed over time. To have it totally transparent, we would have to be able to advertise these posts on a regular basis but the province doesn't have the money to do it – that's both sides of the coin. They try now as far as they can to advertise en block.

On the other hand, people go to the HOD/Super and put their names down that they want to specialise when a post is available. Then everybody is called for an interview – its in the department and now we are very strict – we want to know how many people apply, what colour, how many women and men. However, it's not easy to get applicants – in some of these posts you're lucky to get people to apply.

Medicine is not lucrative anymore. Certain hospitals are well known for certain specialities, for example, if you want to become a cardio-thoracic surgeon, people would want to go to Cape Town because they do cardio transplants. Our major problem here is to get our posts open so that they can be filled.

**Question: Do you think that women prefer certain specialities?**

It depends on the woman – I know that years ago when I was at that age, a woman would not have done surgery at this University because the HOD wouldn't have accepted a woman to do surgery. But now its still not very popular with women, especially if you're married. You need to spend five years studying and the hours are too terrible and if you have that with a household, its very difficult.

**Question: Do many of the female students marry soon after graduation?**

Once you are trained, you can be in control. I've discussed this often with 3<sup>rd</sup> and 4<sup>th</sup> year students – who marries you if you have that kind of job? It has to be a man who is not threatened and has a good personal view of himself. Once students [female] get to 3<sup>rd</sup> or 4<sup>th</sup> year they get very panicky about getting husbands because their peers are getting married. I find, this quite amazing – once you've done 3years at school – a B.Sc or B.A. – then all of a sudden girls marry. I don't know what makes you so well advised to do so – and then they look at friends getting married and look ahead and realise that they have 3 more years to study and get panicky that they will not marry. I often tell them that if they find the right man then they will be a fool not to marry, but if you marry and want to take any fool – then you're a bigger fool. They have to make sure that whoever they marry has enough self-esteem that he just has a wife who has a career.

**Question: Is sexual harassment a problem for female students?**

Students are very victimised in their minds but often a surgeon or professor has too much power in passing them or not passing them – so maybe that hinders the coming out with it. Although we advertise that if they have a problem they should come and see me but they very rarely come, although you hear about some cases. Often the allied health students appear to have problems.

**Question: What precipitated the change in curriculum?**

We appreciated the need to change the medical curriculum many years ago after we had visited universities overseas and realised what we were doing wrong. There was such an explosion of knowledge that the only way to keep up was to have more and more handouts, talk quicker and quicker. We used to have 50 minute lectures and were asked to have a warming up 5 minutes and a closing up 5 minutes so there would be 40 minutes of lecturing time. We would steal an extra 5 minutes to get through the lecture and the students were like sponges, having to suck up what you say with very little time for integration and assimilation. We recognised that something had to give.....

What we have done with restructuring the course has been quite a bold step. We pulled apart the whole course and then redesigned it. We really didn't do it the classic way of saying OBE – we started before that and started with “what would be a good doctor?” The Dean and senior management drove it – you can't do it with less than the top management – that is a total paradigm shift in a medical school and doctors are the most traditional people.

Selling it was difficult – we needed strong leaders and they were – we didn't sell it in total – we're still selling it. People do it but they do it reluctantly – or they don't do it as they should but we're comfortable now that we've gone through it – pushed it through and now that everybody's in there – now we're doing to go back and assess how we're doing things