

**FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR
NURSE TRAINING PROGRAMME IN THE FREE STATE
PROVINCE**

by

KELEBOGILE CECILIA LEHASA

Submitted in partial fulfilment of the requirements for the degree of

MASTER OF ARTS

in the

SUBJECT HEALTH STUDIES

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: DR UU ALBERTS

JOINT SUPERVISOR: MRS LV MONARENG

NOVEMBER 2008

Student no: 7762267

DECLARATION

I hereby declare that the study titled **FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME IN THE FREE STATE PROVINCE** is my own work and that all the sources that I have used or quoted have been indicated and duly acknowledged by means of complete references.

SIGNED

KC Lehasa

DATE

FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME IN THE FREE STATE PROVINCE

STUDENT NUMBER: 7762267
STUDENT: KELEBOGILE CECILIA LEHASA
DEGREE: MASTER OF ARTS
DEPARTMENT: HEALTH STUDIES, UNIVERSITY OF SOUTH AFRICA
SUPERVISOR: DR UU ALBERTS
JOINT SUPERVISOR: MRS LV MONARENG

ABSTRACT

A quantitative descriptive study was used to describe the factors that influence the output in the four (4) year nurse training programme. Data was collected by using a self administered questionnaire to 73 participants sampled by stratified random sampling in the Southern Campus of Free State School of Nursing in the Free State Province. Data was analysed by using SPSS computer version 15.

The findings of this study revealed that there were difficult subjects like Fundamental Nursing Science, General Nursing Science, Basic Nursing Science, Psychiatric Nursing Science and Midwifery. These were identified per year level of study. The study revealed that difficulty experienced by students resulted in them failing the indicated subjects.

Recommendations were made as to how to address the identified factors especially those regarding subjects that were failed in each level, different teaching strategies that could be used to improve the throughput.

Key concepts

Output, nurse training programme (curriculum), learning programme, student nurse, teaching staff, learning experience and learning opportunity.

ACKNOWLEDGEMENTS

First, my praise and thanks to God for the wisdom, strength and guidance to complete this study.

There is a Sotho saying, *Motho ke motho ka batho babang* (“a person is a person because of other people”) and this dissertation is the outcome of many hands. So I would like to thank the following persons without whose assistance I could not have written it:

- Dr UU Alberts, my supervisor for her warmth, guidance, patience, encouragement and all she taught me throughout the entire study
- Mrs LV Monareng, my supervisor, for support and understanding
- The Free State Department of Health, for permission to conduct the study
- The FSSON, Southern Campus, Pelonomi and Orange Psychiatric Complex hospital allowing me to do the study
- My beloved husband Teboho Patrice Lehasa, for his unconditional love, support, encouragement and endurance
- My two children Moleboheng Precious Lehasa and Pheny Nyakallo Portia Lehasa for their moral support
- My friends and colleagues who encouraged me continuously
- My brothers and sisters for giving me the ongoing support
- The respondents, for their time, input and friendliness
- Ms Talana Erasmus, at the Unisa Library, for her assistance with the resources
- Professor Steffens for the statistical analysis of the study
- Ms lauma Cooper, for critically and professionally editing the manuscript

CHAPTER 1**Orientation to the study**

1.1	INTRODUCTION	1
1.2	BACKGROUND TO THE PROBLEM	3
1.3	STATEMENT OF THE PROBLEM	4
1.4	PURPOSE OF THE STUDY	4
1.5	RESEARCH OBJECTIVES.....	4
1.6	RESEARCH QUESTIONS.....	5
1.7	SIGNIFICANCE OF THE STUDY	5
1.8	RESEARCH DESIGN AND METHODOLOGY	5
1.9	POPULATION.....	6
1.10	SAMPLE AND SAMPLING	6
1.11	DATA COLLECTION	7
1.12	DATA ANALYSIS.....	8
1.13	VALIDITY AND RELIABILITY	8
1.14	ETHICAL CONSIDERATIONS	9
1.15	DEFINITION OF KEY TERMS.....	9
1.16	OUTLINE OF THE STUDY	11
1.17	CONCLUSION.....	11

CHAPTER 2**Literature review**

2.1	INTRODUCTION	12
2.2	HEALTH CARE SYSTEM.....	13

Table of contents		Page
2.3	NURSING EDUCATION	13
2.3.1	The South African Qualification Authority Act (Act 95 of 1995).....	14
2.3.2	The Higher Education Act (Act 101 of 1997)	15
2.3.3	The Nursing Act (Act 50 of 1978).....	15
2.4	FACTORS INFLUENCING LOW OUTPUT OF TRAINED PROFESSIONAL NURSES	18
2.4.1	Other factors	19
2.4.2	Environmental factors	20
2.5	STRATEGIES TO MINIMISE DECREASED OUTPUT	21
2.5.1	Preventive strategies	21
2.5.2	Curative strategies.....	22
2.6	CORRELATING THEORY AND PRACTICE	26
2.6.1	Clinical practica.....	26
2.6.2	Clinical accompaniment.....	27
2.8	CONCLUSION.....	27

CHAPTER 3

Research design and methodology

3.1	INTRODUCTION	28
3.2	RESEARCH OBJECTIVES.....	28
3.3	RESEARCH DESIGN AND METHODOLOGY	28
3.3.1	Quantitative research.....	29
3.3.2	Descriptive	30
3.4	POPULATION AND SAMPLE.....	31
3.5	DATA COLLECTION	32
3.6	PRE-TEST	33
3.7	DATA ANALYSIS.....	33
3.8	VALIDITY AND RELIABILITY	34
3.8.1	Validity and reliability of the study.....	34
3.8.2	Reliability of the research instrument.....	35

Table of contents		Page
3.8.3	Validity of the research instrument.....	35
3.9	ETHICAL CONSIDERATIONS	36
3.9.1	Privacy	36
3.9.2	Right to self-determination.....	36
3.9.3	Confidentiality and anonymity.....	37
3.9.4	Privacy.....	37
3.9.5	Freedom of choice and protection from harm.....	37
3.12	CONCLUSION.....	37

CHAPTER 4

Data analysis and interpretation

4.1	INTRODUCTION	38
4.2	DATA ANALYSIS	39
4.2.1	Section A: Respondents' demographical data.....	39
	Item 1: Ethnic groups.....	39
	Item 2: Home language	40
	Item 3: Age	41
	Item 4: Gender.....	43
	Item 5: Marital status	43
	Item 6: Bread winner	44
	Item 7: Family support of nursing career	45
	Item 8: Type of support.....	45
	Item 9: Respondents' number of children.....	46
	Item 10: Passed Std10 (Grade 12).....	47
	Item 11: Subjects done.....	48
	Item 12: Relevance of subjects to nursing now	49
	Item 13: Medium of instruction in Std 10 (Grade 12).....	50
4.2.2	Section B: Education and training.....	51
	Item 14: Reason for choosing nursing	51
	Item 15: Admission to the four-year course	51
	Item 16: Study level.....	52
	Item 17: Library use.....	53
	Item 18: Library hours.....	54
	Item 19: Time library closes.....	54
	Item 20: Librarian.....	55
	Item 21: Library assistance.....	55
	Item 22: Are there prescribed books for your level of training?	56
	Item 23: Prescribed books	56
	Item 24: Aspects causing stress.....	57
	Item 25: Emotional changes	58

Table of contents	Page
4.2.3	Section C: Training programme (curriculum)..... 58
	Item 26: Learning contract and policy 58
	Item 27: Programme objectives 50
	Item 28: Teaching methods 60
	Item 29: Difficult subjects 61
	Item 29.1: First year 61
	Item 29.2: Second year 62
	Item 29.3: Third year 63
	Item 29.4: Fourth year 63
	Item 30: Four-year training programme too theoretical 64
	Item 31: Evaluation methods 65
	Item 32: Feedback regarding reaching objectives 67
	Item 33: Relationship with tutors 68
	Item 34: Failed subjects 69
	Item 35: Subjects failed 70
	Item 35.1: First year 70
	Item 35.2: Second year 70
	Item 35.3: Third year 71
	Item 35.4: Fourth year 72
	Item 36: Reasons for failure 73
	Item 37: Registered students 73
	Item 38: Student dropout 74
	Item 39: Learning in the practical setting 75
	Item 40: Clinical area placement 76
	Item 41: Reasons for dropout 77
	Item 42: Remedial facilities 77
	Item 43: Tutors accompaniment 78
	Item 44: Remedial activities provided 79
	Item 45: Prerequisite wards for theoretical learning 80
	Item 46: Assistance in clinical nursing 80
	Item 47: Planned clinical accompaniment 82
	Item 48: Competent in practice 82
4.2.4	Section D: Education and training institution 83
	Item 49: Competent professional nurse training 83
	Item 50: Re-writing failed examination 84
4.2.5	Section E: Clinical facilities 85
	Item 51: Supervision provided to students 85
	Item 52: Difficulties encountered with placement 86
4.3	CONCLUSION 87

CHAPTER 5

Conclusions, limitations and recommendations

5.1	INTRODUCTION 89
-----	-----------------------

5.2	RESEARCH DESIGN AND METHODOLOGY	90
5.3	SUMMARY AND INTERPRETATION OF RESEARCH FINDINGS.....	91
5.3.1	Demographical data.....	91
5.3.2	Education and training	91
5.3.3	Training programme (curriculum).....	92
5.3.4	Education and training Institution	94
5.3.5	Clinical facilities.....	94
5.3.6	Factors influencing decreased output	95
5.3.7	Strategies that can be used to address decreased output.....	96
5.3.8	Implications of decreased output	97
5.4	CONCLUSIONS.....	97
5.5	CONTRIBUTIONS OF THE STUDY	98
5.6	RECOMMENDATIONS.....	99
5.7	LIMITATIONS OF THE STUDY	102
5.8	CONCLUDING REMARKS	102
	BIBLIOGRAPHY.....	103

Table 1.1	Output of nurses from four (4) year nurse training programme	2
Table 1.2	A stratified random sample according to the level of study of the four (4) year nurse training programme.....	7
Table 1.3	Outline of the study	11
Table 4.1	Respondents who passed Std 10 (Grade 12) (N=73)	47
Table 4.2	Respondents' study level (N=73)	53
Table 4.3	Availability of library (N=73)	54
Table 4.4	Time library closes (N=73)	54
Table 4.5	Librarian (N=73)	55
Table 4.6	Prescribed books (N=73)	56
Table 4.7	Registration per study level (N=73)	74
Table 4.8	Student dropout (N=73).....	74

List of figures	Page
Figure 1.1	Output of four (4) year nurse training programme in the Free State 1996-2004 3
Figure 4.1	Ethnic groups (N=73) 40
Figure 4.2	Respondents' home language (N=73) 41
Figure 4.3	Respondents' ages (N=73) 42
Figure 4.4	Respondents' gender (N=73) 43
Figure 4.5	Respondents' marital status (N=73) 44
Figure 4.6	Respondents and breadwinner (N=73) 44
Figure 4.7	Respondents' family support of nursing career (N=73) 45
Figure 4.8	Respondents' type of support (N=73) 46
Figure 4.9	Respondents' number of children (N=73) 47
Figure 4.10	Respondents' subjects done (N=73) 48
Figure 4.11	Relevance of subject to nursing (N=73) 49
Figure 4.12	Medium of instruction in Std 10 (Grade 12) (N=73) 50
Figure 4.13	Respondents' reason for choosing nursing (N=73) 51
Figure 4.14	Respondents' admission to the four-year course (N=73) 52
Figure 4.15	Respondents' library use (N=73) 53
Figure 4.16	Respondents' library assistance (N=73) 55
Figure 4.17	How respondents obtained prescribed books (N=73) 57
Figure 4.18	Aspects causing respondents stress (N=73) 57
Figure 4.19	Respondents' emotional changes (N=73) 58
Figure 4.20	Respondents' learning contract (N=73) 59
Figure 4.21	Programme objectives (N=73) 60
Figure 4.22	Teaching methods (N=73) 61
Figure 4.23	Respondents' most difficult first-year subjects (N=73) 62
Figure 4.24	Respondents' most difficult second-year subjects (N=73) 62
Figure 4.25	Respondents' most difficult third-year subjects (N=73) 63
Figure 4.26	Respondents' most difficult fourth-year subjects (N=73) 64

		Page
Figure 4.27	Respondents' rating of four (4) year nurse training programme theory (N=73).....	65
Figure 4.28	Evaluation methods most used (N=73).....	66
Figure 4.29	Respondents' feedback received (N=73).....	67
Figure 4.30	Respondents' relationship with tutors (N=73).....	68
Figure 4.31	Subjects failed (N=73).....	69
Figure 4.32	Respondents' subjects failed in first year (N=73).....	70
Figure 4.33	Respondents' subjects failed in second year (N=73).....	71
Figure 4.34	Respondents' subjects failed in third year (N=73).....	72
Figure 4.35	Respondents' subjects failed in fourth year (N=73).....	72
Figure 4.36	Reasons for failure (N=73).....	73
Figure 4.37	Respondents' receipt of a learning plan in the practical setting (N=73).....	75
Figure 4.38	Indication in plan how long student will be placed (N=73).....	76
Figure 4.39	Respondents' reasons for student dropout (N=73).....	77
Figure 4.40	Remedial facilities (N=73).....	78
Figure 4.41	Respondents' tutor accompaniment (N=73).....	78
Figure 4.42	Respondents' remedial activities provided (N=73).....	79
Figure 4.43	Prerequisite wards for theoretical learning (N=73).....	80
Figure 4.44	Respondents' assistance in clinical nursing (N=73).....	81
Figure 4.45	Respondents' planned clinical accompaniment (N=73).....	82
Figure 4.46	Respondents' rating of subject importance in practice (N=73).....	83
Figure 4.47	Respondents' competent professional nurse training (N=73).....	84
Figure 4.48	Respondents' re-writing failed examinations (N=73).....	85
Figure 4.49	Respondents' supervision provided (N=73).....	86
Figure 4.50	Respondents' difficulties encountered (N=73).....	85

List of abbreviations

AIDS	ACQUIRED IMMUNE DEFICIENCY SYNDROME
CHC	COMMUNITY HEALTH CENTRES
CHE	COUNCIL OF HIGHER EDUCATION
CBE	COMMUNITY-BASED EDUCATION
DOH	DEPARTMENT OF HEALTH
ETQA	EDUCATION AND TRAINING QUALITY ASSURANCE BODY
FSSON	FREE STATE SCHOOL OF NURSING
HEQC	HIGHER EDUCATION QUALITY COMMITTEE
HIV	HUMAN IMMUNODEFICIENCY VIRUS
MOU	MEMORANDUM OF UNDERSTANDING
NEI	NURSING EDUCATION INSTITUTION
NHS	NATIONAL HEALTH SYSTEM
NQF	NATIONAL QUALIFICATION FRAMEWORK
OBE	OUTCOMES-BASED EDUCATION
PBE	PROBLEM-BASED EDUCATION
PHC	PRIMARY HEALTH CARE
RPL	RECOGNITION OF PRIOR LEARNING
SANC	SOUTH AFRICAN NURSING COUNCIL
SGB	STANDARD GENERATING BODY
SAQA	SOUTH AFRICAN QUALITY AUTHORITY
UK	UNITED KINGDOM
WHO	WORLD HEALTH ORGANIZATION

List of annexures

ANNEXURE A Letter of approval to conduct research from Unisa

ANNEXURE B Letters to FSSON and clinical facilities requesting for approval to conduct research study

ANNEXURE C Letter of approval from Free State School of Nursing, Southern Campus and clinical facilities

ANNEXURE D Consent form

ANNEXURE E Questionnaire

CHAPTER 1

Orientation to the study

1.1 INTRODUCTION

In South Africa, nursing was regulated by the *Nursing Act (Act 50 of 1978, as amended)*, which is presently replaced by the *Nursing Act 33 of 2005* which makes provision for nursing education and training, however this study is based on the context of the *Nursing Act 50 of 1978, as amended* and its regulations in relation to nursing education. All subsequent references in the study refer to this Act. The South African Nursing Council (SANC) is the regulatory body established by Section 2 of this Act and is charged with the ultimate responsibility for controlling all matters concerning nursing education and training. In accordance with Section 45(1), the Minister of Health and Welfare on the recommendation of the SANC makes regulations for basic and post-basic programmes (South Africa 1978:17). Various basic nursing programmes are offered and provided according to the relevant prescribed regulations. Irrespective of their category, nurses play a major role in the health care system, as they are the first contact with the patient in the line of health care providers.

The researcher seeks to examine and evaluate the four-year course leading to registration as a Nurse (General, Psychiatric and Community) and Midwife. This course is regulated by Regulation 425 no 22 of 1985, as amended, and falls under the basic programmes. Upon completion of the course, students are registered nurses with the above four disciplines, which enable them to work anywhere in the health care sector, especially in primary health care (PHC) settings as that is the core of the South African health care system. According to the Department of Health (DOH) (1999:16), the challenge is to fully staff and equip PHC clinics so that they can provide a comprehensive health service.

The South African population's health needs are affected by the output of nurses, especially qualified nurses, hence the vital role of trained nurses in hospitals and PHC facilities. "Statistics South Africa indicated that in 2002 the country boasted 155 484

practising nurses giving a nurse/population ratio of 343 per 100 000 which is not favourable when compared to the World Health Organization's (WHO's) minimum of 2000 per 100 000. In the Free State, where the study was conducted, the nurse/population ratio is 419:100 000. Prior to 1994, the public health system was a fragmented, racially divided, hospital-centred service favouring the urban population, hence the need for the transformation into an integrated comprehensive national service (DOH 1999:5). There was an urgent need for the prioritisation of PHC and the introduction of community and home-based care, which meant that the training of PHC nurses and community health workers had to be fast-tracked to meet the country's health needs (DOH 1999:31). One of the broad objectives of the four-year course is that on completion nurses must be "skilled in the diagnosing of individual, family, group and community health problems" (SANC 1985:2) The present output of the four-year programme, is decreasing in all nine provinces (see table 1.1 and figure 1.1).

Table 1.1 Output of nurses from four (4) year nurse training programme

Province	Output of four (4) year nurse training programme									
	1996-2004 Nursing Colleges									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Limpopo	114	131	123	126	152	154	72	72	60	940
North West	163	187	177	102	112	83	82	46	35	987
Mpumalanga	27	31	41	43	73	65	47	73	95	495
Gauteng	887	794	632	594	545	598	388	273	275	4986
Free State	214	235	177	141	156	125	168	64	45	1325
KwaZulu Natal	361	354	295	336	432	266	214	264	358	2880
Northern Cape	25	23	38	35	7	16	25	21	19	209
Western Cape	322	227	178	265	323	140	81	83	121	1630
Eastern Cape	156	313	329	269	286	186	175	204	280	1929
Output four (4) year programme										
	1996	1997	1998	1999	2000	2001	2002	2003	2004	Total
Free State	214	235	177	141	156	125	168	64	45	1352

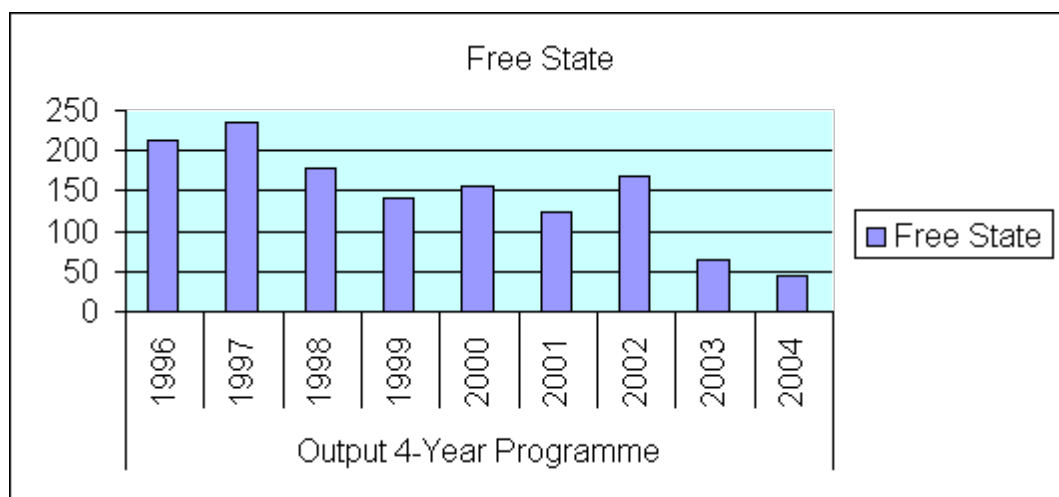


Figure 1.1 Output of four (4) year nurse training programme in the Free State 1996-2004

The number of nurses completing the course has decreased over the years. For example, in the Free State, 125 students registered for the course in 2001, but only 45 completed it in 2004. The low output contributes to the shortage of nurses, which has a serious negative impact on health care. There is a global shortage of registered nurses (Buchan & Colman 2005:1). The study therefore seeks to investigate the factors influencing output in the four (4) year nurse training programme.

1.2 BACKGROUND TO THE PROBLEM

Cholera, diarrhoea, diabetes mellitus hypertension, tuberculosis (TB), malaria and Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome (HIV/AIDS) are among the major health problems in the world. In South Africa, there was a need to transform the public health care system from a fragmented, racially divided, hospital-centred service favouring the urban population into an integrated, comprehensive national service driven. Accordingly, the government adopted the PHC approach (DOH 1999:5).

The researcher was appointed as a senior lecturer at the Free State School of Nursing (FSSON) Southern Campus in June 1997. Since then the researcher noted with concern that the number of students who completed the four (4) year nurse training

programme consistently decreased. The ever-changing health care environment and constantly rising health needs of the community make an adequate staff complement of nurses imperative. This motivated the researcher to undertake the study to assess the comprehensive programme with regard to its load of work, period of training, sequencing of the curricula, and quality of nurses produced. Manzini (1998:293) recommends that curricula be reviewed and adjusted regularly to ensure that both student and community needs are met.

1.3 STATEMENT OF THE PROBLEM

The shortage of nurses results in heavy workloads, stress and burnout. The researcher seeks to identify and describe the four (4) year course, which is intended to equip nurses to work anywhere in the health care sector especially in PHC settings, which form the core of the South African health care system. The DOH (1999:16) emphasises that the challenge is to fully staff PHC clinics to provide a comprehensive health service. Consequently, the researcher wished to determine the reasons for the decreasing number of students who complete the four (4) year nurse training programme, with particular reference to the Free State Province. For this purpose, the study focused on the Southern Campus of the Free State School of Nursing (FSSON). The researcher chose this area and topic because of the concern that little is known about the topic.

1.4 PURPOSE OF THE STUDY

The purpose of the study was to describe the factors that influence output in the four (4) year nurse training programme.

1.5 RESEARCH OBJECTIVES

The objectives of the study were to

- identify and describe the factors that influence the decreased output of student nurses following the four (4) year nurse training programme
- identify strategies to maximise the output of trained professional nurses

1.6 RESEARCH QUESTIONS

In order to achieve the objectives, the study seeks to answer the following questions:

- What factors influence the low output of trained professional nurses?
- What strategies can be utilised to minimise the decreased output of student nurses following the four (4) year training programme?

1.7 SIGNIFICANCE OF THE STUDY

Identifying the factors that contribute to the decreasing numbers of students who complete the four (4) year training course and qualify as nurses would enable the researcher to recommend strategies to improve nursing education and training as well as practice. This should help to alleviate the shortage of nurses. Furthermore, the findings would contribute to nursing knowledge and indicate areas for further research.

1.8 RESEARCH DESIGN AND METHODOLOGY

The researcher adopted a quantitative approach, using a descriptive design (see chapter 3). Quantitative research is a vigorous, systematic process for generating information about the world (Burns & Grove 2007:17). The researcher's rationale was that quantitative research measures the properties of phenomena systematically, using structured data-collection techniques, and requires that data collected be expressed in numbers; that is quantified (Babbie & Mouton 2003:49).

The study was descriptive because the objective was to identify factors that influenced the output in the-four (4) year nurse training programme therefore the findings were grounded in reality and not in the researcher's beliefs. According to Burns and Grove (2007:24), the purpose of descriptive research is to gain more information about characteristics within a field of study, and to provide a picture of situations as they naturally happen. In accordance to Polit and Beck (2008:16) evidence is gathered according to an established plan using structured instrument to collect the needed information which is numeric. This study therefore seeks to identify problems students experienced, using a questionnaire as a structured instruments for data collection. Descriptive designs are also used for the purpose of developing theory, identifying

problems in current practice, making judgements, or determining what others in similar situations are doing. The researcher also seeks to identify and describe factors that contributed to decreased output of students following the programme.

1.9 POPULATION

A research population refers to all persons who fit the specified characteristics being studied (Babbie 2007:9; Polit & Beck 2006:259). De Vos (1998:190) describes a research population as the individuals in the universe that possess specific characteristics required for research studies. The population for this study were all student nurses registered for the four (4) year basic training programme in the Free State School of Nursing (FSSON). The study was only conducted at the Southern Campus FSSON and clinical facilities where the respondents were placed for their clinical practica, namely Primary Health Care clinics at Orange Psychiatric Complex and Pelonomi Hospital. After qualifying, the nurses deliver health care services at PHC facilities and Community Health centres (CHCs).

To be eligible to participate, the respondents had to be students registered for the four (4) year nurse training programme from first to fourth year, with the same learning programme (curriculum), the same subjects, content, in all four disciplines, and exposed to the same teaching staff, learning experience and learning opportunities.

1.10 SAMPLE AND SAMPLING

Sampling is “the process of selecting a portion of the population to represent the entire population” (Polit & Hungler 1997:278). In this study, probability stratified random sampling was used (Burns & Grove 2003:244). The reason for using this type of sampling is that it increases the probability of being representative and assures adequate number of cases for subgroups from each group.

The sample was taken from all the student nurses, male and female, aged between 18 and 40 registered in the basic four (4) year nurse training programme in the FSSON, Southern Campus and placed at the Pelonomi and Universitas Hospitals at the time (Van Lill & Visser 1998:31).

The population was divided into groups (strata), according to levels of training from first year to fourth year and determined the number of respondents desired in each stratum. Then a sample of 20%, 30% and 100% was randomly selected from these strata as displayed on the table below (Johnson & Christensen 2004:207; Nieswiadomy 2002:175).

Table 1.2 A stratified random sample according to the level of study of the four (4) year nurse training programme

Nurse training programme level	Number of students registered for 2007 per level	Sample in percentages
First year	100	20% of 100 = 18
Second year	87	20% of 87 = 18
Third year	57	30% of 57 = 17
Fourth year	21	100% of 21 = 21
Total =	N = 265	N = 74

1.11 DATA COLLECTION

Data collection is the process of collecting data. There are various methods for collecting data. In this study, data was collected by means of a self-administered questionnaire consisting of open-ended and closed questions. In a questionnaire each person is asked to answer the same questions in a predetermined order (Saunders, Lewis & Thornhill 2003:280).

A questionnaire is a set of questions on a form, which is completed by participants for the purpose of collecting data for the research project (De Vos 1998:152).

A questionnaire was considered appropriate for this study to enable the respondents to describe the factors influencing output in the four (4) year nurse training programme.

The researcher adapted existing questionnaires that had been tested in other research before (Exner 2003:250; Manzini 1998:293). A pilot study or trial run (pre-test) was done with a group who were not included in the main study. The purpose was to check the relevance and clarity of the questions as well as the time needed to complete the questionnaire.

1.12 DATA ANALYSIS

Data analysis is the process of analysing data to determine the results. Data analysis is conducted to reduce, organise and give meaning to the data. Data analysis usually begins together with data collection. The analysis techniques implemented are determined primarily by the research objectives, questions or hypothesis (Burns & Grove 1999:43). As a quantitative approach was used, inferential statistics helped to investigate and describe the data by means of frequencies and percentages (Burns & Grove 2001:409). Data was broken into smaller categories and coded. A statistician analysed the data using the Statistical Package for Social Sciences (SPSS) version 15 programs.

1.13 VALIDITY AND RELIABILITY

The quality of a research instrument is determined by its validity and reliability. *Validity* is the extent to which an instrument measures what it is supposed to measure (Van Lill & Visser 1998:14). The researcher ensured validity by conducting a literature review and developing a questionnaire from existing ones that had been used previously with similar research (Exner 2003:250; Manzini 1998:293). In this study both face and content validity applied to avoid bias and to ensure that the instrument measures the contents desired.

Reliability is the degree of consistency or dependability with which the instrument measures the attribute it is designed to measure. Brink (1990:157) describes reliability as the extent to which measures are consistent or repeatable over time. If the instrument is reliable, the results will be the same each time the test is repeated (Polit & Hungler 1997: 308). Reliability is the accuracy or precision of an instrument as a degree of consistency or agreement between two independently derived sets of scores. It is concerned with how well things are measured (Polit & Hungler 1998:433). *Reliability* refers to “the extent to which independent administration of the same instrument will consistently yield the same results under comparable conditions” (De Vos 1998:168).

1.14 ETHICAL CONSIDERATIONS

Ethics implies preferences that influence behaviour in human relations (De Vos, Strydom, Fouche & Delport 2005:57). It deals with matters of right and wrong. This implies that anyone involved in social scientific research should be aware of agreements shared by researchers and participants about what is proper and improper in the conduct of the research (Babbie & Mouton 2001:470).

Collins English Dictionary (1991:533) defines ethics as “a social, religious, or civil code of behaviour considered correct, esp. that of a particular group, profession, or individual”.

In this study, the researcher observed all rights of the respondents and the authorities of FSSON where the study was conducted. Permission to conduct the study was sought and obtained in writing from the FSSON (Southern Campus), the two clinical facilities where the students were placed for their clinical practical (Pelonomi Hospital and Orange Psychiatric Complex), and the Free State Department of Health. The ethical considerations included respect for the respondents’ freedom, the right to self-determination, privacy, autonomy, volunteerism, confidentiality and avoidance of harm. Further details are discussed in chapter 3.

1.15 DEFINITION OF KEY TERMS

For the purposes of this study, the following terms are used as defined below:

- **Output**

Collins English Dictionary (1991:1109) defines output as “the amount or number produced, as in a given period”. In this study, output refers to the number of students that successfully complete the programme a nurse (general, psychiatric and community) and midwife (SANC 1985).

- **Nurse Training Programme (curriculum)**

In terms of Regulation R425, 1985, paragraph 1(11), refers to “a programme of education and training approved in terms of section 15(3), leading to the obtaining of a qualification, which confers on the holder thereof the right to registration as a nurse (general, psychiatric and community) and midwife” (SANC 1985).

- **Learning programme**

A learning programme is a combination of courses, modules or units of learning; that is, learning materials and methodology, by which learners can achieve the learning outcomes of a qualification (South African Qualification Authority [SAQA] 2001:31).

- **Student nurse**

A student nurse is a person undergoing education and training at an approved nursing school and registered as such under section 23 of the *Nursing Act (Act 50 of 1978)* at SANC (South Africa 1978:25). In this study, a student nurse is a person registered as such to undergo a basic four (4) year nurse training programme in the FSSON.

- **Teaching staff**

Teaching staff refer to professional personnel directly involved in teaching students, including classroom teacher; special education teachers; and other teachers who work with students as a whole class in a classroom. Teaching staff also includes chairpersons of departments whose duties include some amount of teaching (OECD Glossary of Statistical Terms 2003:1)

- **Learning experience**

The SANC (1992:7) describes a learning experience as a learning opportunity used by the student. It involves exposure of the student to an environment conducive to learning in theory and practica, namely the activities that the students are actively involved in during self-directed learning.

- **Learning opportunity**

The possibility for learning created by the registered nurse or midwife in the classroom and clinical teaching situations that could be used by the student to reach learning objectives (SANC 1992:7). It is an environment conducive to learning, created for the purpose of enabling students to correlate theory with practice; that is, apply what is learned to a real-life situation, using critical thinking and problem-solving skills as well as creativity.

1.16 OUTLINE OF THE STUDY

Table 1.3 presents an outline of the study.

Table 1.3 Outline of the study

Chapters	The title	Content description
Chapter 1	Research proposal	Describes the problem and its background, the purpose and significance of the study, and the research design methodology and defines the key terms
Chapter 2	Literature review	Discusses the literature review for the study
Chapter 3	Research design and methodology	Describes the research design and methodology
Chapter 4	Data analysis and interpretation	Presents the data analysis and interpretation
Chapter 5	Conclusion, limitations, and recommendations	Discussions on findings, conclusions and makes recommendations based on research findings for further practice and research

1.17 CONCLUSION

This chapter stated the problem, purpose and significance of the study, research design and methodology, including population, sample, data collection and analysis; defined key terms, and outlined the study.

CHAPTER 2

Literature review

2.1 INTRODUCTION

A literature review identifies and compares earlier studies, and helps to avoid duplication and unnecessary repetition (Mouton 2001:87). Burns and Grove (2001:810) describe a literature review as “an analysis and synthesis of research sources to generate a picture of what is known about a particular situation and knowledge gaps that exist in that situation”. The purpose of a literature review is to look for research approaches used by other researchers, which could be useful to a particular study (Manzini 1998:13).

Other than Manzini’s (1998:134) study, the researcher found no literature on South African student nurse dropout related to the factors influencing output in the four (4) year nurse basic training programme. The literature review examined South African and international studies on nursing education.

The researcher undertook the literature review to investigate and gain insight into factors that influence output in the four (4) nurse training programme, possible gaps in the programme and nursing education, the best approach and methodology to use, and ultimately to make recommendations for practice and further research. Accordingly, the literature review covered national and international sources on the following topics:

- The health care system
- Nursing education
- Student nurse output
- Factors influencing low output of trained professional nurses
- Strategies to minimise decreased output of students nurse following the four (4) year nurse training programme

2.2 HEALTH CARE SYSTEM

The transformation of the health care system in South Africa after 1994 had an impact on nursing education and student dropout (Manzini 1998:17). In order to provide quality health care, nurses need to correlate theory with practice to equip them with the necessary knowledge and skills. Reilly and Oermann (1992:19) emphasise that clinical nursing teaching as a discipline encompasses theory related to its people-centred mission, and is concerned with matters of health/illness, and the nature of its process in the practice milieu. On completion of their training, nurses are expected to function as competent independent practitioners (SANC 1995:1). In 1995, the *South African Authority Act, 58 of 1995* made provision for the SAQA, which, in turn, is responsible for overseeing the development and implementation of a National Qualifications Framework (NQF).

In 1997, the DOH introduced the *White Paper for the Transformation of the Health Care System in South Africa*. The White Paper contained the policy objectives and principles upon which the unified health care system of South Africa would be based (DOH 1997:1). The main purpose was to deliver quality health care to all the citizens of South Africa, using a comprehensive PHC approach. One of the objectives of the health care system was to develop the human resources available to the health sector. This reflected that education and training programmes would be developed to recruit and develop personnel competent to respond appropriately to the health needs of the people they served (DOH 1997:4).

Therefore it is important to investigate the factors that influence output in the four (4) year nurse training programme to ensure that the number of professional nurses that qualify will be able to care for the population's health needs and ensure health care for all (DOH 1997:3). The special interest in this study, therefore, was the four (4) year nursing programme for training to register as a Nurse (general, psychiatry, and community) and midwife.

2.3 NURSING EDUCATION

There are two categories of nursing education, namely tertiary and professional education. Therefore nursing education falls under the *Higher Education Act, 101 of*

1997 as well as the *Nursing Act, Act 56 of 1978*. The *Higher Education Act, Act 101 of 1997, as amended*, is responsible for tertiary education and provides for the establishment of the Council of Higher Education (CHE). The CHE's responsibilities include advising the Minister of Education on all matters of higher education for the system to be characterised by equity and quality. Furthermore, provision is also made for the establishment of a Higher Education Quality Committee (HEQC) which is the CHE's permanent committee responsible for promoting quality assurance in higher education and accrediting programmes of higher education (Vasuthevan & Viljoen 2003:17).

The *South African Nursing Act (Act 50 of 1978, as amended)* governs nursing education. The South African Nursing Council (SANC) was established under this Act with the responsibility of assisting in the promotion of health standards of the country and controlling matters affecting the education, training and practice of nurses, midwives, enrolled nurses and enrolled auxiliary nurses conducting examinations, and approving nursing programmes and schools.

These two Acts have similar responsibilities therefore the HEQC has statutory responsibility in higher education and the SANC has a statutory responsibility in nursing education. The HEQC's responsibility must be facilitated through entering into a memorandum of understanding (MOU) with professional councils, which in terms of nursing will be the SANC and Education and Training Quality Assurances (ETQAs) in the system (Vasuthevan & Viljoen 2003:19).

2.3.1 The South African Qualification Authority Act (Act 95 of 1995)

The National Qualification Framework (NQF) and the SAQA were established after South Africa's first democratic election in 1994 and brought about major changes in the country's education and training system. SAQA set the standard of educational outcomes in this country and developed descriptors for the eight (8) main levels in the NQF. The NQF had to reconstruct the education and training systems into one reflecting an integrated approach that addresses learners' needs effectively. The emphasis was also shifted to lifelong learning (Van den Host & McDonald 1998:74).

SAQA makes provision for the establishment of Education and Training Quality Assurances (ETQAs) in each sector for the purpose of monitoring and auditing achievements by SAQA in terms of the NQF and standards. ETQAs are accredited by SAQA to ensure that education and training is of the highest quality. ETQAs, in turn, accredit providers to offer education and training in accordance with the standards and specific qualifications registered on the NQF, monitor quality among providers, evaluate assessment and facilitate moderation among providers (Vasuthevan & Viljoen 2003:13).

2.3.2 The *Higher Education Act (Act 101 of 1997)*

In terms of Section 37(4) of the *Higher Education Act (Act 101 of 1997)*, the Councils of Universities with the approval of the Senates of the Universities shall determine the entrance requirements in respect of particular higher education programmes, the number of students to be admitted, how they are selected, and the requirements for readmission (South Africa 1997:28).

2.3.3 The *Nursing Act (Act 50 of 1978)*

Chapter 2, Section 15(1) and (2) of the *Nursing Act (Act 50 of 1978)* stipulates that no person or institution may offer or provide any education and training intended to qualify any person to practise the profession of nursing or midwifery unless that institution has been approved by the SANC. The institution wishing to provide this education and training shall also apply in writing (South Africa 1978:17).

With regard to nursing education, the SANC as a statutory body has to establish, improve and control standards and quality of nursing education and training within the ambit of the Act and any other applicable laws. The functions of the SANC are to conduct inspections and investigations of nursing education institutions, nursing education programmes and health establishments, in order to ensure compliance with the Act and the rules and standards determined by the Council in terms of the Act (South Africa 2005:5).

The changing environment meant that society's needs and expectations as well as nursing education and training also changed, therefore, SANC regulations had to

respond to these changes. The education and training of nurses at a basic level thus have to be comprehensive.

Regulation R425 of 1985 governs the course leading to registration as a nurse (general, psychiatric and community) and midwife. This is a comprehensive course with four disciplines for a minimum of four (4) years by a nursing college in affiliation with the University (Regulation R425, 1985, Paragraph 5). The college providing this programme must be accredited by the SANC. This regulation makes provision for a nursing education institution to develop its training programme based on the society it serves. The SANC does not stipulate how and when to teach disciplines, but the specific directive is used as a guide on what to cover, for how many years and the number of theoretical and clinical hours for completion. The programme must be submitted to and approved by the SANC before its implementation, in terms of section 15(3) (Regulation R425, 1985, Paragraph 3[b]). The nursing education institution will be approved to offer the programme and the head of the institution where the education and training is offered, is a registered nurse who holds at least a Baccalaureus degree and against whose name an additional qualification in Nursing Education and additional qualification in Nursing Administration are registered (SANC 1985:2).

For admission to a programme in nurse training, a person must hold at least a senior certificate or an equivalent certificate, which qualifies a candidate to undertake formal post-secondary education Regulation R425, 1985, (SANC 1985:2). ETQA fits in higher education as its responsibilities amongst others is to monitor quality assurance among providers, accredit them for specific qualifications registered in NQF, evaluate assessment and facilitate moderation. SANC is now an ETQA body. The overall objective of ETQA is to monitor nursing education and training standards; therefore the SANC has to monitor the nursing education institution providing nursing education. According to the SANC as a statutory body and an ETQA, there must be exit levels if the learners do not cover the minimum requirement as part registration (SANC Circular 12/2003), regarding admission criteria. This circular points out that not only senior certificate is considered, also learners who had undergone the one-year course leading to enrolment as an enrolled nursing auxiliary (regulated by R2176 of 19 November 1993) and the two-year course leading to enrolment as an Enrolled Nurse (regulated by R2175 of 19 November 1993). This category of nurses can access the programme. Recognition of prior learning (RPL) is also considered. Selection criteria of nursing

education institutions, educational programme, policies differ from institution to institution as well as RPL and the SANC does not also prescribe RPL for institution as long as they are on a par with that of the SANC and SAQA.

Nursing education is directed specifically for the provision of competent nurses and midwives. In a televised interview, Nelson Mandela, the former president of South Africa, emphasised that South Africa needed to overcome challenges by combating poverty, ensuring education and enjoying good health (SABC 2, 2006). The purpose of nursing education is specifically the development of the nursing student as an adult on both personal and professional level and should lead to cognitive, affective and psychomotor development and the achievement of prescribed programme objectives. Furthermore the nurse should be able to analyse critically, evaluate and think creatively (SANC 1985:4).

Chapter 2 of the Act makes provision for nursing education, training, research, registration and practice, and stipulates the prerequisites for practice. In South Africa the nursing education institution must first be accredited by the SANC to provide nursing education and training. A student must also be registered first as a student nurse before undergoing education and training in nursing. A health establishment must also not allow access to clinical facilities for training purposes to anyone who is not registered as a student (South Africa 2005:18).

The SANC must issue an accreditation certificate for a nursing education institution and for each nursing programme offered by the institution (South Africa 2005:20). The *South African Qualification Authority Act* also has implications for nursing education as the SANC was accredited by SAQA as an ETQA body to December 2000 and that was extended to March 2006 (SAQA 1995:4).

Regarding nursing education, the SANC sets standards for and controls (monitors) the education and practice of nurses, midwives and enrolled nurses. One body cannot do this, therefore section 5 of the Act empowers the SAQA to formulate and publish policies and criteria for the registration of Standard Generating Bodies (SGB's) responsible for establishing education and training standards or qualifications. ETQA bodies are accreditation bodies responsible for monitoring and auditing achievements for such standards or qualifications.

Nursing education must be quality assured therefore providers of nursing education and training must meet the prescriptions of the Nursing Act and the SAQA Act and their regulations. The NQF must also guide programme development and guidelines should be outcomes based and community based. As an ETQA body in terms of Section 5(1) (a) (11) of the SAQA Act, the SANC has to accredit providers for nursing programmes, monitor these providers for nursing programmes, certificate learners, and maintain a database of students hence the investigator was able to get statistics of nurses who followed the four (4) year nurse basic programme (SANC 2003:1).

In this study, output refers to the number of students that successfully complete the programme and exit as registered nurses qualified with four disciplines, namely general, psychiatric, community and midwifery (see chapter 1, section 1.12). In accordance to SANC circular 6 of 2007, second paragraph of 1.2 SANC approved issuing of certificates of professional registration for learners who had not successfully completed the course and had not acquired an academic qualification from their respective training institutions. Nurses who follow this programme based on this clause can exit at any level if they cannot cope, depending on the credits they have acquired and the programme of the specific nursing education institution where they trained (SANC 2007:2).

2.4 FACTORS INFLUENCING LOW OUTPUT OF TRAINED PROFESSIONAL NURSES

Physical, environmental, psychological, social and other factors influence the output of professional nurses. Mokoena (1999:20) found that family commitments especially amongst graduate nurses, high dropout rates, qualified nurses seeking better employment opportunities abroad and an increased number of qualified nurses taking up positions in the United Kingdom (UK) worsen output.

2.4.1 Other factors

Students who had followed the four (4) year nurse training programme when they complete they qualify as professional nurses. Family commitments among graduate nurses makes them to stop working as nurses possibly to stay at home or follow their husbands who get transferred/get other jobs that pay better or so that they don't have to work nights. Qualified nurses going elsewhere (e.g. UK) loses them to the practice, so these two factors worsen the nursing shortage.

Other factors that impact on low output include exit level, part-registration, student transfers, and readmission.

- **Exit level.** A student can exit as an Auxiliary Nurse when she/he has obtained 100 practical hours and 24 theoretical hours in the first year, or as an Enrolled Nurse, previously known as a staff nurse, after acquiring 200 practical hours and 48 theoretical hours (SANC 2007:3). According to SAQA (1995), the nursing programme has to provide exit levels in case students do not complete the programme They are, in turn, credited for the subjects passed and this was approved by SANC as an ETQA in July 2001. In accordance to SANC circular 6 of 2007 the last paragraph of 1.2 the purpose of SANC issuing certificates to nurses who did not complete the course was to assist learners who had undergone the whole programme and exhausted legislated duration of the course but had not passed all the subjects/course of the programme to qualify for registration as a nurse (general, psychiatric and community) and midwife (SANC 2007:2)
- **Part registration.** A student may exit as a registered nurse with either of the disciplines, depending on the programme of the nursing education institution, but adhering to SANC prescriptions regarding different disciplines. The institution's then will send the academic record of the student for analysis by the SANC in consultation with the regulation and directive as well as the specific institution programme. This process follows the procedure of being presented to the education committee of the Council for approval then to the full Council for ratification, it is called part registration because it is a violation of the regulation and hence is called part registration (SANC 2007:4).

- **Student transfers.** According to the Nursing Act (Act 50 of 1978, as amended), students can be transferred from one institution to another or from province to province and be credited for what they have acquired (South Africa 1978).
- **Re-admission.** According to the Nursing Act (Act 50 of 1978, as amended), students training can be terminated due to various reasons and may join another group if they want to (South Africa 1978). That could account for a low output/high dropout rate.

2.4.2 Environmental factors

In Great Britain research on student nurses found that one in five nursing students fails to complete the course. It was discovered that students were not aware of what nursing at both ward and community level is all about therefore it was recommended that the training programme be more work related as that would better prepare them for life on the wards. Lack of faculty support was also indicated as a factor in nurses either voluntarily or involuntarily withdrawing from the programme (No staying power 2000:1).

Although the high dropout rate of nursing students is of serious concern there is little research available regarding the reason why students leave. It is therefore crucial to conduct this study.

Some universities also collected some information from exit interviews but were not made available due to ethical sensitivity. Reasons among others were communication and operational factors between the university and clinical areas, feeling of not being valued, unmet expectations and stress (Why do nurses leave 2005:1).

Shelton (2003:1) maintains that retaining student nurses requires providing the caring atmosphere of mentoring relationships and assisting students directly to facilitate student learning.

This then serves to indicate why we consider it important to conduct this study. But we don't show that the little available actually differs from the problem under study in this study.

Nursing students report that some nursing faculty members struggle to enact the caring philosophy they espouse (Enacting connectedness in nursing education 2005:1)

2.5 STRATEGIES TO MINIMISE DECREASED OUTPUT

The shortage of nurses results in heavy workloads, stress and burnout. The researcher seeks to examine and evaluate the four (4) year nurse training programme which is intended to equip nurses to work anywhere in the health care sector especially in PHC settings, which form the core of the South African health care system. The DOH (1999:16) emphasises that the challenge is to staff PHC clinics to provide a comprehensive health service. Consequently, the researcher sought to determine the reasons for the decreasing number of students who complete the four (4) year course, with particular reference to the Free State Province.

The objectives of the study were to

- identify the factors that influence the decreased output of student nurses following the four (4) year programme.
- identify strategies to minimise the decreased output.

In order to achieve the objectives, the study wished to answer the following questions:

- What factors influence the low output of trained professional nurses?
- What strategies can be utilised to minimise the decreased output of student nurses following the four (4) year nurse training programme?

Strategies to minimise the decreased output of trained professional nurses include preventive and curative strategies; rules and regulations; programme implementation and adjustment; community-based education (CBE); problem-based education (PBE); teaching and learning strategies, assessment strategies, and others.

2.5.1 Preventive strategies

To increase the output, preventive strategies pertaining to recruitment, admission, selection and orientation or socialisation of students into the institution, programme, and the profession as a whole are to be used before commencement of the programme.

Nursing education institutions use different recruitment strategies and policies to recruit students. SANC as the body that regulates nursing education and training does not stipulate how students can be recruited (SANC 1985:2).

➤ **Admission**

A person who wishes to be admitted to the four (4) year training programme must hold at least a senior certificate or an equivalent, which gives admission to formal post-secondary education Regulation R425, (SANC 1985:2).

Recognition of Prior Learning (RPL) means the comparison of individuals' previous learning and experience, however, obtained against the learning outcomes required for a specific qualification, and the acceptance for Recognition of Prior Learning provides students entry to access the programme even if they do not have a senior certificate as prescribed by the regulation. These are then enrolled auxiliary nurses and enrolled nurses (SAQA 2002:3).

➤ **Selection**

Selection depends on the particular nursing education institution's policy on the selection of students.

➤ **Orientation**

Orientation depends on the nursing education institution policy regarding how the orientation programme is drawn, what it entails and the duration of the orientation programme.

2.5.2 Curative strategies

When the students have already been selected, accepted and orientated into the programme, curative strategies must be in place to underpin any problems that may occur. These strategies include programme implementation and adjustment, teaching and learning strategies, assessment strategies, rules and regulations as well as other policies used in the education and training of student nurses.

➤ **Programme implementation and adjustment**

The nursing education institution chooses the preferred type of approach to implement the programme. According to SAQA programme must be outcomes based. The programme is developed from outcomes the school wants students to demonstrate, rather than writing objectives for the programme already in place. The programme is constructed to give all students an equal opportunity to achieve each outcome. Active modelling, expecting success, intensive engagement, diagnostic assessment, and frequent feedback to students about their performance are emphasised (Van der Horst & McDonald 1998:146).

The way the programme is implemented and adjusted also depends on the nursing education institutions. Institutions can choose community-based education (CBE), problem-based education (PBE), or outcomes-based education (OBE).

Community-based education (CBE) is used to facilitate the process of transforming the South African National Health System (NHS) to a PHC approach. Training is most effective if it is carried out in close relation to the actual community in which nurses will later work. It ensures that nurses are responsive to the health needs of the people and improving the health care system. Learning activities use the community extensively as a learning environment (Heliker 1994:45).

Problem-based education (PBE) enables students to apply knowledge gained from the content presented in class to real situations using critical thinking and creativity. They are exposed to a particular situation in which the task is given as a source of learning to fast track the process and efficiency of clinical reasoning (Heliker 1994:45). PBE uses case studies, which involve an in-depth analysis and systematic description of one patient or a group of similar patients to promote understanding of nursing interventions; nursing care plans; nursing rounds; assignments, and projects.

➤ **Teaching strategies**

Different methods can be used for teaching. Traditionally, the main method was the lecture, which was involved in the presentation of content to students, usually accompanied by some type of visual aid or handouts (Billings & Halstead 1998:257).

This method did not stimulate critical thinking in student nurses and could be solved by utilisation of problem-based case study in the classroom and clinical setting. It was further recommended that further future research population should include more colleges as that study was done only at Northern Province College of Nursing, Sovenga Campus hence the present study involves the FSSON, Southern Campus.

The teaching/learning strategies used depend on the approach of the programme.

Teaching/Learning strategies

Learning strategies that can be used to improve concentration which include time management and pre-reading.

➤ **Time management**

Time management involves learning to control time; establishing goals to keep up with nursing studies; setting and prioritising goals (e.g., which goals need to be achieved during the course of the semester); balancing them realistically, and lastly using a calendar to use time more effectively (Meltzer & Palau 1997:3).

➤ **Pre-reading**

Pre-reading encourages students to read the chapter title first and internalise it, then the introduction and summary. All headings are also to be read looking at key words and examine all graphic aids (Meltzer & Palau 1997:13).

Assessment strategies

Assessment includes strategies for measuring knowledge, behaviour or performance. Assessment is a data-gathering strategy that helps to evaluate. In OBE, for example, the learning outcomes to be achieved are clearly defined. Through assessment, both teachers and learners are able to determine whether these outcomes have been achieved (Van der Horst & McDonald 1998:170).

➤ **Diagnostic assessment**

Diagnostic assessment is used prior to teaching or at the beginning of a lesson to provide the teacher with planning information. It can be informal and helps the teacher to know the learners' entry levels regarding the topic to be presented (Van der Horst & McDonald 1998:171).

➤ **Formative assessment**

Formative assessment is conducted during instruction either formally through tests or informally through questioning or observations. This helps the teacher to adapt teaching strategies and methods during lesson time in order to effect greater understanding and learning (Van der Horst & McDonald 1998:171).

➤ **Summative assessment**

Summative assessment is conducted at the end of the lesson and is a final measure of what has been learned. This can measure learner outcomes. When it is well developed and matched to individual learners, it tells teachers about their teaching as well as about their learners' learning (Van der Horst & McDonald 1998:172).

Rules and regulations

Regulation 425 (1985:1) and its guidelines stipulates the conditions for registration; approval of the school; admission to a course of study; programme objectives, and subjects as well as the duration of the subjects. These guidelines are not prescriptive as long as students have completed all the prescribed theory and practical hours at the end of the programme Regulation R425 (SANC 1985:1).

Other strategies

Other strategies include policies and circulars used in the education and training of student nurses.

2.6 CORRELATING THEORY AND PRACTICE

It is important to correlate theory with practice as nursing is a science and a art. This is done by means of clinical practica and clinical accompaniment.

2.6.1 Clinical practica

Clinical practica is a function of nursing and envisioned as more than the opportunity to put theory learned in the classroom into practice. These practical sessions involve clinical learning opportunities in the health care setting under supervision of a registered nurse or mentor or accompaniment by other knowledgeable or skilled personnel to allow for correlation of theory and practice (Reilly & Oermann 1992:5). Clinical nursing is acknowledged as the heart of all nursing education programmes, but there is no consensus on the balance between theory and practice (Lee [1996] cited by Pilane 2000:23).

The decision to select or continue to use the setting for clinical learning should be based on an evaluation of that setting and the extent to which it facilitates the achievement of clinical objectives (Reilly & Oermann 1992:132).

Ntlokotsi (1999:13) refers to Wilson's (1994:83) finding that students were able to understand some concepts explained in the classroom and content from textbooks only after observing or practising their clinical application. Smith (1992:18) (cited by Ntlokotsi 1999:13) emphasises that it is the theory-driven nature of practice that gives intended meanings to procedural steps.

Adopting discovery-oriented approaches and experiential learning can bridge the gap between practice and theory. Experiential learning means that students gain insight through their own experience and begins with experience followed by reflection, discussion, analysis and evaluation leading to understanding, which is meaningful to the individual (Severinsan 1998:17).

2.6.2 Clinical accompaniment

In nursing education, clinical accompaniment refers to directed assistance and support extended to a student by a registered nurse or registered midwife with the aim of developing a competent nurse. It is indispensable in all teaching situations (SANC 1992:8).

Van Rooyen (2003:13) points out that it is important that tutors/mentors, personnel in the clinical environment and any other person involved in education of first-year students to accompany students effectively. The researcher is of the opinion that accompaniment should continue for the whole four (4) year nurse training programme period.

2.7 CONCLUSION

This chapter discussed the literature review on nursing education in South Africa and factors that influence the output of trained professional nurses.

Chapter 3 describes the research design and methodology.

CHAPTER 3

Research design and methodology

3.1 INTRODUCTION

This chapter describes the research design and methodology of the study, including the population, sampling and sample, data collection and analysis, data-collection instrument, and ethical considerations. According to De Vos (2003:27), quantitative researchers consult possible designs and select or develop one from the models available. In this study, the researcher selected a descriptive design to gain insight into the factors influencing the output of student nurses who followed the four (4) year nurse training programme.

3.2 RESEARCH OBJECTIVES

The purpose of the study was to describe the factors that influence output in the basic four (4) year nurse training programme. The objectives of the study were to

- identify the factors that influence the decreased output of student nurses following the four (4) year nurse training programme
- identify strategies to minimise the decreased output

In order to achieve the objectives, the study seeks to answer the following questions:

- What factors influence the low output of trained professional nurses?
- What strategies can be utilised to minimise the decreased output of student nurses following the four (4) year training programme?

3.3 RESEARCH DESIGN AND METHODOLOGY

The researcher adopted a quantitative approach, using an exploratory and descriptive design to examine factors impacting on the low output of professional nurses from the

four (4) year nurse training programme and strategies to alleviate or lessen this output. De Vos (2003:138) describes a research design as “an overall plan for conducting research”.

3.3.1 Quantitative research

Quantitative research is a vigorous, systematic process for generating information about the world and further plans to gain more information about a phenomenon under study (Burns & Grove 2003:56). Quantitative research is highly structured hence this study adopted a structured approach, using a questionnaire to collect data (Oosthuizen 2005:89).

A quantitative approach is a formal, objective, systematic process in which numerical data are used to obtain information about the world. It emerged from a branch of philosophy called logical positivism, which operates on strict rules of logic, truth, laws and predictions. Quantitative research holds the position that "truth" is the absolute and that a single reality can be defined by careful measurement. Researchers must be objective to find the truth by not entering their values, feelings, and personal perceptions into the measurement of reality (Burns & Grove 2003:19). The researcher therefore considered this approach appropriate, as the questionnaire (the data-collection instrument) was formal, objective and systematic.

Advantages of quantitative research

- More efficient and economical.
- Fewer people needed to administer questionnaires.
- More impersonal, offer anonymity which may result in more honest answers.
- People who are difficult to contact personally or by phone can answer questionnaire.
- Lower costs and saving in labour more respondents can be surveyed than with personal interview (Van Lill & Visser 1998:12).

The reasons for choosing quantitative research are:

- Mkhwanazi (2007:5) cites Burns and Grove (2005:23) that quantitative research is a formal, objective and systematic process in which numerical data is used to obtain information about the world. The purpose of the study is to describe the factors that influence output in the four (4) year nurse training programme as well as to identify strategies to minimise the decreased output. To obtain this quantitative research based on the purpose and objectives of the study is found to be the best approach.
- The instrument used to collect data is a self completion questionnaire which is structured, formal, objective and systematic, which is one of the characteristics of quantitative research.
- Numerical data will be used to obtain information about factors influencing the output of four (4) year nurse training programme.

Quantitative research requires that data collected be expressed in numbers; that is, quantified (Struwig & Stead 2001:7). Numerical data was used to obtain information about factors influencing the output of the four (4) year training programme.

3.3.2 Descriptive

Descriptive research plans to gain information about a phenomenon in a particular field of study. A descriptive design focuses on specific details of a situation and asks “why” and “how” questions. Descriptive research begins with a well-defined subject and is conducted to describe it accurately (De Vos 2002:110). Furthermore, this type of research provides an accurate portrayal or account of characteristics of a particular individual, event, or group in real-life situations (Burns & Grove 2003:480). The variables are observed in their natural environment and do not include treatment imposed by the investigator, the purpose being to provide a picture of a situation as it naturally occurs. No manipulation of variables is involved when using this design. Protection against bias is achieved through selection of sample and size.

3.4 POPULATION AND SAMPLE

De Vos (2005:193) describes a population as “the individuals in the universe that possess specific characteristics”, therefore the population for this study consisted of all the students registered for the four (4) year nurse training programme leading to registration as a nurse (general, psychiatric and community) and midwife in the FSSON in 2006.

Inclusion criteria for this study was the following:

- registered for the four (4) year nurse training programme with the same learning programme (curriculum), subjects, content, and four disciplines, and exposed to the same nurse tutors, learning experience and learning opportunities.

Sampling is “the process of selecting a portion of the population to represent the entire population” (Polit & Hungler 1995:278). Due to time and financial constraints, probability stratified sampling was used in this study (Burns & Grove 2003:244). Accordingly, the researcher selected a sample of students registered in the four-year programme leading to registration as a Nurse (General, Psychiatric and Community) and Midwife in the FSSON, Southern Campus (Burns & Grove 2003:90).

Before sampling, the researcher obtained the first- to fourth-year registers and arranged the students from the four levels into homogeneous strata. The researcher then used probability or random sampling to select 20% of the respondents from first and second year of each stratum, 30% from third year and 100% from fourth years thereby obtaining a sample of seventy four. The respondents were selected at Orange Psychiatrist Complex and Pelonomi Hospitals. Probability random sampling was used because it increased the probability of being represented and assured an adequate number from each stratum (Johnson & Christensen 2004:207 & Nieswiadomy 2002:175).

The total number of students registered for 2007 was 265. Of these, 100 were first-years, 87 were second-years, 57 were third-years and 21 were fourth-years. The researcher selected a sample of 74 as follows:

- 20% of 100 first-years, taking every fifth student from the register to participate in the study, giving 18
- 20% of 87 second-years, following the same procedure, thereby giving 18
- 30% of 57 third-years, using convenience sampling, giving 17
- 100% of fourth-years, because they were only 21 students

Convenience sampling was used for the third-years because these students were allocated in different clinical facilities in the Free State outside Bloemfontein and it was difficult to find them in one area. Fifteen were allocated at the Psychiatric Complex and two were at Pelonomi Hospital. An appointment was then scheduled with the tutor accompanying them to assemble them in one area for administration of the questionnaire at both venues.

All the fourth-years (100%) were chosen to participate because they were only 21. Of these, however, one was absent on data-collection day, thus only 20 completed questionnaires were returned.

3.5 DATA COLLECTION

A structured data-collection approach was adopted, using an interview schedule or questionnaire (see annexure 4 and 5). The structured approach was chosen because it “yields data that is easy to analyse and does not require much effort from the respondents” (Polit & Hungler 1997:202). A questionnaire is “a formal, written document in which respondents complete the instrument themselves in a paper-and-pencil format” (Polit & Hungler 1997:202). The researcher collected data from the respondents by means of self-administered structured questionnaires. Each respondent was asked the same questions in a predetermined order. The researcher assured the respondents that their responses would be treated strictly confidentially and obtained informed consent from them before distributing the questionnaires. Self-administered questionnaires were relevant for this study because they ensure a higher response rate (Mouton 2003:258). Moreover, questionnaires save time for both researcher and respondents. A covering letter was attached to the questionnaire. The letter introduced the researcher and explained the nature and purpose of the study. The researcher was available to answer and clarify any queries. The questionnaire used, was taken from Manzini (1998:32).

As a data-collection instrument, a questionnaire has the following advantages (Van Lill & Visser 1998:12, 14):

- All kinds of abstract information can be gathered.
- Measurement is enhanced because all respondents answer the same questions.
- Closed questions are easy to code and analyse.
- It is easier and faster to answer closed questions, as respondents do not have to formulate their own answers.
- Open-ended items provide a rich variety of alternative responses.
- It is less costly and requires less time to complete.
- Respondents' anonymity is ensured by not mentioning their names. Anonymity allows respondents to provide honest answers knowing that they cannot be identified.

3.6 PRE-TEST

A pre-test is carried out to determine in so far as possible whether the instrument is clearly worded, free from major biases, and appropriate for the type of information envisioned. Pre-testing helps to validate the accuracy, correctness and appropriateness of the research instrument for purposes of obtaining meaningful and quality information (Brink 1990:157; De Vos, Strydom, Fouche & Delpont 2002:177).

The researcher conducted a pre-test with a group of students registered for the four-year programme but not included in the main study.

3.7 DATA ANALYSIS

Data analysis is the process of bringing order, structure and meaning to collected data (Marshall & Rossman 1995:111). Data analysis usually begins when data collection begins. Data analysis is conducted to reduce, organise and give meaning to the data. In quantitative research, analysis techniques include descriptive and inferential analysis. The analysis techniques implemented are determined primarily by the research objectives, questions or hypothesis (Burns & Grove 1999:43). Descriptive statistics are used to describe and summarise data. Descriptive statistics convert and condense a collection of data into an organised, visual representation of data (a picture) in a variety

of ways so that the data have some meaning for the reader. A descriptive approach employs measures of central tendency and dispersion or variability and measures of relationship (Brink 1990:179).

In this study, all the completed questionnaires were returned thus giving a response rate of 98% exclusive of one fourth year student who was absent on the day of questionnaire administration. The purpose of data analysis is to break down the data to make it possible to interpret the information. Data analysis entails categorising, ordering and describing data in meaningful terms (Brink 1996:178). A statistician analysed the data using the Statistical Package for Social Sciences (SPSS) version 15 program for frequency distribution and calculation of percentages and bar charts (Polit & Hungler 1997:48).

3.8 VALIDITY AND RELIABILITY

The quality of research and research instruments is determined by their validity and reliability. In this study, the researcher adhered to the principles of reliability and validity.

3.8.1 Validity and reliability of the study

Burns and Grove (1998:28) describe study validity as “a measure of the truth or accuracy of the claim and an important concern throughout the research process”. Validity provides the chief basis for making decisions about which findings are useful.

The researcher ensured the validity and reliability of the study by means of the following (Polit & Hungler 1995:31, 246):

- Undertaking an literature review.
- Giving operational definitions of concepts, which are specifications of the operations that the researcher must perform to collect the required information.
- Ensuring congruency between the research questions, objectives, investigations, findings and recommendations.

3.8.2 Reliability of the research instrument

Reliability is “the extent to which measures are consistent or repeatable over time” (Brink 1990:157). Reliability is “the degree of consistency or dependability with which the instrument measures the attribute it is designed to measure. If the instrument is reliable, the results will be the same each time the test is repeated” (Polit & Hungler 1997:308).

Asking more than one person the same questions and obtaining the same answers will ensure reliability. An interview guide was used to obtain information from all the respondents to make sure that the same questions were asked. Reliability is the accuracy or precision of an instrument as a degree of consistency or agreement between two independent derived sets of scores (De Vos 1998:168; Polit & Hungler 1998:433).

To ensure reliability, the researcher developed the questionnaire in consultation with the supervisor. Questions regarded as not clear by the supervisor were then corrected accordingly. The researcher pre-tested the questionnaire in a pilot study with student nurses who were not part of the main study.

3.8.3 Validity of the research instrument

Validity is the degree to which an instrument measures what it is supposed to measure (Van Lill & Visser 1998:14). Internal validity refers to the extent to which it is possible to establish that the independent variable truly influences the dependent variable and the relationship is not false. External validity is achieved when results can be generalised to situations outside the specific research setting (Polit & Hungler 1995:277).

The researcher ensured external validity by means of the literature review, and by adapting Manzini’s questionnaire (1998:32). There are different types of validity, namely construct, content and criterion validity. The types of validity depend on the purpose for which the measuring instrument is used (Van Lill & Visser 1998:15). In this study, the face and content validity of the questionnaire was tested by the researcher’s supervisor and the pre-test (Exner 2003:250; Manzini 1998:293).

3.9 ETHICAL CONSIDERATIONS

Ethics deals with matters of right and wrong. *Collins English Dictionary* (1991:533) defines ethics as “a social, religious, or civil code of behaviour considered correct, especially that of a particular group, profession, or individual”. Accordingly, the researcher obtained permission in writing to conduct the study from the Free State School of Nursing (Southern Campus), Orange Psychiatrist Complex and Pelonomi Hospital (see annexure C). Furthermore, the researcher respected the respondents’ right to self-determination, privacy, anonymity, confidentiality, fair treatment, and protection from harm and discomfort.

3.9.1 Privacy

Privacy is the freedom an individual has to determine the time, extent and general circumstances under which private information will be shared with or withheld from others (Burns & Grove 1999:158).

To protect the respondents’ privacy, the researcher obtained informed consent from them to participate voluntarily (see annexure E). They were assured that their information would not be misused to embarrass or humiliate them. Only data absolutely necessary for achieving the objectives of the study would be obtained. In addition, administration of questionnaire did not infringe on their privacy because it took place at a specific time and venue, and not during tea times or lunch times.

3.9.2 Right to self-determination

The right to self-determination is based on the ethical principle of respect for persons and indicates that people are capable of controlling their own destiny. They should be treated as autonomous agents, who have the freedom to conduct their lives as they choose without external controls (Burns & Grove 1999:158).

The respondents’ right to self-determination was ensured by explaining the purpose, significance and potential benefits of the study to them; obtaining their informed consent, and emphasising that participation was free and voluntary, and that they had the right to withdraw from the study at any time without penalty.

3.9.3 Confidentiality and anonymity

Using numbers and levels (i.e., year of study) instead of their names ensured the respondents' anonymity. Anonymity means that the researcher cannot trace the data to specific subjects (Brink 1990:51). Confidentiality entails that information provided by respondents will not be divulged or made available to any other person. This will be enhanced by keeping the information gathered confidential and will be done by not writing the names of the respondents in the questionnaires and also in the report. The researcher assured the respondents that only she and her team would have access to the results.

3.9.4 Freedom of choice and protection from harm

The right to protection from discomfort and harm from the study is based on the ethical principle of beneficence. The principle of beneficence states that one should do good and above all do no harm (Burns & Grove 1999:165). They will be given opportunity to volunteer and that they are free to choose not to participate or withdraw from the study when they feel like. There will be a clause that appears that participation is voluntarily.

Discomfort and harm can be physical, emotional, economic, social or legal. In this study there was no risk of exposing the respondents to discomfort or harm. The respondents were given the opportunity to volunteer and were free to choose not to participate or to withdraw from the study at any time should they so wish. Sensitive issues were not included in the questions, and finally, the respondents signed informed consent attached to the questionnaire (Mofokeng 2003:8).

3.10 CONCLUSION

This chapter discussed the research design and methodology, including the population; sample and sampling; data collection and analysis; validity and reliability, and ethical considerations.

Chapter 4 covers the data analysis and interpretation.

CHAPTER 4

Data analysis and interpretation

4.1 INTRODUCTION

This chapter discusses the data analysis and interpretation, and findings on factors influencing output in the four (4) year nurse training programme in the Free State Province. The aim of data interpretation is to learn more about the population from which the sample is drawn (De Vos et al 2003:218).

The goal of nursing education programmes in South Africa is to produce successful practitioners and diplomats who will fit into the South African and international health systems. Lekhuleni (2002:1) points out that successful diplomats must be competent, critical thinkers, and must possess knowledge and the ability to solve problems independently and exercise independent judgments.

Data was collected in September 2007 from 73 first- to fourth-year respondents from the Southern Campus of the Free State School of Nursing (FSSN), using a self-administered questionnaire, containing both closed and open-ended questions. Closed questions were used to elicit background information and for statistical information about education and training, the programme, education institution and clinical facilities. Open-ended questions were used to allow the respondents to give longer answers. The questionnaire consisted of five (5) sections, namely

- Section A Demographical information
- Section B Education and training
- Section C Training programme (curriculum)
- Section D Education and Training Institution
- Section E Clinical facilities

The questionnaire was sent to both the supervisor and the statistician for comment and then amended according to their comments.

The population consisted of first- and fourth-year students. All the respondents participated voluntarily, and were free to withdraw from the study at any time if they so wished. A random stratified sample of 74 students was chosen from the total population of 265 registered students in 2007 at the FSSN: Southern Campus. Of the sample, 73 were given questionnaires to respond to questions (see chapter 3).

A statistician analysed and interpreted the data, using the SPSS program version 15. The results were presented in descriptive and inferential statistics, such as frequency tables with percentages.

This chapter discusses the data analysis and interpretation with the assistance of frequency tables and bar charts (Manzini 1998:238). The bar charts are presented in a horizontal format. The N value indicates the number of respondents for each question.

4.2 DATA ANALYSIS

4.2.1 Section A: Respondents' demographical data

The demographical data covered the respondents' ethnic group, language, age, gender, marital status, breadwinner, family member supporting nursing career, choice and type of support, number of children, level of education, and medium of instruction in teaching.

Item1: Ethnic groups

Of the respondents, 82.2% (n=60) were Black, 1.4% (n=1), were Whites, 2.7% (n=2) were Indians and 13.7% (n=10) were Coloureds (see figure 4.1). The respondents' ethnic groups were asked because communication differs between the different groups and for statistical purposes to indicate which ethnic groups were present. The results reflected that most of the respondents were Blacks, followed by Coloureds.

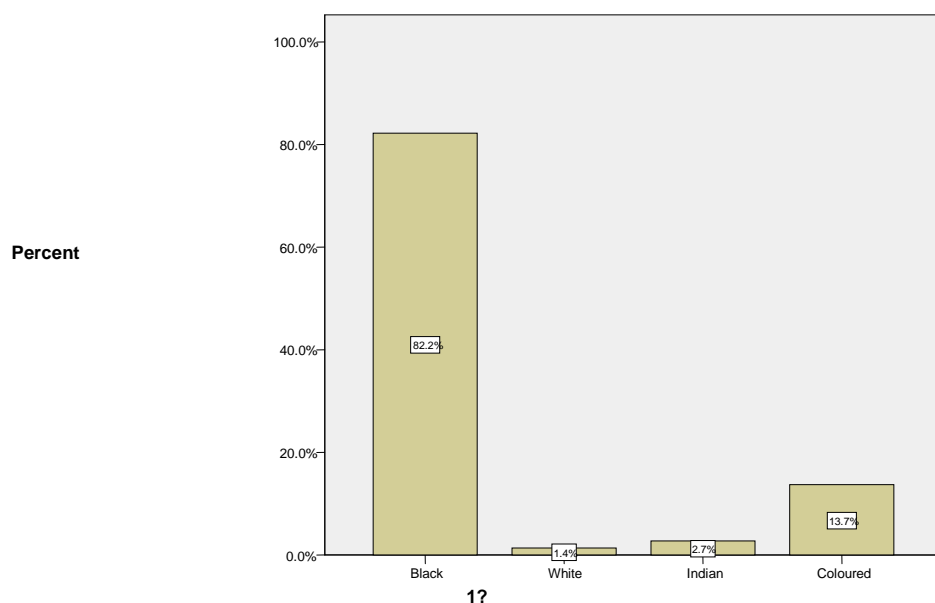


Figure 4.1 Ethnic groups (N=73)

From figure 4.1 it is clear that of the respondents, the majority were Blacks and Coloureds compared to Whites and Indians.

Item 2: Home language

Of the respondents, 52.1% (n=38) were Sesotho speaking; 17.8% (n=13) were Setswana speaking, 15.1% (n=11) were Afrikaans speaking, 1.4% (n=1) Tsonga speaking and 9.6% (n=10) Xhosa speakers (see figure 4.2) and 4.1% (n=3) were English speaking. (see figure 4.2). In accordance to this study the number of those speaking Sesotho is higher than the others followed by Afrikaans speaking.

Students may experience difficulty in understanding the language of instruction if they did not do it at school level. Mokoena (1999:20) found that language is one of the factors that influence the output of the four (4) year nurse training programme.

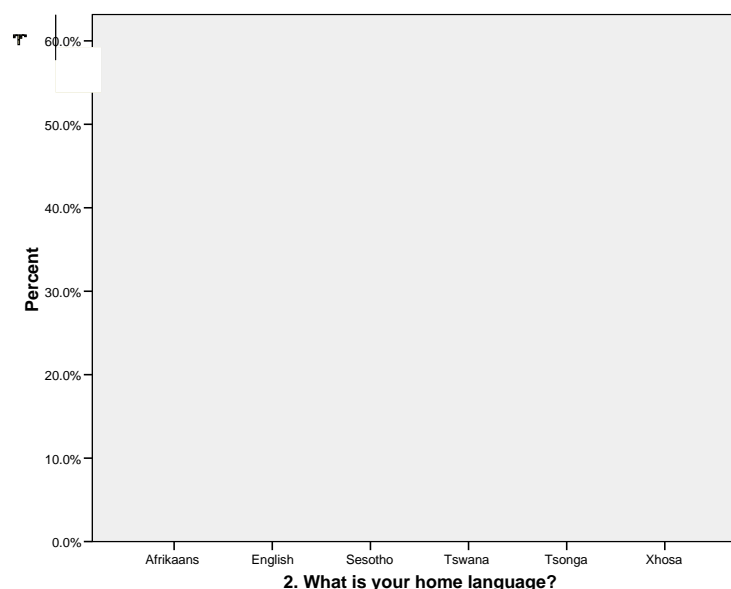


Figure 4.2 Respondents' home language (N=73)

In a study on the experiences of students from informal settlements in Lenasia in 1994, many Indian educators expressed difficulty with regard to language, teaching and learning (Pillay 2004:7). The students, in turn, indicated that they experienced difficulty in understanding what was being taught, because English was not their first language.

Mkhwanazi (2007:73) indicated that student nurses might perform poorly in the classroom because of the language of instruction, which appears to be a major problem especially in their first year. Student nurses have to adapt and internalise the subculture of nursing. Therefore, students need to be taught in English from primary school to avoid difficulty when entering tertiary institutions where the programmes are presented in English. Some institutions, like the University of the Free State and the University of Pretoria, present their programmes in English and Afrikaans and the students are afforded the opportunity to choose the language of preference for tuition.

Item 3: Age

The respondents ranged from under 19 to over 40 years old (see figure 4.3). Of the respondents, 2.7% (n=2) were under 19; 21.9% (n=16) were between 20 and 24; 37.0% (n=27) were between 25 and 29; 9.6% (n=7) were between 30 and 34; 11.0% (n=8) were between 35 and 40 years, and 17.0% (n=13) were older than 40.

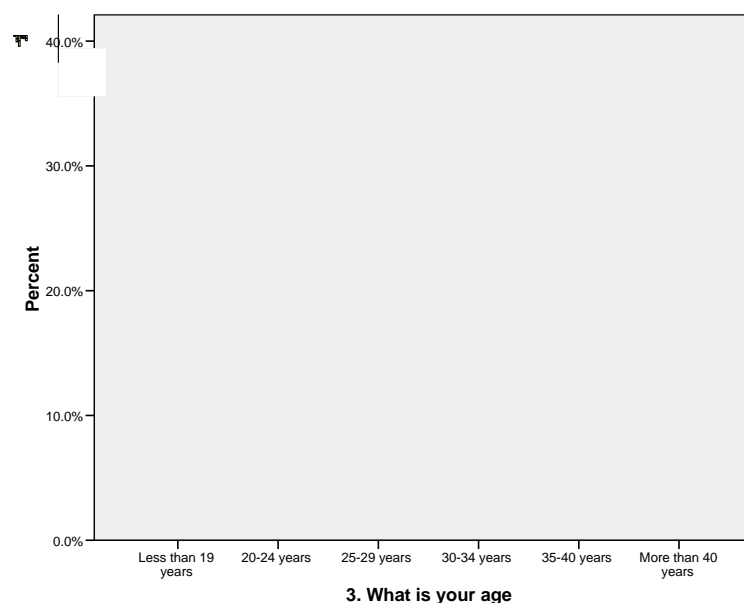


Figure 4.3 Respondents' ages (N=73)

Regarding the role of the nurse educator in supporting student nurses, Mkhwanazi (2007:72) found that 41% (n=29) of the respondents were between 21 and 25 years of age, which is between late adolescence and early adulthood. This is a critical stage of development, which can impact in their learning. Furthermore, adolescents are always faced with adjustments hence support and guidance is needed from the teaching staff. Mkhwanazi (2007:73) refers to Hamachek's (1995:120) finding that depression and emotional instability are the most common emotional experiences of adolescents.

Of the respondents, 37% (n=27) were 25 to 29 years old, 11.0% (n=8) were which indicated that most of them were mature enough in terms of age, although this is for the whole four (4) year nurse training programme. This is further supported by (Nethandama-Funyufunyu 1997:52) whose study revealed that the largest number of nursing students ranged between the age group of 21 to 25 years, 59.0% (n=36) followed by those ranging between 26 to 30 with 27.9% (n=17). She explained that this could imply that the average nursing students reached the third and fourth year level of training as a young adult. Therefore a predictive and correlation between the students' age and the level of academic performance, as the highest percentage were between 25 and 29 years old.

Item 4: Gender

Of the respondents, 74.0% (n=54) were females and 26.0% (n=19) were males (see figure 4.4). This gender distribution confirms the general profile in nursing, as more females than males enter the nursing profession.

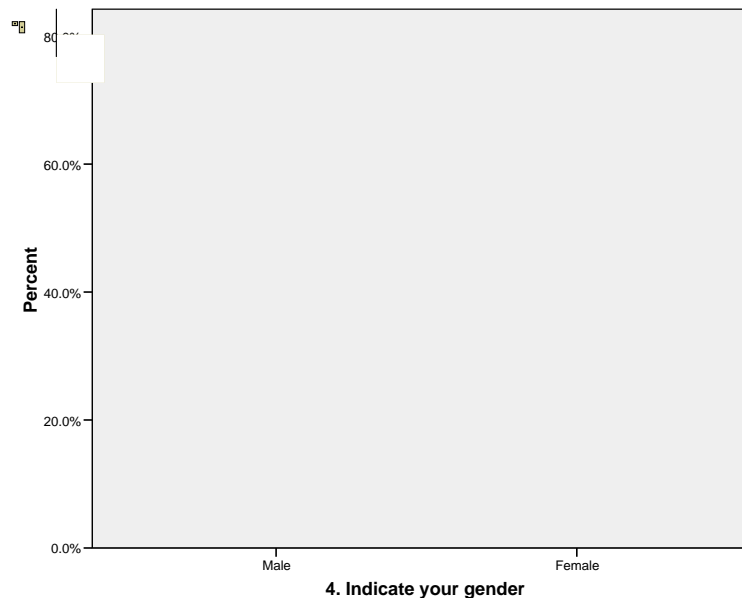


Figure 4.4 Respondents' gender (N=73)

Mokoena (1999:25) and Ngidi (2007:721) emphasise that nursing is generally a female-dominated profession.

Item 5: Marital status

Of the respondents, 60.3% (n=44) were single; 24.7% (n=18) were married; 6.8% (n=5) had a partner; 5.5% (n=4) were divorced, and 2.7% (n=2) were separated (see figure 4.5).

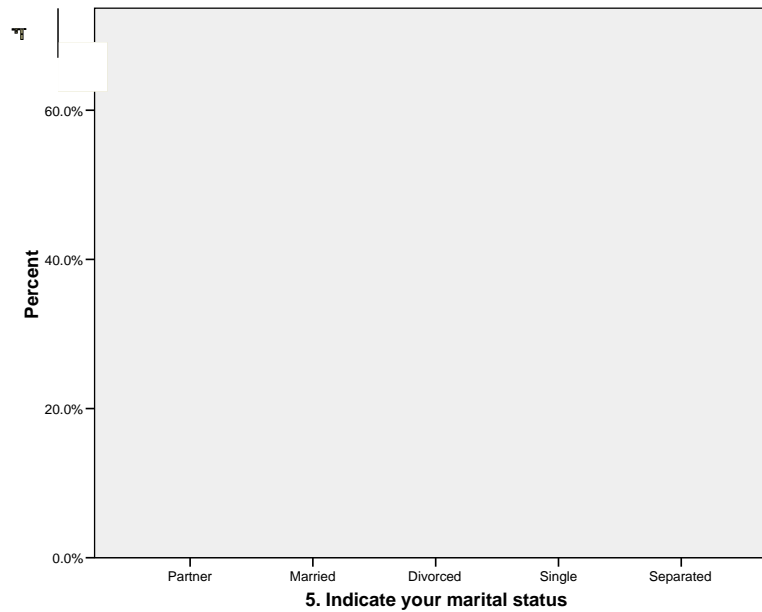


Figure 4.5 Respondents' marital status (N=73)

Ali (2008:4) found that unmarried young females following the general nursing diploma were between 15 and 25 years old.

Item 6: Breadwinner

Of the respondents, 57.0% (n=42) were the breadwinners, followed by 23.3% (n=17) whose mothers were the breadwinners (see figure 4.6).

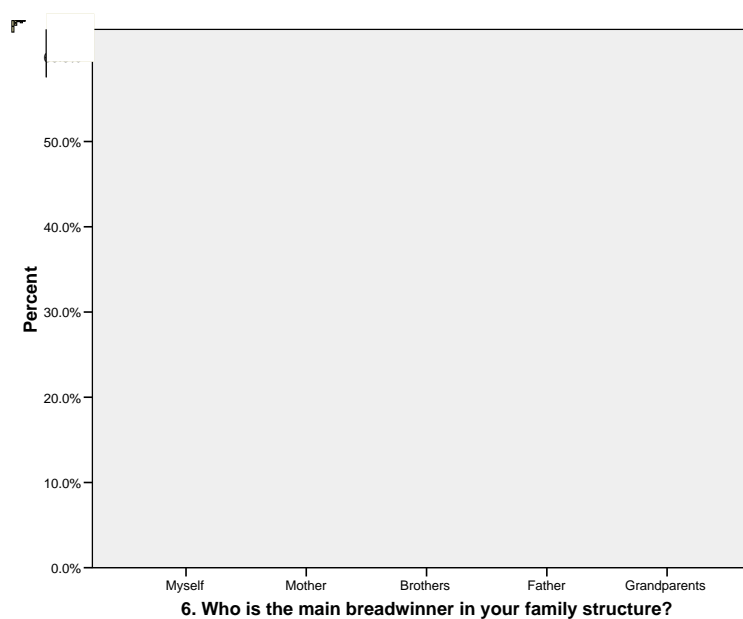


Figure 4.6 Respondents and breadwinners (N=73)

Ngidi (2007:730) found that financial constraints were one of the factors contributing to student dropout. Accordingly, Ngidi (2007:730) maintains that nursing institutions need to provide needy students with financial support in the form of bursaries or study loans, as stress caused by financial problems is one of the main factors that contribute to student failure or dropout.

Financial constraints may prevent students from buying prescribed books, which makes it difficult for them to augment what is taught in class. This also hampers concentration. Mokoena (1999:20) points out that nurses indicated family commitments as one of the reasons for the high dropout rate.

Item 7: Family support of nursing career

Of the respondents, 94.0% (n=66) received support from their families (see figure 4.7).

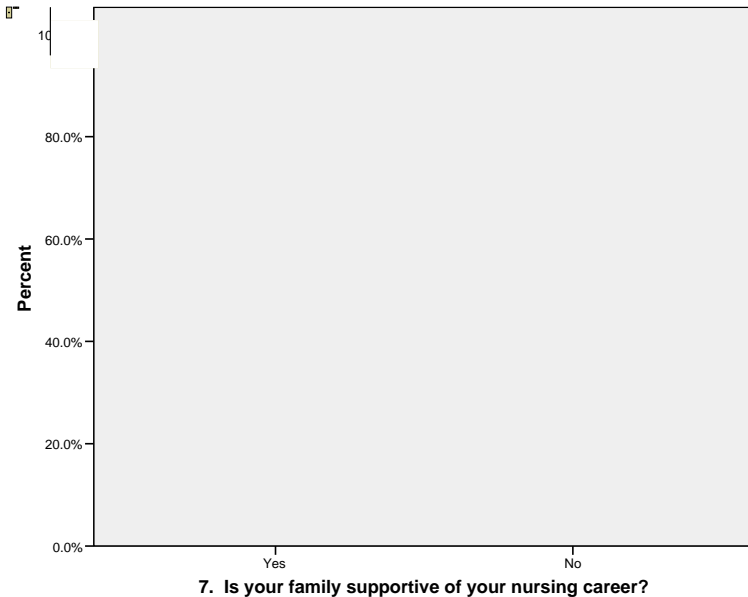


Figure 4.7 Respondents’ family support of nursing career (N=73)

Family support encourages and motivates students to work for positive results at the end. The researcher found no literature regarding family support of nursing career.

Item 8: Type of support

Regarding the type of support they received, 86.3% (n=63) indicated emotional support

and 30.1% (n=22) received financial support from their families (see figure 4.8). Family support encourages students to persevere and succeed in their studies. In this study, the majority of the respondents did not receive financial support from their families, but emotional support instead. Ngidi (2007:729) stresses that financial support is crucial, because stress caused by financial problems is a major cause of student failure.

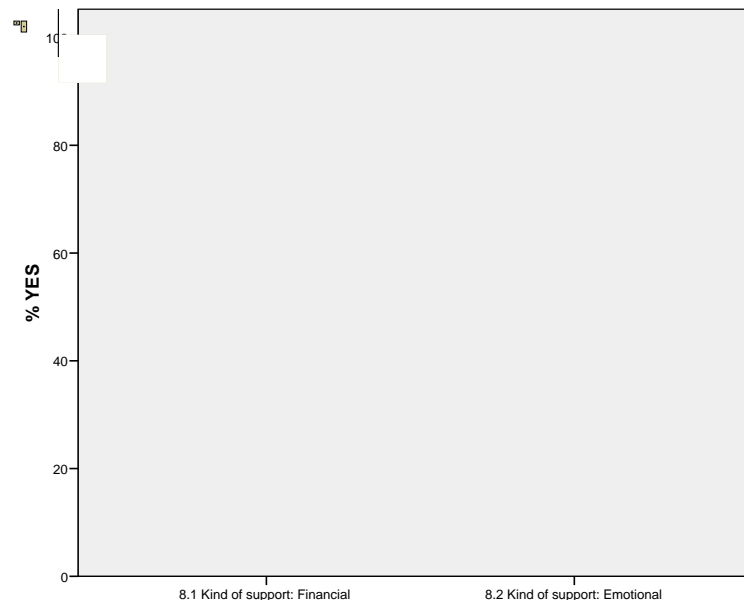


Figure 4.8 Respondents' type of support (N=73)

Item 9: Respondents' number of children

Of the respondents, 39.7% (n=29) had no children; 34.2% (n=25) had one child; 20.5% (n=15) had two children, and 5.5% (n=4) had more than two children (see figure 4.9). The number of respondents having no children is further supported by the study conducted by Pilane when exploring various clinical setting for the educational preparation of student nurses 76,6% of respondents had 0-2 children. This shows that the number of respondents entering the 4 year programme are having no children and therefore the responsibilities attached to having children as additional responsibility of being a student are minimal (Pilane 2000:84).

Most of the respondents (60.3%; n=44) were single (see figure 4.5) and between 20 and 29 years old (61.6%; n=45) (see figure 4.4) therefore the majority were of childbearing age. The respondents without children had no challenges, compared to the challenge of having one or more children and coping with the physical, emotional and financial demands of a family.

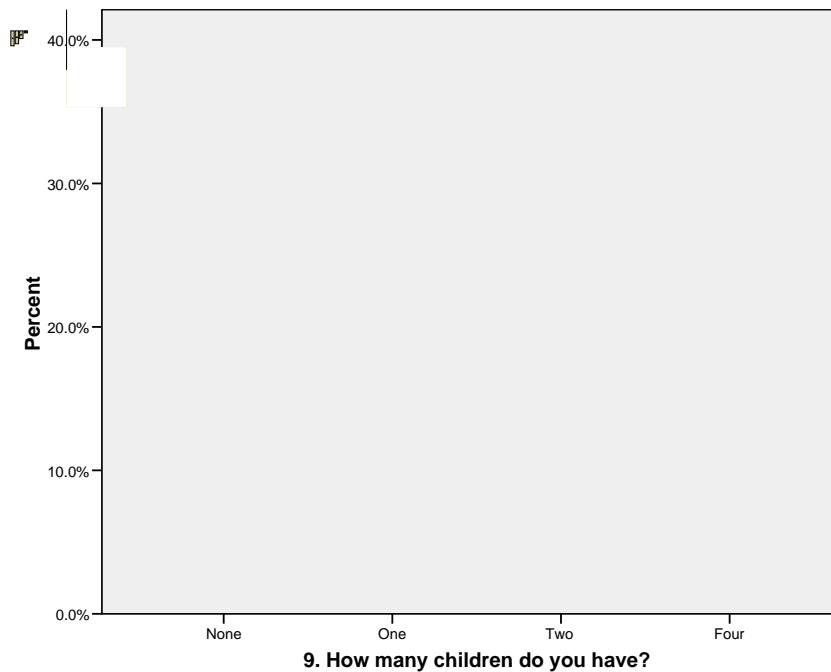


Figure 4.9 Respondents' number of children (N=73)

The respondents with no children therefore had more opportunity to focus fully on their studies. The respondents with one child should also not have been hampered too much in their studies. This is because of the implementation of the SANC *Recognition of Prior Learning (RPL)*, which makes provision for students between 30 and 50 years of age to be considered for training only if they have been involved in continuous education, such as workshops, symposia or any certificate course (SANC 2002:1). The number of children the students is having might be a factor in lowering their performance. The more dependents they have will have a direct impact on their study due to other responsibilities attached to them.

Item 10: Passed Std 10 (Grade 12)

Table 4.1 Respondents who passed Std 10 (Grade 12) (N=73)

PASSED STD 10 (GRADE 12)	FREQUENCY	PERCENTAGE
Yes	72	98.6
No	1	1.4
Total	73	100.0

Of the respondents, 98.6% (n=72) had passed Grade 12 and only 1.4% (n=1) had not (see table 4.1).

In South Africa, in order to access the four (4) year nurse training programme and be admitted to the course, individuals must have at least a senior certificate or equivalent certificate which gives admission to formal post-secondary education as per Regulation R425, 1985 paragraph 3 (c) (SANC 1985:2). Table 4.1 indicates that the majority of the respondents (98.66%) passed Grade 12 and are therefore qualified for admission to the four (4) year nurse training programme.

Item 11: Subjects done

Among the subjects taken by the respondents, Science (43.8%; n=32) and Mathematics (56.2%; n=41) were the least popular choices, while English, Afrikaans and Biology were taken by most (see figure 4.10). These findings concur with Eiselen and Geysers (2003:120), who found the main subjects of choice were English, followed by Afrikaans, Biology, Science and Mathematics.

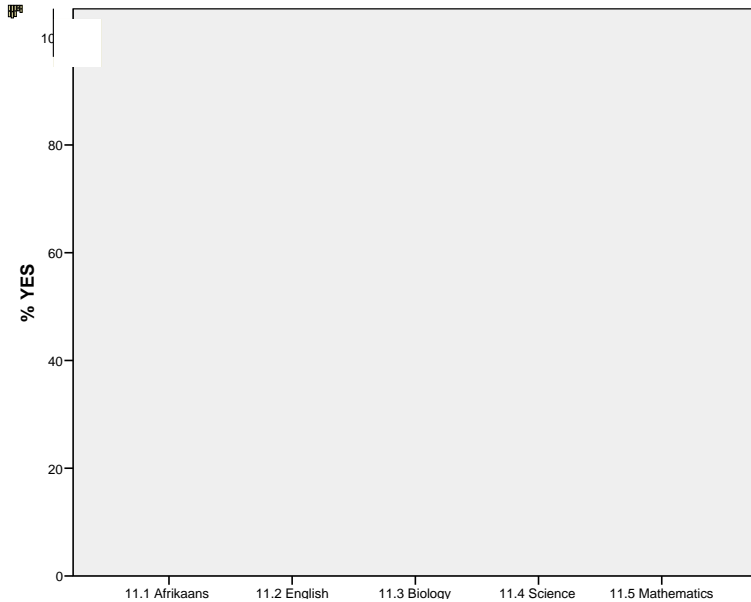


Figure 4.10 Respondents' subjects done (N=73)

The choice of subjects in Grade 12 predicts and assists selection to the nursing programme. The subjects that are required for entry level are mainly one or more of mathematics, science and biology, and languages at higher grade.

Figure 4.10 indicates that all the respondents took English in Grade 12, which shows that they did not experience problems when taught in English, and Afrikaans was the second language taken by 90.4% (n=66) of the respondents. These two languages are the common ones students need to know in order to succeed at tertiary institutions and in nursing for both theory and practice.

Clinical facilities care for different races and nurses need to communicate with these patients therefore knowing and understanding both English and Afrikaans is crucial.

Of the respondents, 100% (n=73) studied English, 90.4% (n=66) studied Afrikaans, and 89% (n=65) studied Biology. Manzini (1998:22) found that most nurses studied English, Afrikaans and Biology.

Item 12: Relevance of subjects to nursing now

Of the respondents, 95.9% (n=70) thought English was relevant; 93.2% (n=68) thought Biology; 72.6% (n=53) thought Science; 69.9% (n=51) thought Mathematics, and only 45.2% (n=33) thought Afrikaans was relevant for nursing (see figure 4.11). Manzini (1998:241) found that English, Afrikaans, Biology, Physical Science and Mathematics are considered to be related to nursing because English or Afrikaans are used as the medium of instruction in nursing.

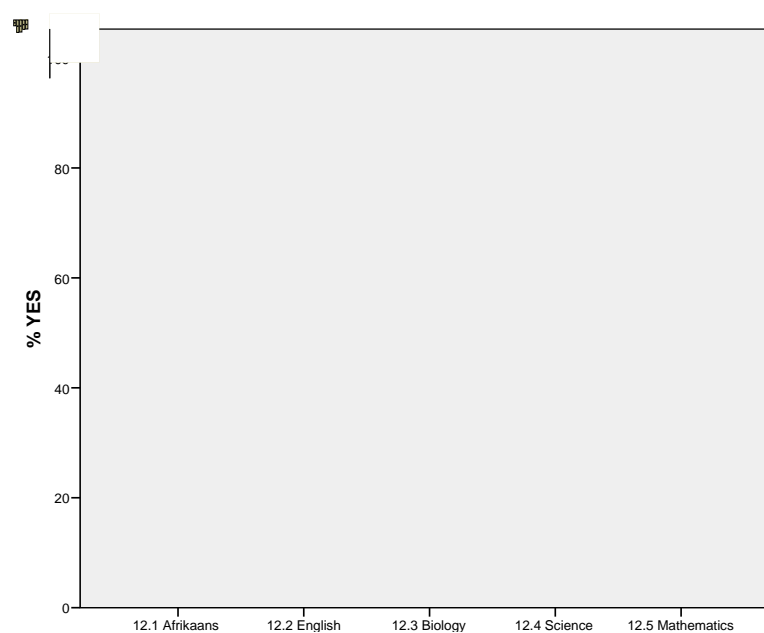


Figure 4.11 Relevance of subject to nursing (N=73)

In practice, English is more relevant as a medium of instruction, and 95.9% (n=70) of the respondents further indicated that. Although only 45.2% (n=33) of the respondents indicated Afrikaans, this was true because the University of the Free State offers its nursing programme in both English and Afrikaans. The students at this university are afforded the opportunity to choose hence some of the respondents indicated Afrikaans as a medium of instruction.

Item 13: Medium of instruction in Std 10 (Grade 12)

Of the respondents, 89.0% (n=65) were instructed in English in Grade 12 (Std 10) (see figure 4.13).

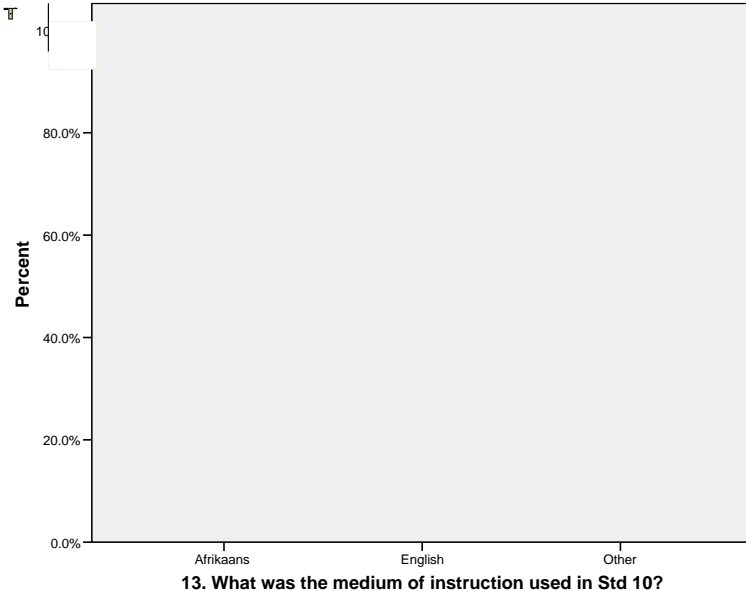


Figure 4.12 Medium of instruction in Std10 (N=73)

Since most of the respondents had been taught through the medium of English in Grade 12, they were already acquainted with English and should not have experienced problems in understanding the nursing programme. Furthermore, they could and would be expected to be able to speak, read and write English. Manzini (1998:22) cites Woodham and Taupe’s (1986) finding that effective use of English language skills was amongst the most valid test predictors for successful completion of student nurse training.

Manzini (1998:242) maintains that the medium of instruction in Std 10 (Grade 12) is fundamental for the preparation of students.

4.2.2 Section B: Education and training

Item 14: Reason for choosing nursing

Of the respondents, 39.7% (n=29) chose nursing as a career; 38.4% (n=28) chose nursing as passion; 27.4% (n=20) chose it as a calling, and 21.9% (n=16) chose it for the money (i.e., an income) (see figure 4.13).

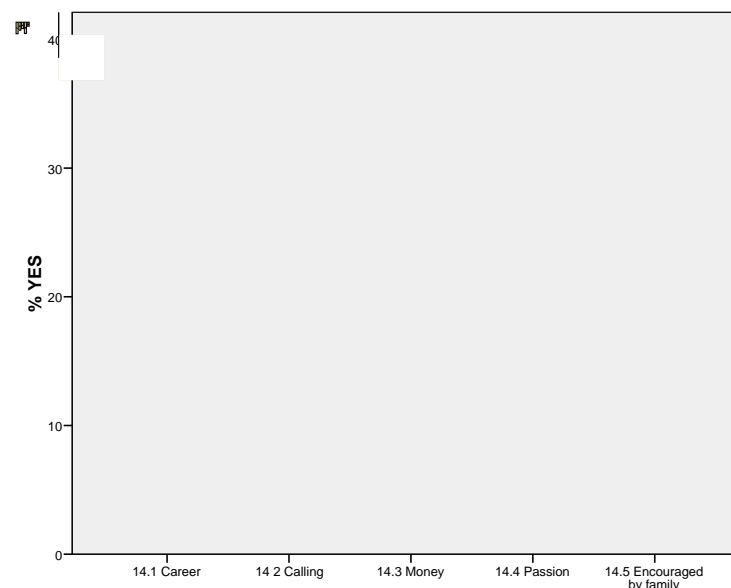


Figure 4.13 Respondents' reason for choosing nursing (N=73)

Career choice is determined by a number of factors such as passion, calling, and benefits. Since most of the respondents (39.7%; n=29) indicated that they chose nursing as a career, it is evident that they will succeed because they were not coerced into it. Ngidi (2007:725) found that both students and lecturers at the University of Zululand ranked the appropriate choice of course of study among the top ten factors that could contribute to success. Although this was specific to the University of Zululand, it is also applicable to this study.

Item 15: Admission to the four-year course

There are various ways of admitting people to various nursing programmes, such as advertising, calling for applications, and recognition of prior learning or study leave. Of the respondents, 72.6% (n=53) applied for admission to the programme; 15.1% (n=11) accessed it through study leave, and 12.3% (n=9) through recognition of prior learning

(see figure 4.14).

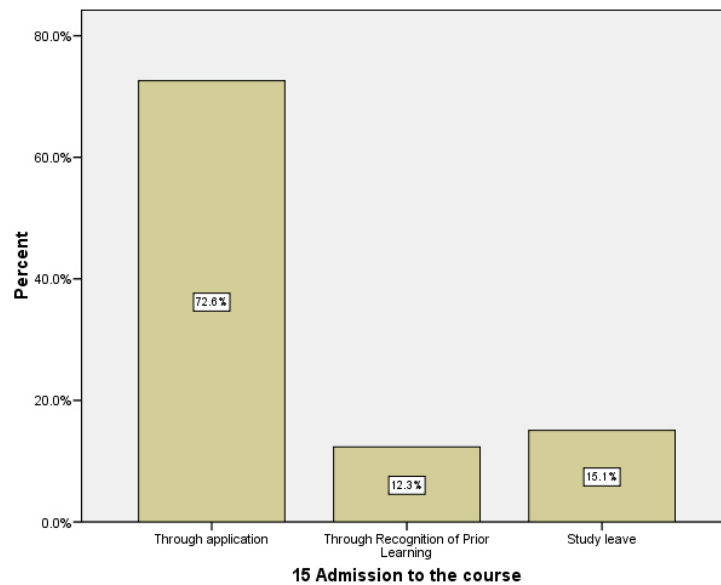


Figure 4.14 Respondents' admission to the four-year course (N=73)

The majority of the respondents (72.6%; n=53) gained entry to the programme through applications, which means that they entered the programme voluntarily, without coercion from parents, or peer group pressure. The respondents (15.1%; n=11) who gained admission through study leave applied to be given the opportunity to further their studies and permission to do so by the institution after being evaluated for qualification. In accordance with SANC Circular 12/2001 (SANC 2001:1), which amends SANC Circular 18/99 dated 13 December 1999 regarding Transformation of Nursing Education and Training in South Africa, not only senior certificate is considered. The SANC thereby makes provision for increased access, mobility and career pathing within nursing education leading to registration as a nurse by applying RPL (SANC 2001:1).

Item 16: Study level

The distribution is the result of the sampling and response rates, which indicated that the highest percentage of the respondents (27.4%; n=20) were in fourth year (see table 4.2).

Table 4.2 Respondents' study level (N=73)

STUDY LEVEL	FREQUENCY	PERCENTAGE
16.1 First year	19	26.0
16.2 Second year	18	24.7
16.3 Third year	16	21.9
16.4 Fourth year	20	27.4
Total	73	100.0

This question was intended to obtain responses from all the levels as the study is on the four (4) year nurse training programme from first to fourth year. Another reason was for representativeness and equal chance of each study level being selected to participate in the study. The outcome of the study would not be skewed or assumed and the recommendations would be for the whole four-year course.

Item 17: Library use

Figure 4.14 reveals that 72.6% (n=53) of respondents indicated that they were taught how to use the library, which meant that no time was wasted in search of books, as they knew exactly where to get the books and what to search for.

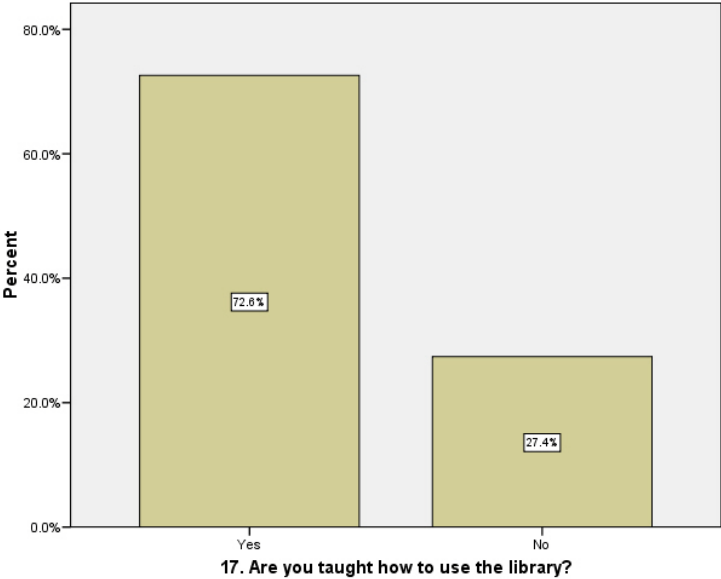


Figure 4.15 Respondents' library use (N=73)

Knowledge and use of the library to searching for books is essential and encourages learning and saves time, preventing unnecessary delays and wasting time that could have been used fruitfully in studying and completing assignments, projects, case studies, and research.

Item 18: Library hours

Of the respondents, 94.5% (n=69) knew that the library opened at 07:30; 4.1% (n=3) indicated at 08:00, and only 1.4% (n=1) did not to know. This could indicate that the respondent did not use the library frequently or was not sure.

Table 4.3 Availability of library (N=73)

OPEN	FREQUENCY	PERCENTAGE
18.1 07:30	69	94.5
18.2 07:45	1	1.4
18.3 08:00	3	4.1
Total	73	100.0

Item 19: Time library closes

The majority of the respondents (94.5%; n=69) knew when the library closed, and 5.5% (n=4) indicating a different time from the rest. There is some disagreement as to the time the library closes. In tertiary institutions the library should be opened in the evening as well, but if that is the case, the students do not know about it.

Table 4.4 Time library closes (N=73)

CLOSE	FREQUENCY	PERCENTAGE
19.1 16:00	69	94.5
19.2 17:00	4	5.5
Total	73	100.0

Item 20: Librarian

Of the respondents, 98.6% (n=72) indicated that there was a librarian, while only 1.4% (n=1) stated that they do not have a librarian. This meant almost all the respondents knew about the presence of the librarian. It could be assumed that the only respondent who did not know was not sure or did not use the library frequently.

Table 4.5 Librarian (N=73)

	FREQUENCY	PERCENTAGE
Yes	72	98.6
No	1	1.4
Total	73	100.0

Item 21: Library assistance

A library is one of the most vital resources that assist students to achieve their academic goals, through the supply of information (books, journals, audio visual material, videos, CDs). The college has a library, although it is not fully equipped.

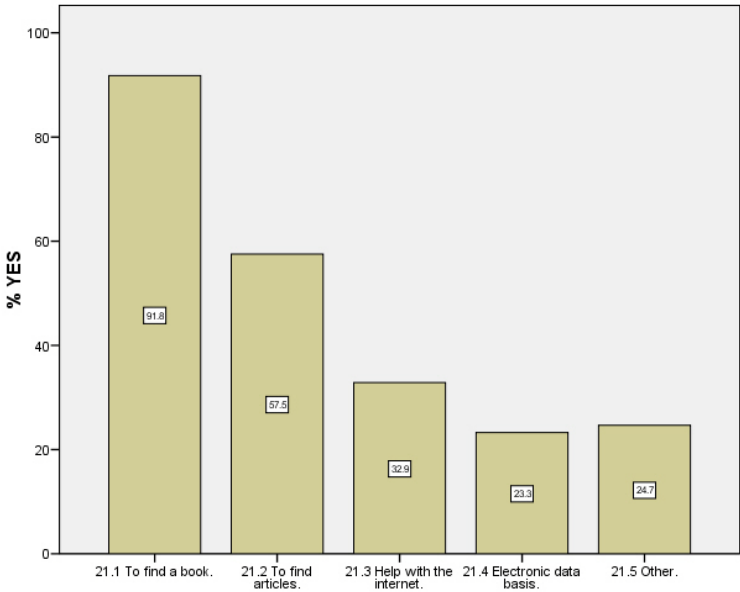


Figure 4.16 Respondents' library assistance (N=73)

Of the respondents, 91.8% (n=67) were assisted to find books, and 57.5 % (n=42) were assisted to find articles about a subject. Help with the Internet was also a substantial

activity (see figure 4.16). This further facilitates finding relevant and appropriate books and articles speedily. Without the assistance of the librarian and the Internet, students could waste time searching for relevant material and lose interest in studying, this is further supported by Haldane in research regarding listening to health care studies on the impact of new library facilities on the quality of science. This study revealed that the library is judged on how good the information in it is and how helpful the staff are (Haldane 2003:66). As not only books, articles, photocopying services are the only services rendered by library electronic access was found to be beneficial also in this study as clinical staff was found to always not wanting access to hard copy resources but to the facilities, services, staff support and learning culture of the physical library (Haldane 2003:67).

The librarian assistance is crucial as in addition they have also assumed the role of educator to teach the users how to find information both in the library and over electronic networks, which means students are not only assisted in finding the books but other information as well as electronically.

Item 22: Are there prescribed books for your level of training?

Of the respondents, 94.5% (n=69) indicated that there were prescribed books for their level of training, while 5.5% (n=4) indicated that there were no prescribed books.

Table 4.6 Prescribed books (N=73)

	FREQUENCY	PERCENTAGE
Yes	69	94.5
No	4	5.5
Total	73	100.0

Item 23: Prescribed books

The respondents were asked how they obtained prescribed books (see figure 4.17). Of the respondents, 63% (n=46) bought the books new; 12.3% (n=9) bought second-hand/old books; 2.7% (n=2) got the books as a gift; 35.6 (n=26) borrowed the books; 6.8% (n=5) shared the books; and 41.1% (n=30) indicated that they made photocopies of the books. This was of concern as to why they were making copies, and whether this was due to financial constraints or they just did not want to buy the books.

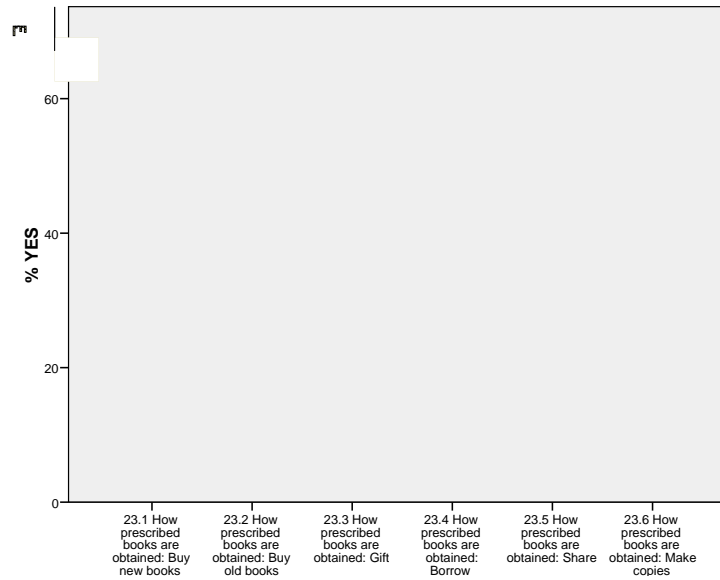


Figure 4.17 How respondents obtained prescribed books (N=73)

Item 24: Aspects causing stress

The respondents were asked to indicate what caused them stress (see figure 4.18). Of the respondents, 49.3% (n=36) indicated money; 34.2% (n=25) indicated the teaching methods used; 32.9% (n=24) indicated college; 28.8% (n=21) indicated tutors; 27.4% (n=20) indicated subjects, and 11.0% (n=8) indicated colleagues. The study reveals that there are a number of variables causing stress money being the highest followed by teaching methods used and college. In terms of college it is assumed that in general there are a number of factors.

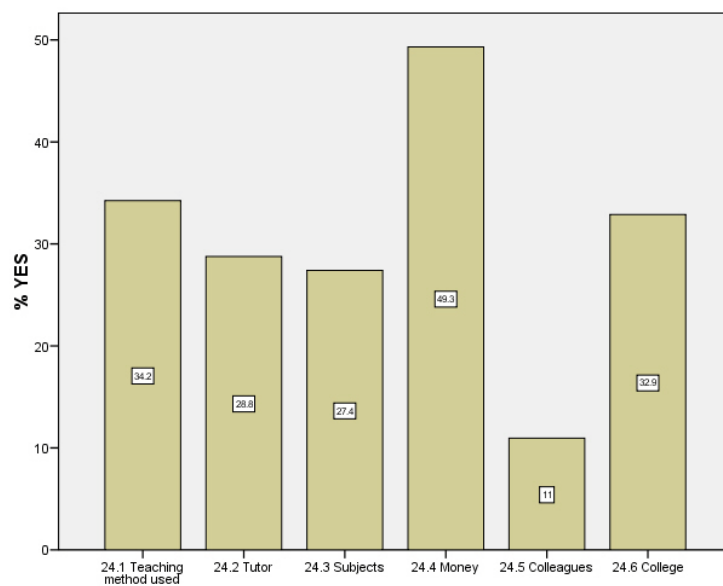


Figure 4.18 Aspects causing respondents stress (N=73)

Manzini (1998:41) found that personality problems such as an inability to adjust to a new environment leading to poor human relations, homesickness, emotional problems and loss of interest were common reasons given for student dropout.

Item 25: Emotional changes

Regarding emotional changes they experienced, 49.3% (n=36) of the respondents indicated depression; 41.1% (n=30) indicated mood swings; 27.4% (n=20) indicated anger; 23.3% (n=17) indicated isolation, and 9.6% (n=7) indicated despair (see figure 4.19).

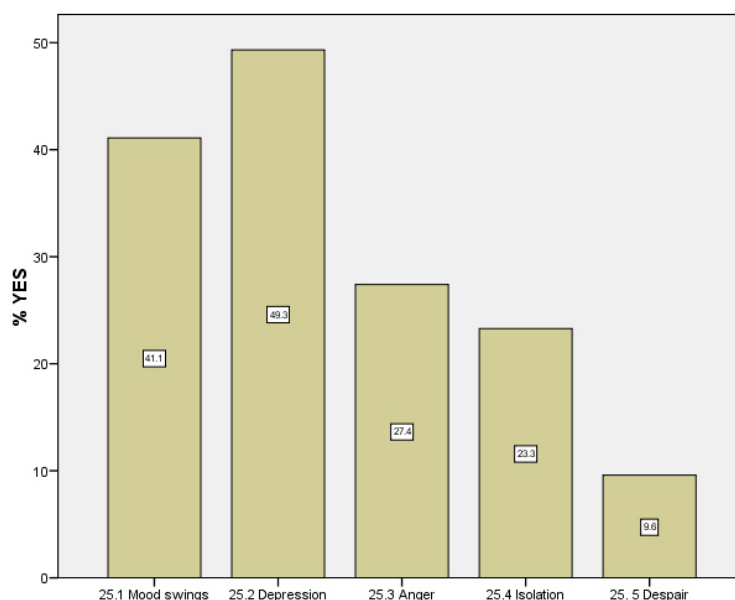


Figure 4.19 Respondents' emotional changes (N=73)

4.2.3 Section C: Training programme (curriculum)

Item 26: Learning contract and policy

The respondents were asked whether they received a copy of the policy with their learning contract (see figure 4.20). Of the respondents, 49.3% (n=36) indicated that they did, and 50.7% (n=37) did not. Thus the respondents were not acquitted with their responsibilities. As the policy is the guide as to how the contract should be. The learning contract being an agreement between the teacher or teaching team and a learner, issues of assessment is also included and the learner is an active partner. It further in terms of format has the name of the student and the level for the specific

expectations of each level to be spelled, the course name, outcomes of the programme, what is expected of the learning regarding the overall objectives, resources and assistance as well as signatures regarding agreement (teaching. info/teaching/learning-contracts.htm <http://www.learningand>).

The effects of this contract in teaching and learning is that it is systematic, organised and structured, and if not adhering to objectives of it the college will not achieve the set outcomes. As a structured guideline to guide the whole college and training programme chaos is prevented. It further assists in adherence to objectives of the course to be achieved and guides the whole college and training programme. Assessment is also guided according to it.

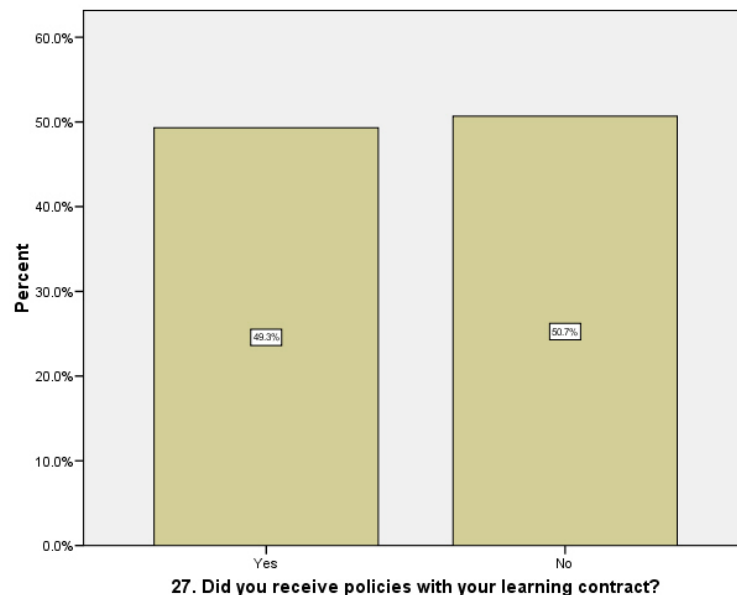


Figure 4.20 Respondents' learning contract (N=73)

Item 27: Programme objectives

The respondents were asked whether the programme objectives of the disciplines were explained to them (see figure 4.21). Of the respondents, 88.8% (n=59) indicated that the programme objectives of all disciplines were explained to them, which meant they knew what was expected of them in each discipline and were able to prepare beforehand and keep up to date with their work. However, 19.2% (n=14) of the respondents indicated that the programme objectives were not explained to them. It is

crucial for programme objectives for both theory and practical to be available and explained to student as these give directions to be followed and what is to be covered for the specific level and in turn the student will know what is expected of them. This is supported by the study that was conducted in Scotland regarding methods to be described of measuring progress in achieving competence assessment. The findings of the study were that students had limited knowledge of their own programme specific clinical competence. They had little confidence and they found the tool difficult to understand, therefore based on this findings if programme objectives are present but not explained it will be difficult for such objectives to be understood and achieved (Calman, Watson, Norman, Redfen & Murrell 2002:576).

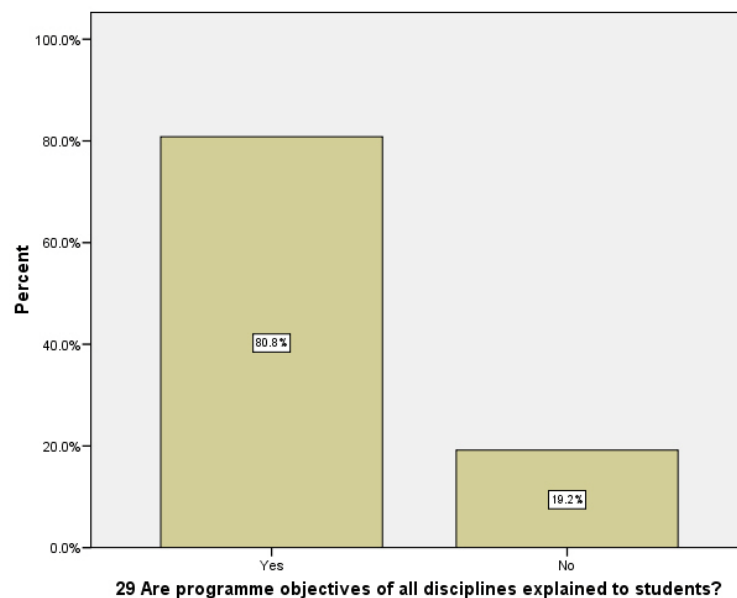


Figure 4.21 Programme objectives (N=73)

Item 28: Teaching methods

Of the respondents, 95.9% (n=70) indicated the lecture as the preferred teaching method and 80.8% (n=59) indicated group discussions as the most used strategy (see figure 4.22). The respondents could indicate more than one method. Lectures and group discussions are the most used teaching methods in all the levels compared to assignments and case studies.

Group discussion is a good method as it promotes growth and group interaction.

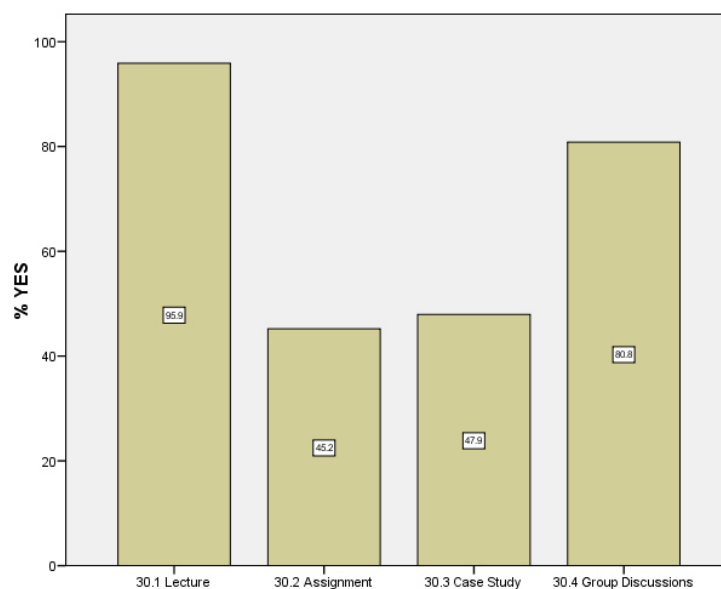


Figure 4.22 Teaching methods (N=73)

Mkhwanazi (2007:77) points out that nurse educators prepare well for lectures, but maintains that this method should be minimized in adult learning as it does not promote growth and independence in education. Moreover, assignments and case studies were not commonly used (Mkhwanazi (2007:78). These two methods promote independence and therefore if frequently used, could result in progress from dependence to independence.

Item 29: Difficult subjects

Item 29.1: First year

Of the respondents, 32.9% (n=24) indicated Fundamental Nursing Science as a difficult first-year subject (see figure 4.23). SANC Regulation R425 (SANC 1985:3) stipulates that fundamental nursing science, ethos and professional practice must be covered within one academic year, but does not stipulate when and how. The nursing education institution compiles its own curriculum and indicates where that must, and can be taught as first-year subject. Students need to pass the subject, as it is a prerequisite and foundation for registration as a nurse.

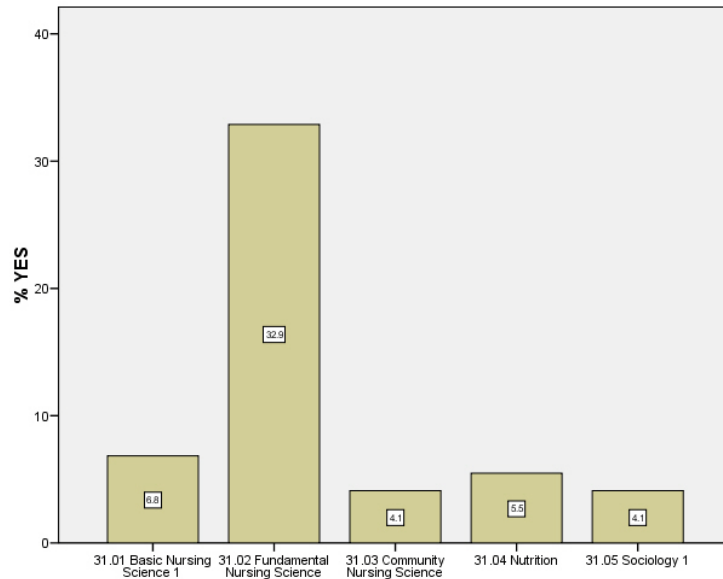


Figure 4.23 Respondents' most difficult first-year subjects (N=73)

Item 29.2: Second year

Of the respondents, 22.2% (n=12) indicated Basic Nursing Science 2 as stipulated in the institution's own curriculum and 20.4% (n=11) indicated General Nursing Science 1. These two are the most difficult subjects in the second year (see figure 4.24).

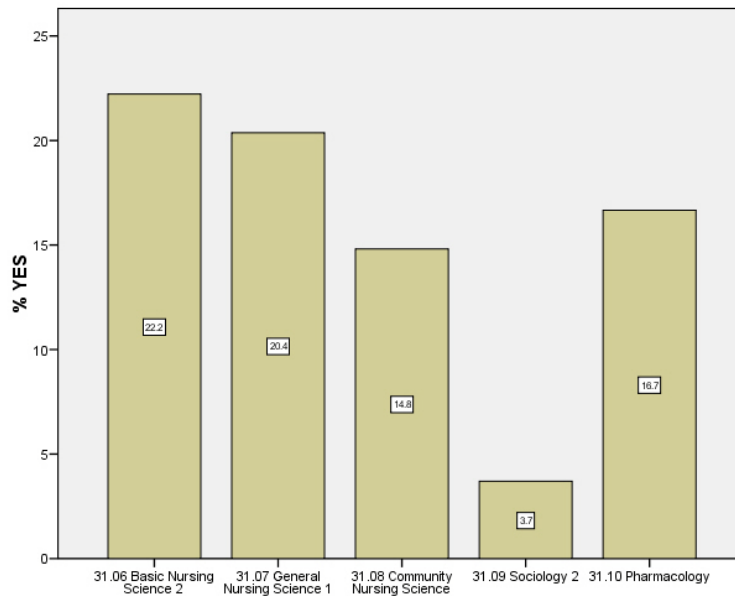


Figure 4.24 Respondents' most difficult second-year subjects (N=73)

General Nursing Science runs up to third year of study and is the crux of nursing. Without it, students are not competent to practise as professional practitioners, as

prescribed by SANC R425 of 1985 (SANC 1985:3).

Item 29.3: Third year

Of the respondents, 22.2% (n=8) out of 16 respondents sampled indicated that Psychiatric Nursing Science caused the most problems in their third year (see figure 4.25).

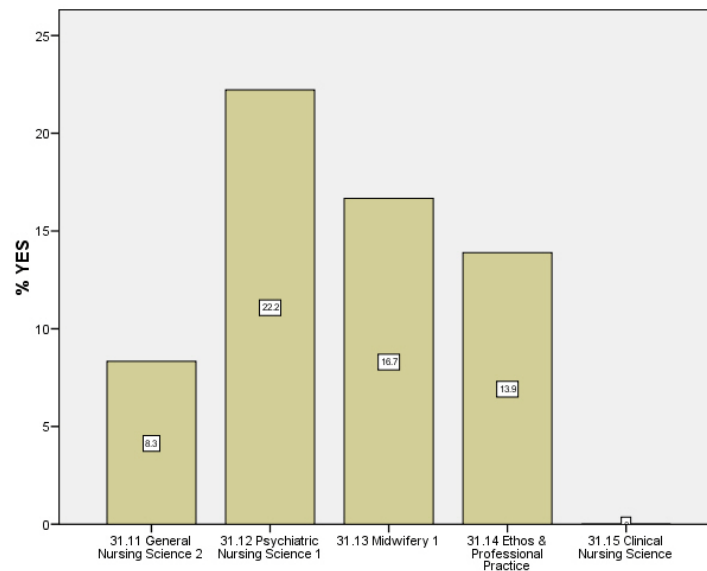


Figure 4.25 Respondents' most difficult third-year subjects (N=73)

This percentage is the same as in second year and according to the SANC Regulation R425 (SANC 1985: 3) Psychiatric nursing science forms part of the programme and needs to be completed, however if the student find it more difficult, he/she can complete the programme without passing it, even if opportunity was granted. In accordance with SANC regulation regarding examination under further examination paragraph 10 as amended in 2003, a candidate who fails an examination of a specific year of a programme will retain credits for any component in which at least 50% was obtained and be permitted to re-write failed components at the next examination (SANC 1993:4). Students can apply to be credited for subjects passed and omit them, and only register for those they have passed. This will be partial registration and it will not be a full comprehensive programme constituting of the three disciplines as prescribed by Regulation R425 (SANC 1985).

Item 29.4: Fourth year

Of the respondents, 35.0% (n=7) indicated Midwifery II as difficult, 20.0% (n=4) found

Psychiatric Nursing Science II difficult; 15% (n=3) found General Nursing Science II difficult, and 5% (n=1) found Ethics and Professional Practice difficult.

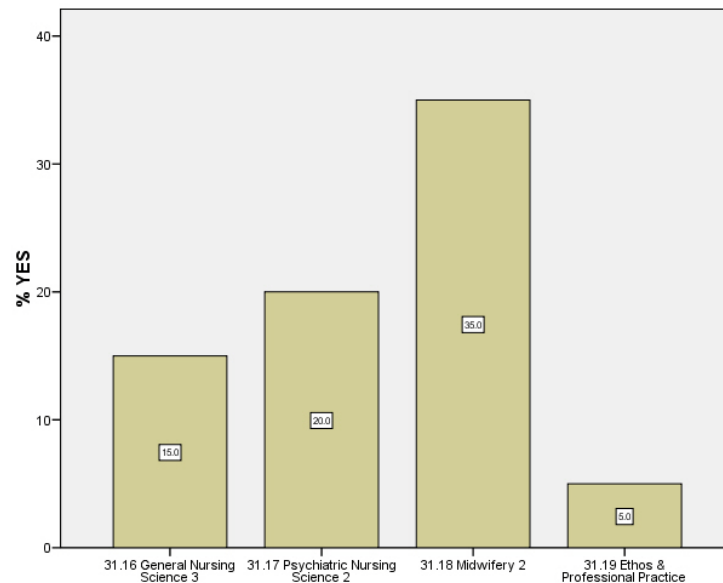


Figure 4.26 Respondents' most difficult fourth-year subjects (N=73)

Psychiatric nursing science forms part of the programme and needs to be completed. However, the students find it difficult to complete the programme without passing it even if opportunity was granted. In accordance with SANC regulations, a candidate who fails an examination of a specific year of a course will retain credits for any component in which at least 50% was obtained and be permitted to re-write the failed components at the next examination (SANC 1993:4). The student can apply to be credited and register for subjects passed. Registration will not be for a full comprehensive programme consisting of the three disciplines prescribed by R425.

Item 30: Four-year training programme too theoretical

Of the respondents, 41.1% (n=30) agreed or agreed strongly that the programme was too theoretical; 26.0% (n=19) indicated that the training programme was more theoretical than what students expected; 17.8% (n=13) were not sure, and 31.5% (n=23) and 9.5% (n=7) disagreed or strongly disagreed (see figure 4.27). The aim of this question was to test if there is correlation of theory and practice of whether students are only given theory through different teaching strategies like lecturing, assignments, and case studies and so on but not placed appropriately to clinical setting. Further it was to test if clinical teaching and learning takes place. Nursing programme is practical

therefore students need to be exposed to real life situation to meet the objective of the programme being to be competent nursing practitioners on completion. Training programme consists of both theory and practice. Clinical nursing education plays a very crucial role in assisting nursing students to integrate theory, research and practice, therefore students have the opportunity to apply theoretical knowledge to practical situation. The other goal of this is to provide them the opportunity to be capable of independence decision making in performing nursing activities (Jerbek, Falk & Severissen 2003:221).

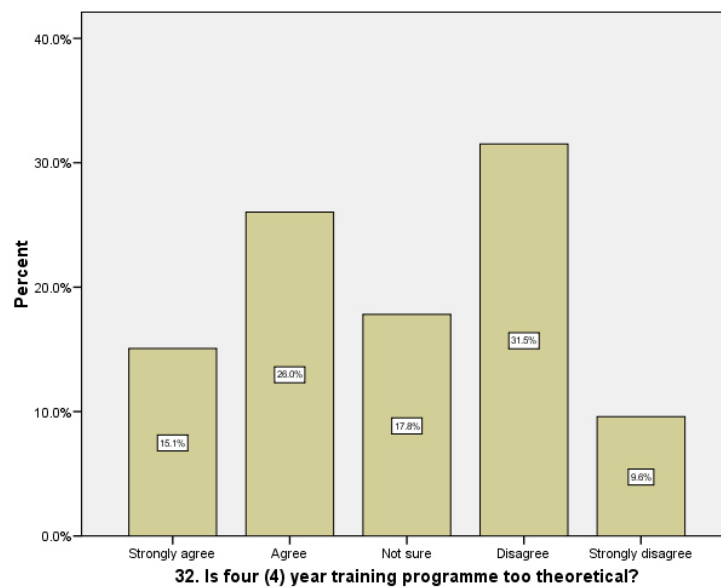


Figure 4.27 Respondents' rating of four (4) year nurse training programme theory (N=73)

Item 31: Evaluation methods

Regarding the evaluation methods most frequently used, 89.0% (n=65) of the respondents indicated tests, 75.3% (n=55) indicated practicals as the second leading method for evaluation of effective and efficient nursing task performance; 60% (n=44) indicated presentations in class; 69.9% (n=52) indicated examinations, 24.7% (n=18) indicated assignments (see figure 4.28).

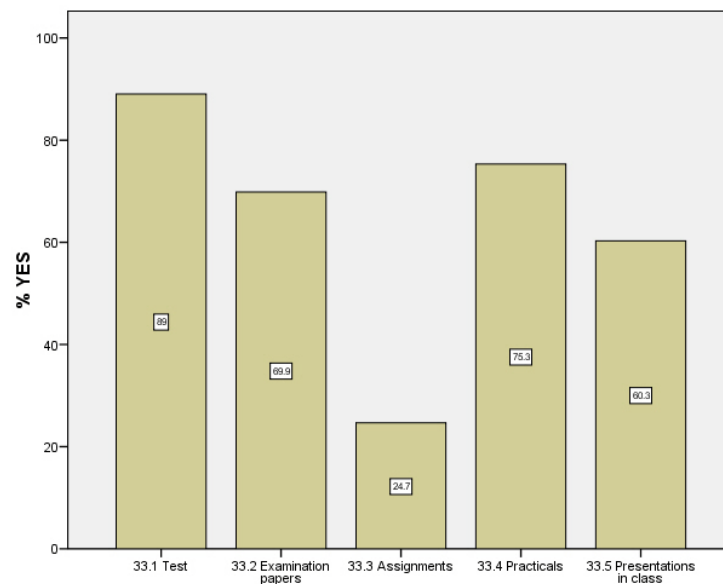


Figure 4.28 Evaluation methods most used (N=73)

It is vital to revisit case study as an evaluation method, as it promotes critical thinking and creativity. Case study again as an evaluation method which helps to build bridges between theory and practice, because learners apply their theoretical knowledge in situations which imitate real clinical situations. Ehlers (1998:88) states that when using case study when learners are writing history of patients they learn about person suffering from a disease and when recording the learner has to apply all the knowledge and skills he/she acquired to care for specific person. In class when they sharing their cases all learners can share the experience. Case study was further recommended to be utilized as teaching and learning tools for nursing students Netshandama-Funyufunyu (1997:111).

More problems are found in practice and are examined which assist students to become clinical thinkers, and their skills are also improved in classifying information about a specific situation as being important or not and make to make decisions (Ehlers 1998:95). Reilly and Oerman (1992:115) also indicates that student nurses will gain experience with real client and real problems, which in turn will enable them to use knowledge in practice. The majority of respondents indicated that the nursing college still used tests as a major assessment tool for theory and this is further supported by study conducted by Mkhwanazi on the role of the nurse educator in supporting pupil nurses, were students indicated that both oral and written tests were commonly used Mkhwanazi (2007:93). Seventy five point three (75,3%) percent indicated practicals for practica. Seventy three (73) of the respondents indicated observation as the

assessment used for clinical assessment and 71% indicated Objective Structured Clinical Evaluation (OSCE) Mkhwanazi (2007:96).

Future students, especially those coming straight from school, will have little difficulty following this course because, they will be used to the new OBE curriculum that focuses more on analytical skills and research.

Item 32: Feedback regarding reaching objectives

Of the respondents, 89.0% (n=65) indicated that feedback was given, and only 11.0% (n=8) indicated that it was not given (see figure 4.29).

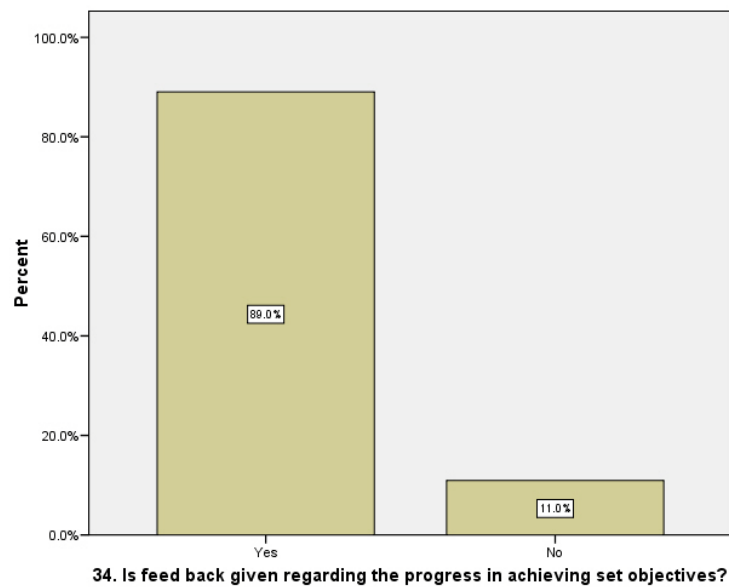


Figure 4.29 Respondents' feedback received (N=73)

Mkhwanazi (2007:80).also confirms this as indicated by students that educators give feedback on their answers and that they were corrected in a friendly manner when they were wrong.

It is important to give continuous feedback regarding progress in training so that problems can be identified and corrected in time. This also improves performance in general therefore it is crucial for teaching staff to give feedback for quality nursing care to be provided.

Mkhwanazi (2007:93) cites Klopper (2001:21) who emphasises that valuable feedback about students' work is essential for effective and efficient guidance. Feedback is important as it is a factor that contributes to success as supported by Ngidi's research where it is indicated that regular and comprehensive feedback on progress from lecturers was one of the factors. Feedback is important as gaps are identified and corrective measures can be taken earlier to improve students' performance and by doing that they can in turn be retained (Ngidi 2007:725).

Killen (2000:193) also states that it is important to give feedback to the students about their progress.

Item 33: Relationship with tutors

Of the respondents, 52.1% (n=38) indicated that they had a good relationship with their tutors; 2.7% (n=2) indicated that relations were bad, and 4.1% (n=3) indicated that there was no relationship.

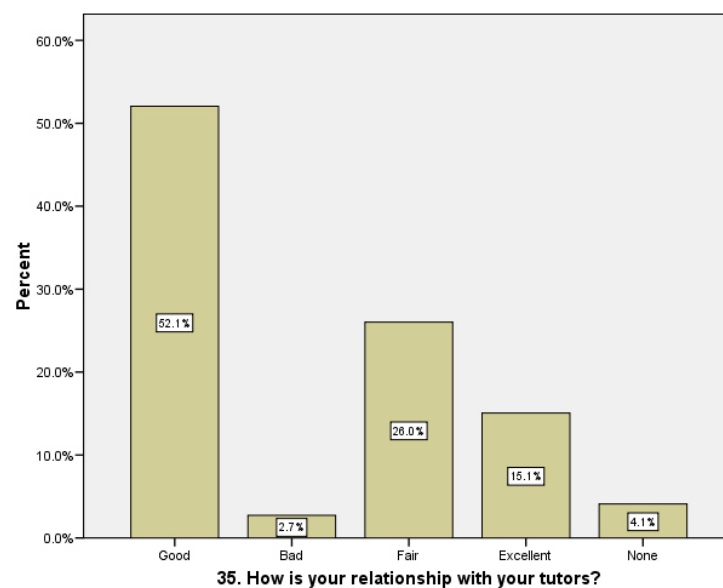


Figure 4.30 Respondents' relationship with tutors (N=73)

A good relationship is facilitated by the methods of assessment used. It is essential for students to have good relationships with the tutors. Tutors, in turn, need to be approachable, create a favourable environment for student so that they are not afraid to voice their frustrations and problems. This moreover assists tutors in being flexible to choose teaching methods that will cater for individuals' needs and not only adhere to

one traditional method of teaching. This is further supported by Killen who states that no teaching strategy is better than others in all circumstances, the teacher can decide how to motivate learner by deciding on which technique to use to support presentation like media which is appropriate and feedback (Killen 2000:22).

Salahuddin (2000:635) also explained that the relationship that is formed between the student and the tutor is the most important factor contributing to the success of the student. Taking part in social activities encourages the relationship to develop whilst addressing academic problems helps to meet the needs of the students. In accordance to the study conducted by Salahuddin at the University of Dundee on the students, tutors and relationships it was concluded that the single most important factor in perceived success was the establishment of a good relationship between the tutor and the student.

Item 34: Failed subjects

Of the respondents, 50.7% (n=37) had not failed one or more subjects in their study level, but 49.3% (n=36) had (see figure 4.31).

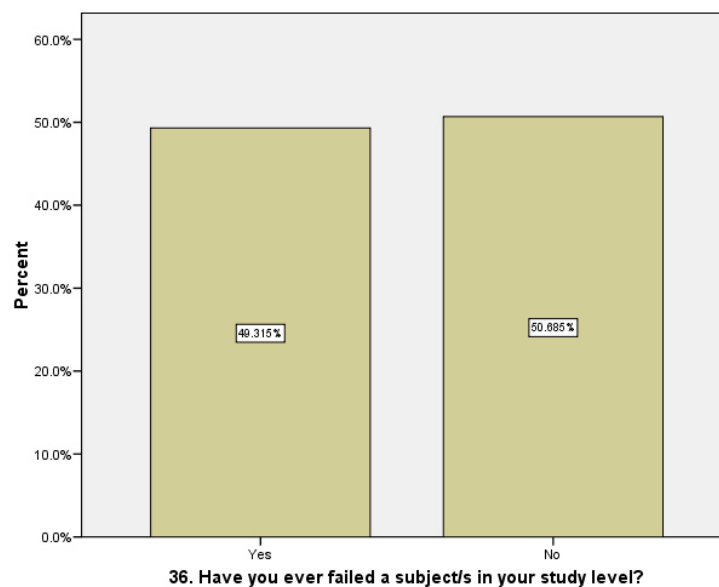


Figure 4.31 Subjects failed (N=73)

Item 35: Subjects failed

Item 35.1: First year

Of the respondents, 34.2% (n=25) had failed Fundamental Nursing Science in their first year; 17.8% (n=13) had failed Sociology I; 8.2% (n=5) indicated Basic Nursing Science; 8.2% (n=6) indicated Community Nursing Science, and 6.8% (n=5) had failed Nutrition (see figure 4.32). The findings revealed that more students were failing Fundamental Nursing Science in their first year as compared to other subjects.

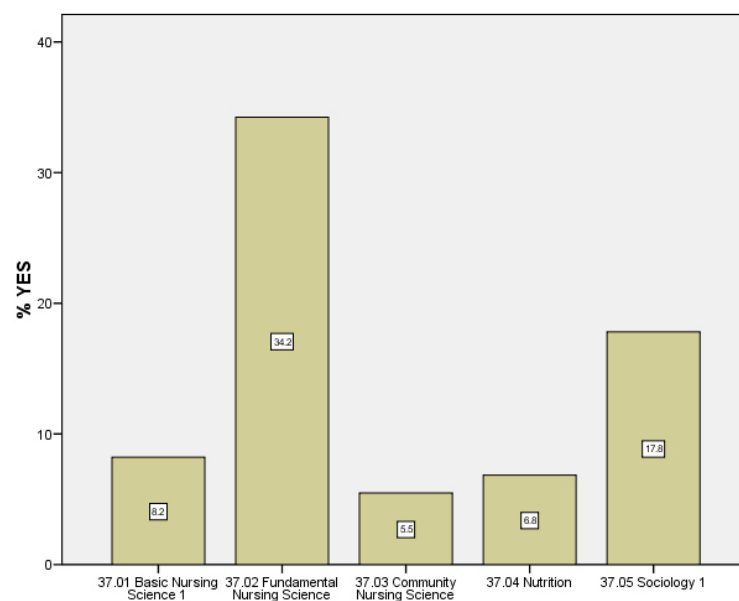


Figure 4.32 Respondents' subjects failed in first year (N=73)

Item 35.2: Second year

Regarding subjects failed at second year, 25.9% (n=14) of the respondents indicated General Nursing Science 1; 20.4% (n=11) indicated Community Nursing Science; 13% (n=7) indicated Basic Nursing Science 2; 5.6% (n=3) indicated Sociology; 1.9% (n=1) indicated Pharmacology (see figure 4.33).

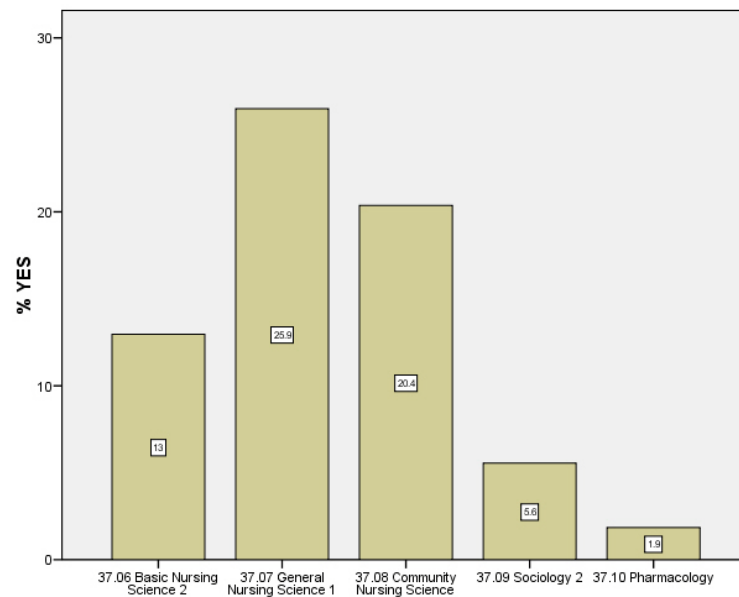


Figure 4.33 Respondents' subjects failed in second year (N=73)

It is important to pass General Nursing Science 1, 2 and 3. Students cannot be allowed to continue with second year if first-year General Nursing Sciences (GNS) has not been passed and this is the foundation of nursing. Failure of this subject cannot credit a student to be enrolled as a nursing auxiliary or enrolled nurse (SANC 1985:3).

Item 35.3: Third year

Of the respondents, 25.0% (n=9) failed General Nursing Science 2; 22.2% (n=8) indicated Midwifery; 13.9% (n=5) indicated Psychiatric Nursing Science, and 11.1% (n=4) indicated Ethos and Professional Practice (see figure 4.34). The results showed that in third year the subject that was failed with high percent was General Nursing Science which is a concern as this is the core of nursing.

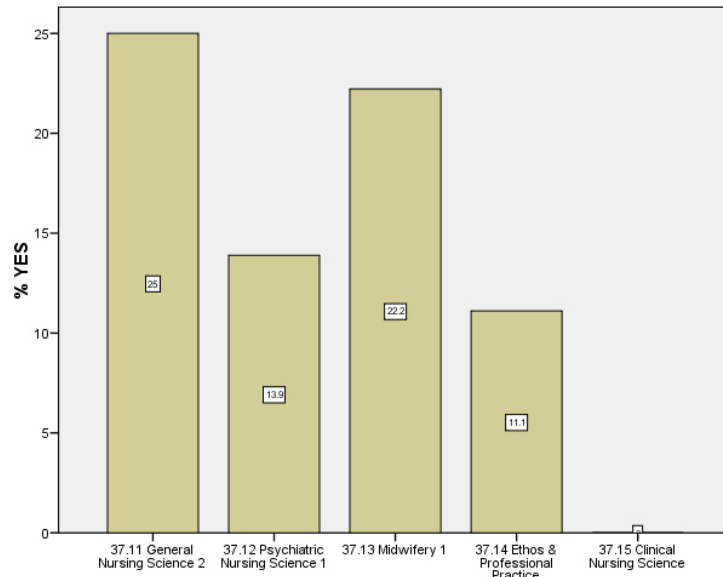


Figure 4.34 Respondents' subjects failed in third year (N=73)

Item 35.4: Fourth year

Of the respondents, 20.0% (n=4) indicated Midwifery II; 15% (n=3) indicated Psychiatric Nursing Science II; 5.0% (n=1) indicated General Nursing Science III, and 0.0 (n=0) indicated Ethos and Professional Practice (see figure 4.35). In fourth year more students were failing Midwifery 11.

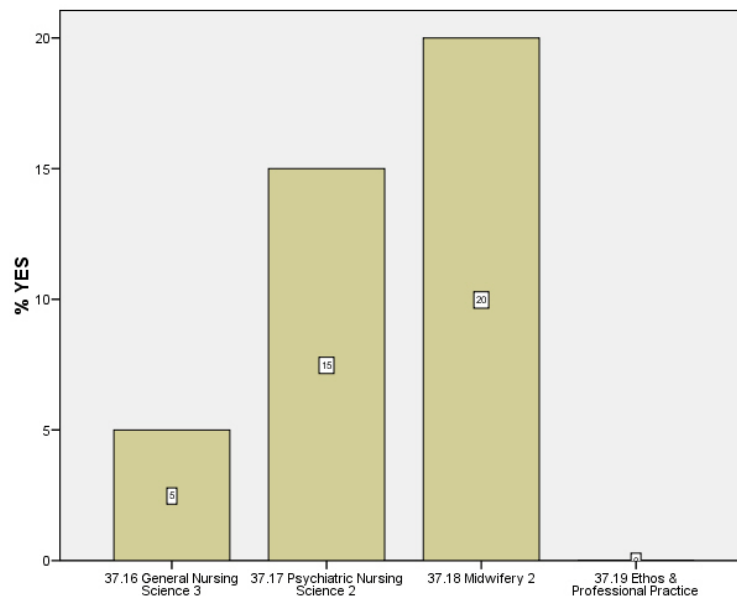


Figure 4.35 Respondents' subjects failed in fourth year (N=73)

Item 36: Reasons for failure

The respondents blamed their failure equally on difficult subjects and social problems (see figure 4.36).

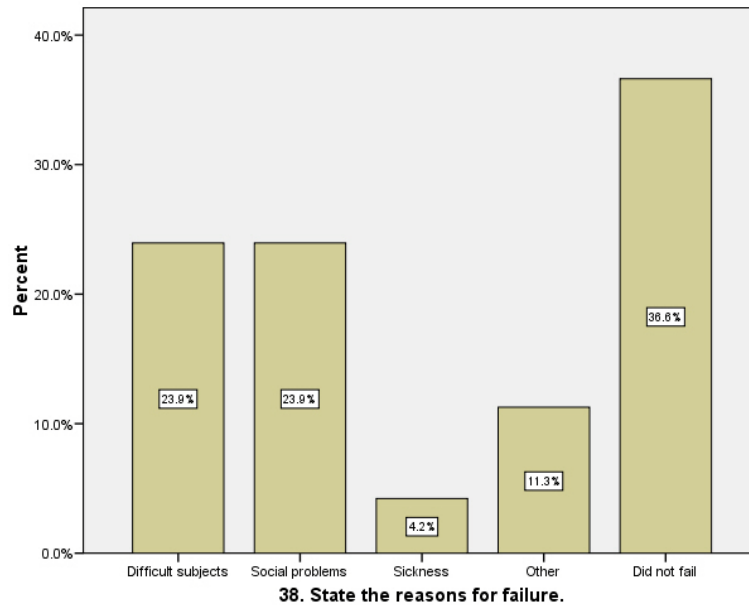


Figure 4.36 Reasons for failure (N=73)

Knowing the reasons for students' problems and reasons for failure of a subject can assist the college to develop strategies to deal with them. Manzini (1998:41-42) found the main reasons being pregnancy, disliking the nursing profession, boredom, and following other challenging career plans.

Item 37: Registered students dropout

This is a mixture of students in different study years, and the respondents indicated different numbers of students in their classes (see table 4.7).

Table 4.7 Registration per study level (N=73)

NUMBER OF REGISTRATIONS	FREQUENCY	PERCENT
20	4	5.5
21	9	12.3
30	1	1.4
35	1	1.4
39	1	1.4
47	7	9.6
50	1	1.4
92	1	1.4
95	11	15.1
100	4	5.5
113	1	1.4
116	2	2.7
120	3	4.1
130	3	4.1
136	1	1.4
150	1	1.4
Total	51	69.9
Missing	22	30.1
Total	73	100.0

Item 38: Student dropout

The respondents indicated different perceptions of the number of dropouts (see table 4.8).

Table 4.8 Student dropout (N=73)

NUMBER OF DROPOUTS	FREQUENCY	PERCENT
0	21	28.8
1	3	4.1
2	4	5.5
3	5	6.8
4	4	5.5
5	4	5.5
6	1	1.4
10	3	4.1
15	1	1.4
20	2	2.7
Total	48	65.8
Missing	25	34.2
Total	73	100.0

Manzini (1998:44) cites Fry, Karami and Tuckel's (1982:24) finding that the majority of student nurses dropped out of nursing because of poor service/working conditions. Student dropout commonly happens during the first year of study and training (Manzini 1998:104). The main reasons for students' dropping out included loss of interest, disliking nursing, better career opportunities elsewhere, social problems, getting married, and pregnancy (Manzini 1998:105). Eiselen and Geysers (2003:119) cites Brawer (1996), Seidman (1996), McGrath et al (1997), and Tinto (1975) that students are more likely to drop out during the first two years of study with the highest percentage being during the first year. These findings further support the above mentioned paragraph that student dropout commonly happens during the first year of study and training as revealed by Manzini.

Item 39: Learning in the practical setting

Of the respondents, 84.9% (n=62) indicated that they had been given a plan for learning in the practical setting, and 15.1% (n=11) indicated that they were not (see figure 4.37).

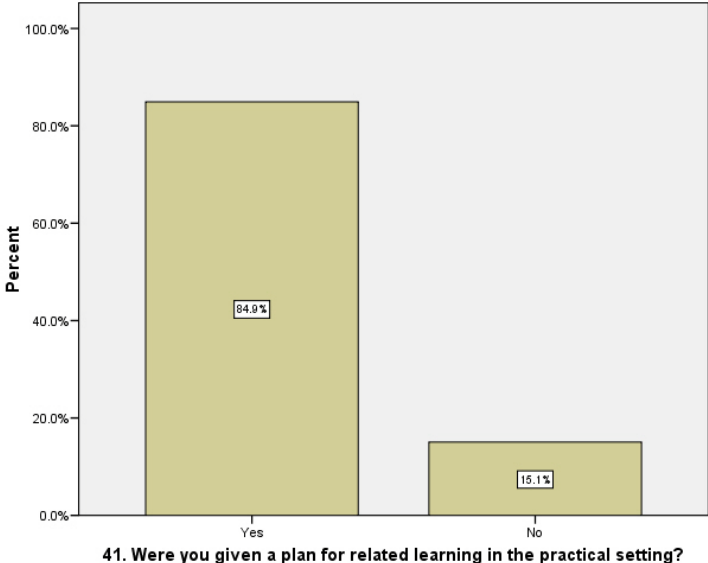


Figure 4.37 Respondents' receipt of a learning plan in the practical setting (N=73)

In terms of the SANC's (1992:9) minimum requirements and guidelines relating to clinical learning, "the overall objective of clinical practica is to provide the student with meaningful opportunities in every area of placement, according to the level of training". This purpose is to enable students to effectively nurse patients.

Policies are guiding documents and assist in controlling the training, avoiding chaos and complying with the prescripts of the SANC, and legislation governing education and training. Students are assessed through these policies to obtain certificates to practice.

In accordance with the SANC policy on accreditation of nursing programmes and institutions (SANC 2002), institutions providing nursing education and training must have policies and contracts that stipulate how programmes will be implemented as well as conditions of placement and the learning contract between the student nurse, the college and the clinical facilities. It must further stipulate how many students will be placed at each ward, for how long, and who will accompany students.

Item 40: Clinical area placement

Of the respondents, 87.9% (n=64) stated that the plan did indicate length of placement, and 12.3% (n=9) indicated that the plan did not (see figure 4.38).

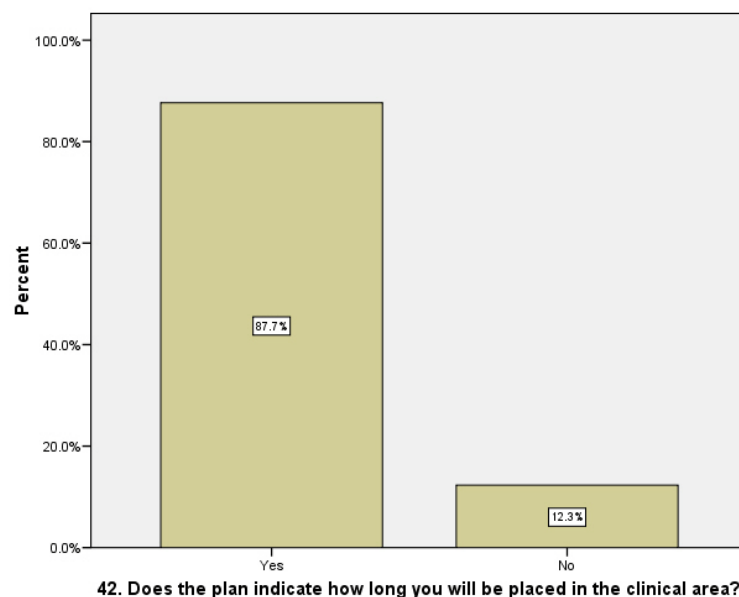


Figure 4.38 Indication in plan how long student will be placed (N=73)

Students must be involved in their plan so that they are part of the learning outcomes. It is easy for them to know what is expected of them if they are involved in their teaching and learning from the beginning. Ntlokotsi (1999:47) found that students were seldom or never involved in formulation of teaching and learning programme and emphasises that ward learning programme be introduced to provide systematic learning experiences for students.

Regarding academic record of education and training, placement should be indicated and cover all periods of placement according to disciplines (SANC [S.a]:annexure II).

Item 41: Reasons for dropout

The respondents were asked to indicate reasons for student dropout (see figure 4.39). Of the respondents, 89% (n=65) indicated failure; 23.3% (n=17) indicated “Other” (but did not specify); 17.8% (n=13) indicated sickness; 11% (n=8) indicated death, and 8.2% (n=6) indicated pregnancy.

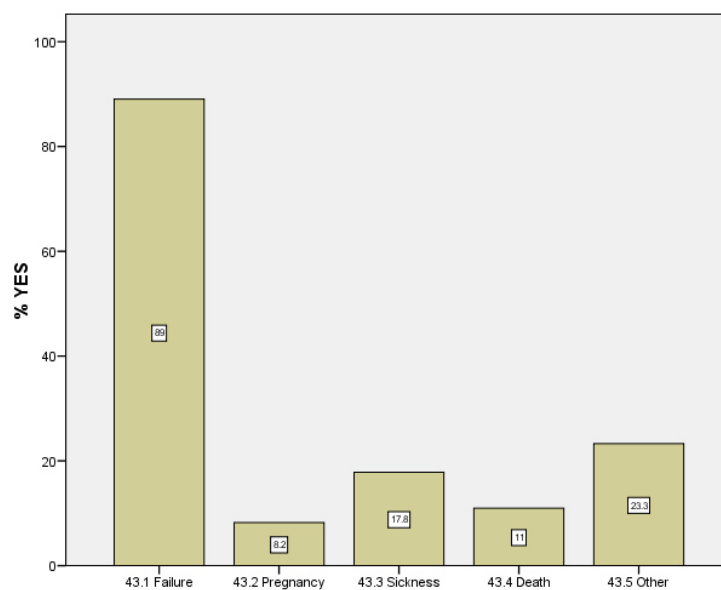


Figure 4.39 Respondents' reasons for student dropout (N=73)

Item 42: Remedial facilities

Of the respondents, 56.2% (n=41) indicated that there were no remedial facilities (see figure 4.40). It is crucial for each tertiary institution to have such facilities. This would enable the institution to assist students and reduce or prevent dropout (see figure 4.42).

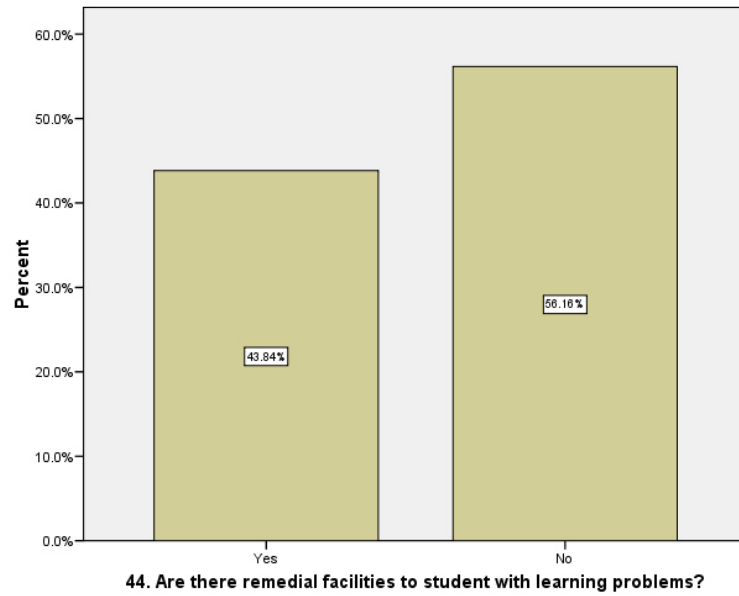


Figure 4.40 Remedial facilities (N=73)

Item 43: Tutor accompaniment

Of the respondents, 82.2% (n=60) indicated that tutors must do clinical accompaniment and 17% (n=13) indicated it is not necessary (see figure 4.41).

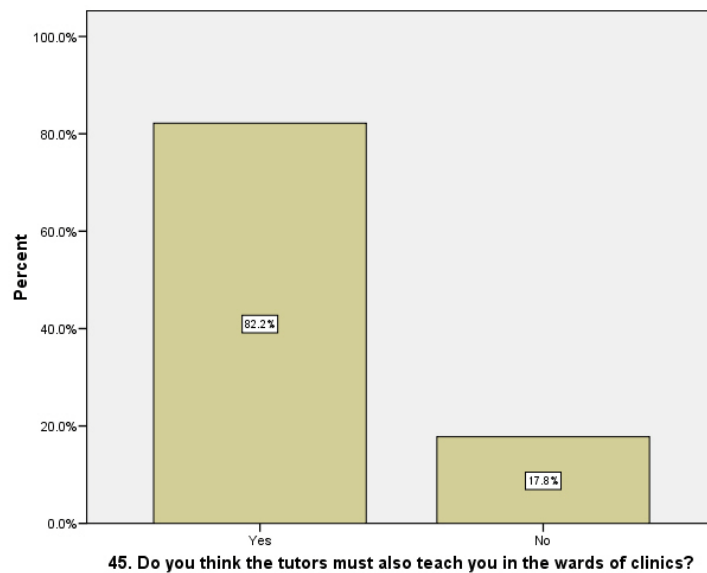


Figure 4.41 Respondents' tutor accompaniment (N=73)

Mkhwanazi (2007:89) found that students would like nurse educators to support them in the clinical area, be more available and do more clinical demonstrations in the clinical area. This is crucial for correlation of theory and practice, and can only be done by

tutors accompaniment to check if theory learned in the class is understood. Mkhwanazi (2007:78) emphasises that integration of theory with practice enhances effective training and education. Moreover, most nurse educators always refer to examples in the clinical area when teaching theory. One of the reasons for dropout was that theory was divorced from practice and a lack of tutor accompaniment (Manzini 1998:44 citing Hawkins 1979:10). The SANC (R425, 1992[b]:22) recommends that qualifications for the appointment of Nurse Educators in a Nursing College or University should include both academic and clinical qualifications, as well as expertise. This confirms that tutors must do clinical accompaniment.

Item 44: Remedial activities provided

Of the respondents, 50.7% (n=37) indicated the use of a variety of teaching methods; 42.5% (n=31) indicated assistance to students to address social problems; 24.7% (n=18) indicated pairing of good students with weak ones, and 23.3% (n=17) indicated that extra tuition was provided for individual weak students (see figure 4.42). It is crucial to address academic problems as that helps them to meet their needs as indicated by Salahuddin. Students who fail exams appear to have the same needs as those who pass hence it is important to have remedial activities. First year contact with students and actively seeking them for follow ups meetings can be used as a remedial activity as explained by Salahuddin that the initial aim being to foster the development of a relationship based on informality and trust Salahuddin (2000:640).

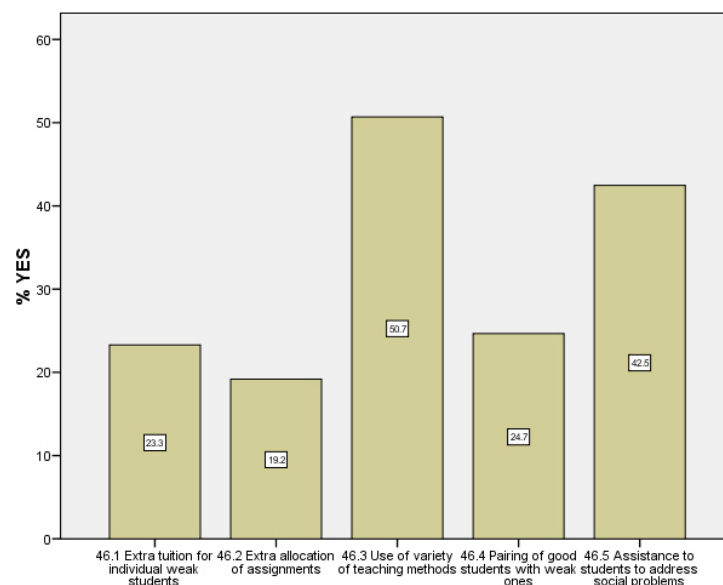


Figure 4.42 Respondents' remedial activities provided (N=73)

Item 45: Prerequisite wards for theoretical learning

In this item, the respondents could select more than one option; irrespective of the study level hence the total exceeded 100. The common wards were Surgical, Orthopaedic, Gynaecological and General (see figure 4.43). Of the respondents, 64.4% (n=47) indicated Surgical; 57.5% (n=42) indicated Orthopaedic; 52.1% (n=38) indicated General; 32.9% (n=24) indicated Urology; 23.3% (n=17) indicated Neurology; 30% (n=22) indicated Urology, Clinics; 28.8% (n=21) indicated Psychiatric and 54.8% (n=40) indicated Gynaecology.

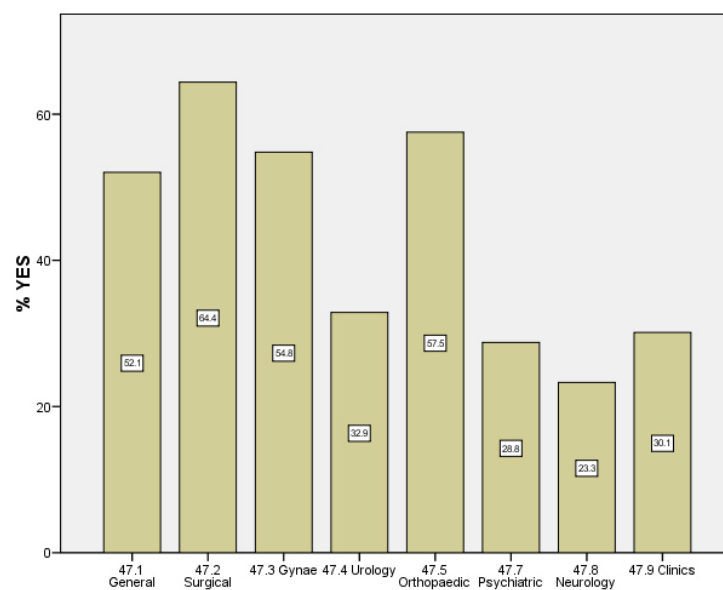


Figure 4.43 Prerequisite wards for theoretical learning (N=73)

In accordance to SANC regulation R425 (SANC 1985:3), there is no stipulation as to which wards students may be allocated to first as long as by the end of the programme students should have covered the hours and been exposed to all prescribed subjects in the regulation. SANC further guides which objectives to cover at a specific level in correlating theory to practice.

Item 46: Assistance in clinical nursing

Of the respondents, 67.1% (n=49) indicated that both tutors and professional nurses should do clinical nursing; 26% (n=19) indicated that only professional nurses should do it; 26% (n=19) indicated only clinical instructors, and 21.9% (n=16) indicated tutors (see figure 4.44).

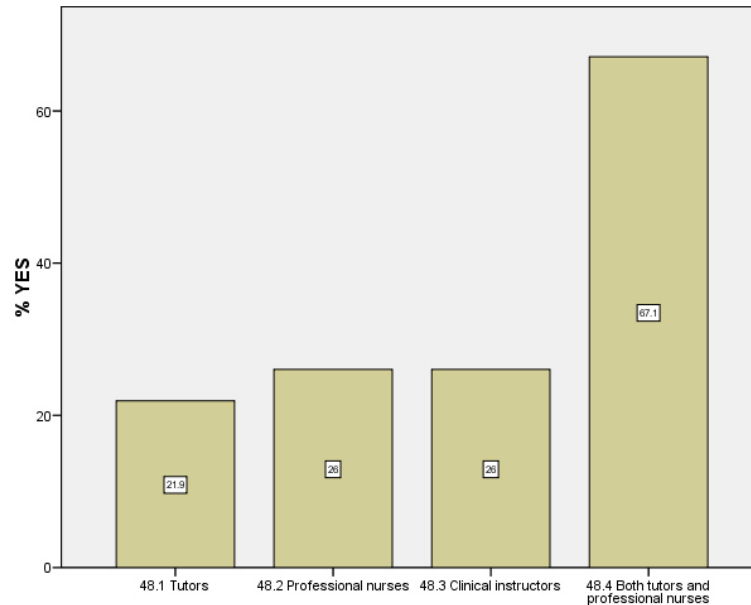


Figure 4.44 Respondents' assistance in clinical nursing (N=73)

The SANC (1992:6) requires both tutors and professional nurses to do clinical nursing as they have the function of clinical nursing and furthermore, the registered nurse or midwife must create the possibility for learning to take place in classroom and in clinical teaching situations.

The teaching staff in the college are also registered nurses therefore both teaching staff and registered nurses need to teach in the clinical setting. However, only the teaching staff have acquired additional nursing education qualifications, while registered nurses have not. The teaching function is inherent in professional functions therefore professional nurses too are required to teach, this is further supported by the Mochaki in his study on clinical teaching by registered nurses that registered nurses have roles amongst which teaching in the clinical setting was one of them Mochaki (2001:34).

They promote active involvement of students in health care activities based on their learning needs. Learning opportunities could be utilized by registered nurses through the exploitation of teachable moments, and their assistance is further provided by acquainting themselves first with students' learning objectives which should be achieved on a daily basis Mochaki (2001:35).

Item 47: Planned clinical accompaniment

Of the respondents, 50.7% (n=37) indicated that there was a planned clinical accompaniment programme, whilst 49.3% (n=36) indicated that there was none (see figure 4.45).

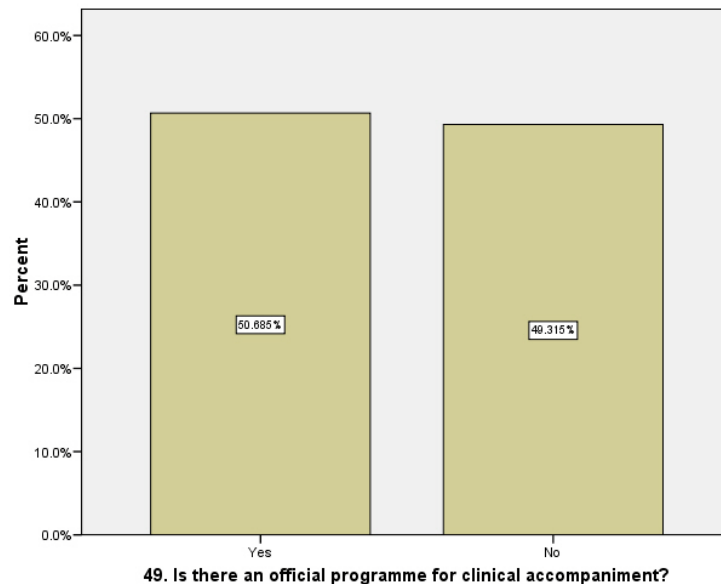


Figure 4.45 Respondents' planned clinical accompaniment (N=73)

Reilly and Oerman (1992), Makoa (2003) and Mkhwanazi (2007) emphasise the importance of planned clinical accompaniment, which develops the students' required skills over time as a result of planned sequential experiences in the clinical setting.

Clinical practice is an integral part of the total nursing curriculum therefore when the curriculum is developed or implemented clinical objectives must also be stated for experiences in the clinical setting as these provide development of the students in terms of knowledge, skills and values inherent in the profession (Reilly & Oerman 1992:348).

Makoa (2003:54) states that clinical accompaniment of student nurses is essential. Mkhwanazi (2007:33) maintains that nurse educators should plan clinical teaching and should avail themselves and support student nurses to acquire the skills needed.

Item 48: Competent in practice

Of the respondents, 93.2% (n=68) indicated that General Nursing Science equips nurses to be competent; 54.8% (n=40) indicated Midwifery; 49.3% (n=36) indicated

Community Nursing Science, and 43.8% (n=32) indicated Psychiatric Nursing Science (see figure 4.46).

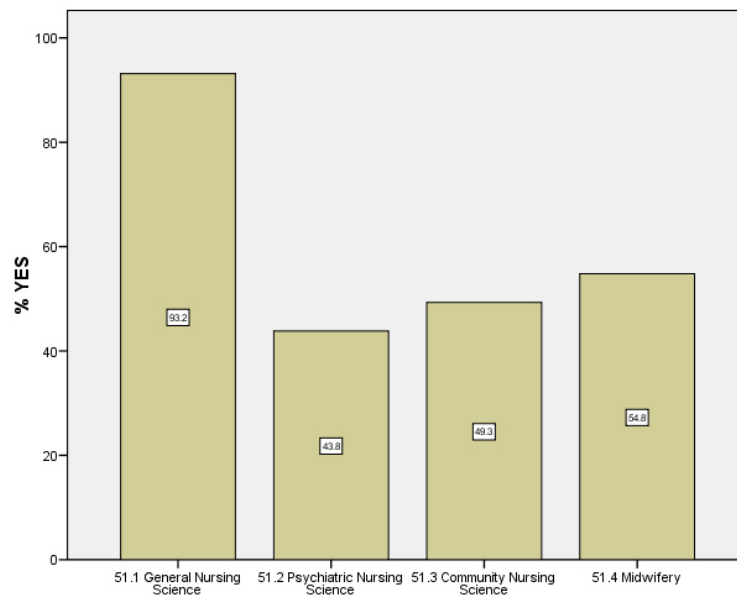


Figure 4.46 Respondents' rating of subject importance in practice (N=73)

In the current comprehensive programme all four disciplines (General nursing science, Psychiatric, Community and Midwifery) are important and equip students to be competent in practice, especially as nursing is more focused on primary health care (PHC) than before. General nursing science is the first priority, however, since without it students cannot qualify as registered nurses.

4.2.4 Section D: Education and training

Item 49: Competent professional nurse training

Of the respondents, 94.0% (n=66) agreed that the training equipped them to be competent professional nurses, and only 9.6% (n=7) did not (see figure 4.47).

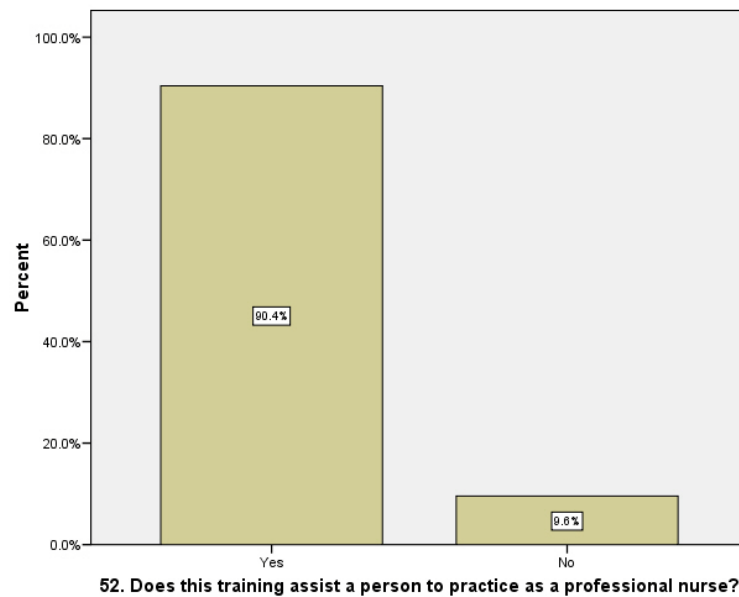


Figure 4.47 Respondents' competent professional nurse training (N=73)

Training assists a student to practice as a professional nurse on completion provided the student has received education and training at an approved nursing school, was registered as a student before, and has successfully completed the programme by having reached all theoretical and clinical objectives, and covered all prescribed periods in theory and practice (SANC 1985:1).

Item 50: Re-writing failed examinations

Of the respondents, 57.5% (n=42) indicated that they were allowed to re-write a failed exam once; 27.4% (n=20) indicated none; 12.3% (n=9) indicated twice, and 2.7 (n=2) indicated that they had re-written three times (see figure 4.48).

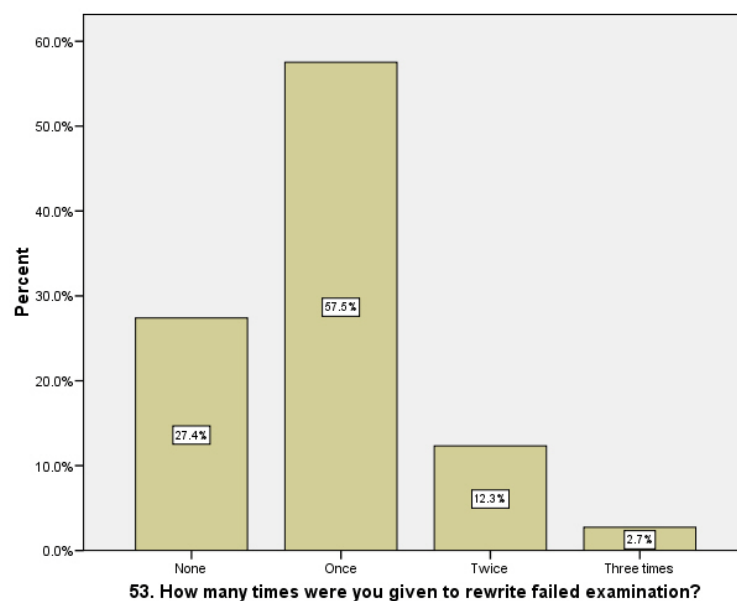


Figure 4.48 Respondents' re-writing failed examinations (N=73)

These results show clearly that, there is a need to examine the problem of repeat failures further in order to initiate proactive or appropriate measures or improve on existing remedial activities.

The National Qualifications Framework (NQF) policy on the retention of credits allows SANC to approve issuing of certificates of professional registration for students who had not acquired an academic qualification from their respective training institutions. Students can therefore be allowed to re-write failed subjects (SANC 2007:5).

4.2.5 Section E: Clinical facilities

Item 51: Supervision provided to students

Of the respondents, only 45.2% (n=33) indicated that sufficient supervision was provided while 57.5% (n=43) indicated that not enough supervision was provided (see figure 4.49).

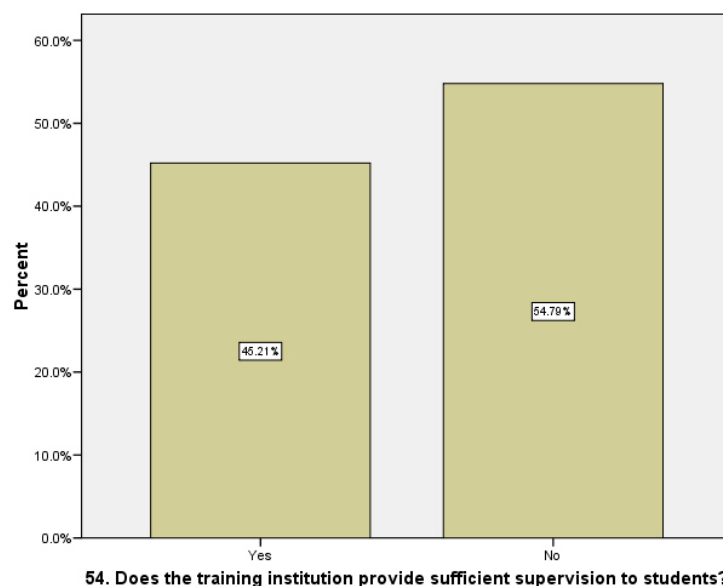


Figure 4.49 Respondents' supervision provided (N=73)

From the results 45.21% (n=33) of the respondents said they are provided with sufficient supervision whilst the 54.79% (n=40) says they are not. Provision of supervision is important as it will facilitate their learning experience and opportunity to reach the set objectives for the specific level as expected.

Mkhwanazi (2007:85) emphasises that supervision in nursing is crucial, as students are dealing with real-life situations, patients' lives. In addition, supervision assist to socialise staff into values and beliefs as well as clinical knowledge (Mkhwanazi 2007:89).

Item 52: Difficulties encountered with placement

Regarding the difficulties they experienced, 54.8% (n=40) of the respondents indicated work overload; 52.1% (n=38) indicated placement in the clinical facilities; 46.6% (n=34) indicated lack of qualified staff to mentor; 43.8% (n=32) indicated difficulties in clinical facilities; 34.2% (n=25) indicated shortage of placements, and 13.3% (n=9) indicated midwifery (see figure 4.50). It is important for student to be placed in the clinical setting for clinical learning as it is stated by SANC minimum requirements and guidelines relating to clinical learning that the overall objective of clinical practice is to provide student nurses with meaningful learning opportunities in every area of placement according to the level of training for the student on completion to nurse efficiently (SANC 1992:9).

Shortage of placement can be either there are less registered nurses who can supervise the students when placed in the wards or students numbers is high in one clinical area to can be supervised. According to (Netshandama-Funyufunyu 1997:30) allocation of nursing students should be evenly distributed so that the service situation is not flooded with them at one time, haphazard allocation would not be conducive either to good learning of the part of the student or to patient care. This study revealed work overload as the highest among others and this is further supported by Mongwe (2001:106) that registered nurses perceived the workload to have increased in the clinical area and this makes facilitation of the learning of student nurses during placement to be difficult.

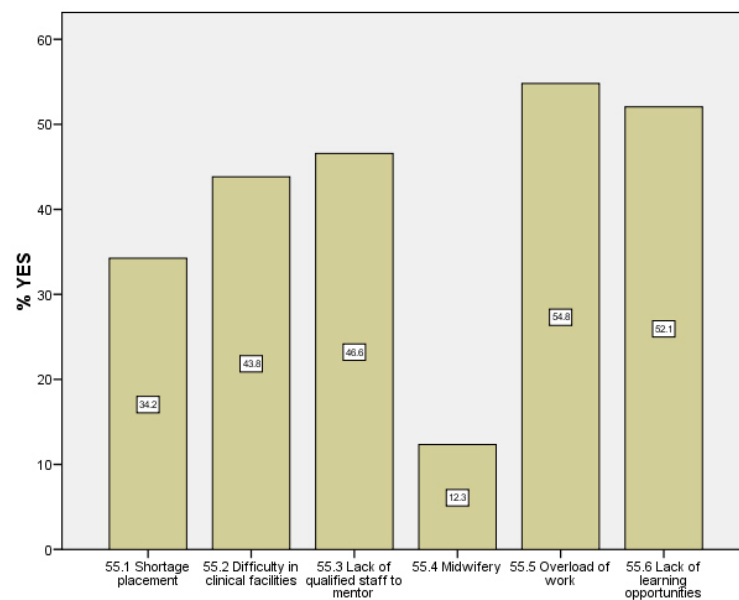


Figure 4.50 Respondents' difficulties encountered (N=73)

Mkhwanazi (2007:86) found that work overload, unavailability of nurse educators in the clinical areas, lack of learning opportunities, and shortage of equipment were the main problems encountered by students.

4.3 CONCLUSION

This chapter discussed the data analysis and interpretation, with reference to the literature review where possible.

Chapter 5 concludes the study, briefly discusses its limitations, and makes recommendations for practice and further research.

CHAPTER 5

Conclusion, limitations and recommendations

5.1 INTRODUCTION

The four (4) year nurse training programme is a comprehensive nursing programme which constituted of four disciplines. It is regulated by R425 of 1985 which is the regulation relating to the approval of and the minimum requirements for the education and training of a nurse (general, psychiatric and community) and midwife leading to registration (SANC 1985:1). At the end of this programme the student will be qualified in all these four disciplines and will be equipped to function as a competent nursing practitioner where she/he will be placed in all health areas. It has come to the attention of the researcher that the number of students is decreasing as the years pass by; hence it was necessary for the study to be conducted to determine the factors influencing the output or reasons why the number of qualified nursing professionals are decreasing

This chapter concludes a summary of the study, discusses findings of the research, implications, limitations, conclusions, and makes recommendations for further study regarding this four (4) year nurse training programme. The study therefore sought to investigate the factors influencing the output in the four (4) year nurse training programme in the Free State Province specifically the Southern Campus so that the actual cause of decreased output is identified for corrective measures to be taken or improvement measures to be put in place to address the causes.

The research objectives of this study were to

- identify the factors that influence the decreased output of the student nurses following the four (4) year nurse training programme
- identify the strategies to be utilised to minimise the decreased output of student nurses following the four (4) year nurse training programme

Literature review revealed that clinical practice has always been a function of nursing and is viewed as an educational experience. Tutors therefore need to do clinical accompaniment to correlate theory with practice.

Regulation R425 of 1985, paragraph 5 makes provision for Nursing Education Institutions to develop their own training programme based on the society they serve. SANC does not stipulate how and when to teach disciplines, as the specific directive is used as a guide as to what to cover, for how many years, number of both theoretical and clinical hours for completion (SANC 1985:2).

5.2 RESEARCH DESIGN AND METHODOLOGY

The quantitative descriptive approach was used. This is the formal, objective, systematic process in which numerical data is used to obtain information about the study. This was relevant to the study hence it was chosen as being the appropriate method. It is the approach towards scientific inquiry where a self administered questionnaire as data collection instrument was used.

The sample included four (4) year student nurses following the four (4) year programme for the course leading to registration as a nurse (general, psychiatry and community) and midwifery in the Free State School of Nursing, specifically the Southern Campus situated in Bloemfontein.

The process followed regarding collection of data, the researcher administered the questionnaire personally to the participants. The nature of the instrument was explained and the purpose of the investigation before it was administered. Data was analysed by using SPSS computer programme version 15 in order to reach a meaningful conclusion. The analysis of data involved descriptive and inferential statistics and was done according to the following sections namely:

- Section A: Demographic data
- Section B: Education and training
- Section C: Education and training programme (curriculum)
- Section D: Education and training institution
- Section E: Clinical facilities

5.3 SUMMARY AND INTERPRETATION OF RESEARCH FINDINGS

Findings that are given and were interpreted from data analysis in accordance to the sections mentioned above and are reflected as follows:

5.3.1 Demographic data

This was Section A of the questionnaire and the study revealed that in terms of race, the nursing profession in the context of the study is followed more by blacks as compared to other races followed by coloureds. They further experience language problems in terms of the programme is presented as 69.9 % (n=51) of respondents were blacks. They are mostly speaking Sesotho and Setswana, although all students in all levels had done English as a subject at high school.

In respect of standard passed, they had passed Std 10 (Grade 12) and were therefore meeting requirements for entry into the programme as prescribed by regulation R425 of 1985 as amended (SANC 1985:2).

The common ages were between 25-29 years and mostly females as compared to males. This confirms the assumption that nursing is followed in large numbers by females as compared to males. The study further reveals that in terms of marriage, they were unmarried and this can be seen from their ages that they are coming from school and had not made commitments yet, although they were on the onset of starting the family. This may have impact towards the end when they complete as they may fall pregnant before completing the programme, is four years. The majority of these students were supported by families to follow nursing that means they had full support during their training period although it was more emotional.

In terms of the respondents, the study further revealed that the students have all done relevant subjects to nursing whilst they were still at school.

5.3.2 Education and training

This section revealed that the students indicated various reasons why they chose nursing as the preferred career which means that their choices can contribute to

success. This was further confirmed by Ngidi (2007:725) where she indicated that appropriate choice of programme of study was among the first top ten responses given by students.

5.3.3 Training programme (curriculum)

- **Admission to programme**

Of the students, 72.6% (n=53) entered the programme through application as revealed by the study. This is a good indication that they met requirements as prescribed by R425 of 1985 as amended, however others met requirements through recognition of prior learning approach (SANC 1985:2). Others entered through application of study leave.

- **Learning contract**

It is a concern that some students were not aware of this as it is a document that is required to be available which spells out all the rules and regulations of how the nursing education institution operates and how the programme as a whole is provided. It is not clear if it is not there or they don't understand what exactly it is. Every student need to have it in his/her file and they all have to know the contents and what is expected from them during their training.

- **Programme objectives**

The study revealed that these are explained to the students which mean they know exactly what is expected from them. It further revealed that objectives were explained which is a positive sign in contrast to the results of the previous research conducted by other researchers where they indicated that these were never or seldom explained to them (Ntlokotsi 1999:48).

- **Teaching methods**

The lecture method is revealed by the study as the one which is commonly used as indicated by 95.9% (n=70) followed by group discussions with 80.8% (n=59). The use of

demonstration, simulations and workbooks are teaching strategies that enhances concrete experiences and active experimentation (Ntlokotsi 1999:96).

- **Difficult subjects failed**

The study revealed that in each level there was a subject that was indicated by the students in their respective levels as being difficult and that they failed. In the first year Fundamental Nursing Science was indicated as being difficult and it is further supported by failure rate percentage (32.9%) thereof.

In second year of the programme, the same percentage namely 22% (n=12) of respondents indicated General Nursing Science 1 and 20.4% (n=11) Basic Nursing Science 3 which is 50/50 meaning this could be experienced by the same students. This clearly shows that out of total of 19 first year students are complaining of these two subjects and is confirmed by 29.9% (n=14) of respondents out of total of 17 having failed General Nursing Science 1. The study further revealed that 20.4% (n=11) of respondents failed Community Nursing Science which was initially not indicated under subjects that are difficult in item 29.2 in chapter 4. This raises a concern as it does not correspond with what they have indicated, Basic Nursing Science was indicated as being difficult, but subject failed is Community Nursing Science and not Basic Nursing Science.

In the third year, half or respondents 22.2% (n=8) indicated psychiatric nursing science followed by Community Nursing Science 2 in addition as also being experienced as difficult with a high failure rate also. In the third year General Nursing Science 2 followed by Midwifery 2 is failed as compared to Psychiatric Nursing Science, which they have indicated as being difficult in third year. This does not correlate with what they have indicated which is a worrying factor, as subjects that are indicated as being difficult are not the subjects being failed as it can be normally expected.

In fourth (4) year 35.0% (n=7) of respondents indicated Midwifery 2 as being difficult and it is confirmed as being failed also with regard to subjects being failed in study level. This clearly proved that students are experiencing difficulty with midwifery.

In general reasons for failure given by Manzini confirms that subjects were also reasons indicated by students, however there was no indication of levels but all the subjects listed above were experienced as being the reasons. They indicated inability to deal with contents of all subjects Psychiatric Nursing Sciences being the highest with 28.9% followed by Midwifery with 20%. Poor performance was also one of the reasons that failure remains still high with 17.8% in Psychiatric Nursing Science followed by Midwifery with 13.3% (Manzini 1998:135).

5.3.4 Education and training institution

- The institution has a librarian who is available to assist students in all levels in finding the relevant materials especially finding books 61.8% (n=67) 57.5% (n=42) and articles between 7:30 -16:00. There are no library facilities earlier before 7:30 and after 16:00 to accommodate those students allocated in the clinical facilities and wanted to utilise the library after hours.
- Ninety four point five percent (n=69) of students, which is the majority indicated that there are prescribed books for each level.

5.3.5 Clinical facilities

- **Accompaniment**

The study revealed that accompaniment must be done by both teaching staff and professional nurses in the clinical facilities. All professional nurses irrespective of where they are allocated have a teaching role to fulfil. It is therefore required that if teaching staff is not available the professional nurses must take up the role of teaching.

Difficulties raised by students with regard to problems encountered in the clinical facilities were: overload of work, lack of learning opportunities and lack of qualified staff to mentor them. The nurse educators to be more available and do more clinical demonstrations (Mkhwanazi 2000:89).

5.3.6 Factors influencing decreased output

- Language was one of the aspects amongst others in factors that influence output of the four (4) year nurse training programme and the majority speaks Sesotho, followed by Setswana and English.
- As the majority of students were breadwinners, commitment as one of the reasons that hampers students' studies. Although the majority of the students were breadwinners the study reveals that the support they received from the family was more emotional than financial. Financial constraints can lead to students not buying prescribed books as 41.1% (n=30) indicated that they were using photo copy item which is illegal.
- Stress was caused by money problems as indicated by almost half of students 49.3% (n=36).
- The study further reveals that the majority of students entering the four (4) year nurse training programme at least met the requirement or criteria as they have passed Std 10 (Grade 12). The study reveals that most of the students were not forced to follow nursing but they chose it themselves. If they have chosen it as a career themselves and were passionate about it why the decreased output. This is further supported by voluntary entering nursing as the majority had entered through self application.
- Depression seemed to be experience by students during their training and this is further supported by the study done by Manzini (1998:135). She stated that emotional problems were among common causes of drop out of nursing.
- Moods swings also were highlighted by students. This might be experienced by those from age 20-29, as the majority of students were between those ages.
- Social problems were indicated as reasons for failure, however no specific social problems was indicated. The question did not provide specific social problems.

The following is a summary of reasons as found in literature review for decreased output:

- High drop out rates especially in the first year of study (Manzini 1998:104).
- A possibility of qualified nurses seeking employment opportunities abroad.
- Students were not aware of what nursing at both ward and community level is.

- Student becoming pregnant and married or married and become pregnant to fulfil the marriage expectations (Manzini 1998:41).
- They dislike nursing and become academically bored preferred to rather follow more challenging careers (Manzini 1998:42).
- Inability to cope with the programme (Manzini 1998:133).
- Lack of faculty support was also pointed out as a factor. This causes students either voluntarily or involuntarily withdrawing from the programme.

5.3.7 Strategies that can be used to address decreased output

Career guidance from school as early as in grade 9 and learners should be guided which subjects to choose for different careers.

The curriculum needs to be reviewed every three years as the environment is constantly changing. The curriculum also needs to change to be in par with the modern trends and to keep abreast with new developments. Nursing is recognised internationally therefore the programme has to be sensitive to the global community also to avoid boredom as indicated by some students that the reasons for drop out was the nursing profession that was boring and they followed other challenging professions.

Different teaching methods for example assignments, case studies, projects, demonstrations should be used because of diversity of nursing, competence and difference among learners. No one method is sufficient and the teacher must choose depending on the Outcomes and characteristics of the learners (Reily & Oermann 1992:161).

The Department of Health to recruit more professional nurses in order to address the shortage of nursing staff as indicated as being one of the problems encountered in the clinical facilities. Shortage of staff hampers effective clinical accompaniment, support and supervision of students. Both teaching staff and professional nurses should work together and draft teaching plans together for effective correlation of theory with practice.

5.3.8 Implications of decreased output

- **Nursing profession**

The country is losing more nurses as when they have failed more than more or less three times even when given opportunity to rewrite, if students continue failing, they in turn will lose interest and discontinue the course.

Negative impact on the whole profession as other students from school will not want to follow it in future when more nurses are failing in large numbers.

Poor nursing care takes place due to shortage of staff. Shortage of staff has been identified as far back as 1998 by Manzini and it is still prevailing, meaning it needs to be addressed vigorously (Manzini 1998:292).

- **Teaching staff**

It is discouraging for teaching staff if students are failing subjects more than once, this will demoralise them. This is further confirmed by Manzini that teachers become demoralised and loss of self esteem that can be very difficult to rebuild (Manzini 1998:146).

5.4 CONCLUSIONS

In conclusion the following research findings were as follows:

- A high percentage of students are experiencing difficulty in each subject per level, which resulted in them failing those specific subjects
- Students are being stressed by money problems as they are also the breadwinners in the family. They are expected to support their families and provide for they also in terms of their training for an example buying of prescribed books instead they make photocopies of prescribed, materials like books.
- Many students indicated that clinical facilities have shortage of man power in respect of professional nurses who must mentor them when placed in the clinical

facilities as a result they are being utilised as the working force themselves which hampers their clinical learning opportunities.

- More students are meeting requirements to follow the nursing programme and have studied subjects that are relevant to nursing education currently like Biology, General science, Mathematics, English.
- It can therefore be finally concluded that the main problems encountered by students are stress and difficult subjects. Failure, being used as working force due to shortage of staff in the clinical facilities. This was also revealed by Manzini (2000:111) under support in the clinical area where pupil nurses were complaining that they were used as workforce sometimes and this is also being encountered by student nurses.

5.5 CONTRIBUTIONS OF THE STUDY

The research findings will contribute to nursing education, practice and the community to be served. The findings and recommendations to be published for the whole country to learn from them, identify problems similar to their situations and rectify where applicable.

➤ Nursing education

- The research findings will contribute to bring about improvement to the nursing education as a whole in terms of the whole programme as to how it should be formulated for an example, it must be in par with the new curriculum system of the Department of Education by being outcome based.
- Lecture method, as the old traditional method of teaching, should be minimised to focus on those that improve independence, creativity, analytical skills and problem-solving techniques. The teaching objectives should be outcome based, the students and community to be actively involved from its inception and must be formulated in such a manner that it will benefit the community to be served. Tests should, as the old method of evaluation, be minimised.

➤ **Nursing practice**

- Clinical accompaniment as the integral part of nursing education is emphasised as being very crucial. Active involvement of students, as well as professional nurses, in drafting the clinical outcomes to ensure that the outcomes will be reached.
- Both professional nurses and teaching staff must be involved. Various clinical teaching and evaluation methods to be used for students to be more independent.

➤ **Community**

- The community will benefit as the curriculum would have been formulated in accordance with their health needs. The active participation of the community will lead to improved health and prevention of diseases and avoidance of complications. The primary health care approach is the preferred current approach to health care in this country.

5.6 RECOMMENDATIONS

Following the findings from the previous chapter, the recommendations are focused on further research, nursing education programme and training institution.

➤ **Research**

It is suggested that future studies to be conducted in the other eight provinces as this study was focusing only in the Free State Province. Problems identified and encountered by respondents of this province could be overcome differently in specific ways or that the research population for future research is defined differently.

Research in areas such as general nursing science, biological sciences, psychiatry and midwifery be investigated whether these are problems in integrating theory with practice (Masele-sele 2000:148).

All areas of student education and learning to be researched to find out if they are experiencing the same problems as those identified from previous researches that were conducted including this one.

Even if high drop out rate of student nurses is indicated as a major concern there is little research available regarding reasons why student leave. Therefore it is recommended that more research is conducted focussing specifically on the reasons why they leave the programme before completion.

More open ended questions need to be included or qualitative research approach to get the in depth or perception as well as attitude of students regarding four year programme and why subjects indicated in all levels are encountered as being difficult and failed.

➤ **Teaching programme**

It is therefore necessary for students to be taught in English from Primary school to avoid difficulty when entering tertiary education as many tertiary institutions are presenting their various programmes only in English.

The nursing programme could be more practice related as that will better prepare them for professional life.

The nursing education institution should utilise alternative teaching strategies and allow students to be actively involved in their own teaching and learning as this is further confirmed by Ntlokotsi (1999:97) under recommendations.

The students revealed that they have experienced Fundamental Nursing Science as difficult then further research in what exactly is difficult. Further research with regard to this subject need to be done and whether the teaching methods are appropriate or tutors who present this subject are not competent to present it.

Student nurses need to be involved in the formulation of the objectives especially where they indicated that the subjects are difficult and they are failing those subjects e.g. Fundamental Nursing Science, General Nursing Science.

Group discussions as a teaching strategy should be more used, as compared to the majority who indicated formal lecture as being frequently used because this provide growth of learners in group interaction and also in their ability to find information on their own and share that information with other. If group discussions will be used more constantly the learner will begin to move from a state of dependence to one of independence (Mkhwanazi 2007:78). The lecture method not to be used frequently as revealed by the study as it does not promoted growth and independence and should therefore be minimised. This is crucial as the current curriculum is outcome based and teaching strategies like assignments, projects and case studies are important to improve research and analytic skills of the students.

➤ **Resources enabling training**

It is recommended that the library's time of closing should be extended because the times indicated might be only applicable to the Free State Province and only the college, not the university, as this study scope were only the Free State colleges.

Further studies need to be extended to other provinces, universities and private nursing institutions as it may reveal that the libraries of these institutions closes late and the library policies differ in terms of their operations/functions.

As recommended by (Ntlokotsi 1999:97) that library accessibility should be addressed as professional nurses in teaching hospitals form part of a comprehensive teaching team and they should also therefore have access to a library.

Significant support and guidance to the nursing student is needed in order for them to overcome the adolescence problem.

Inclusion of the teaching staff, clinical facilities and professional nurses in future research to get a holistic picture of the factors influencing output as the current study only focused on students, programme, institutions and clinical facilities only.

5.7 LIMITATIONS OF THE STUDY

Limitations of the study can be summarised as follows:

The research findings cannot be generalised to all nursing education institutions in the whole country, as the study was only conducted on the Southern Campus of the Free State School of Nursing. Generalisation of the study is therefore limited to the Free State Province and it is recommended to the same study in the other provinces.

In the Universities there are faculties which provide nursing education and private nursing colleges and the set up of these institutions may differ with that of the college, therefore the responses of the respective respondents of the above mentioned Nursing Institution may differ too. This is brought by diverse problems, theory and clinical placements.

Allocation also of students to do clinical accompaniment may differ (Makoa 2003:79). Availability of resources also varies greatly from one Nursing Institution to the other.

Teaching staff and professional nurses in clinical facilities need to be included in the study programme plan.

The study does not show gender in terms of those respondents who indicated that Midwifery 1 in third year and 2 in fourth year are females or males as it is assumed that males are the ones failing midwifery with a high number because this subject deals with female parts, therefore it is difficult to understand it as easy as females do. The other reason could be that the number of males was only 26% (n=19) males and 74.0% (n=54) were females. This is just an assumption for further research to focus on gender.

5.8 CONCLUDING REMARKS

The conclusions were drawn from the research findings and are valuable to students, the institution and its programme, and the clinical facilities. The research adds more to the body of knowledge about the profession for improvement of retention of students. The environment is changing so there is a need for the nursing education and practice processes to be reviewed from time to time.

LIST OF REFERENCES

- Ali, PA. 2008. *Admission criteria and subsequent academic performance of general nursing diplomats*.
[Online]: http://jpm.org.pk/ViewArticle.aspx?ERIXLWS_ID=1345 (accessed 11 November 2008).
- Babbie, E. 2007. *The practice of social research*. 11th edition. Belmont: Thomson Wadsworth.
- Babbie, E & Mouton, J. 2003. *The practice of social research*. South African edition. Cape Town: Oxford University Press Southern Africa.
- Babbie, E & Mouton, J. 2001. *The practice of social research*. South African edition. Cape Town: Oxford University Press Southern Africa.
- Billings, DM & Halstead JA. 1998. *Teaching in Nursing*. Saunders: Philadelphia.
- Brink, HI. 2001. *Fundamentals of research methodology for health care professionals*. Johannesburg: Juta.
- Brink, HI. 1996. *Fundamentals of research methodology for health care professionals*. Kenwyn: Juta
- Brink, HIL. 1990. *Statistics for nurses*. Cape Town: Academica.
- Burns, N & Grove, SK. 2007. *Understanding nursing research: building evidence-based practice*. 4th edition. St Louis: Elsevier Saunders.
- Burns, N. & Grove, SK. 2005. *The practice of nursing research: conduct, critique and utilization*. 5th edition. St Louis: Elsevier Saunders.
- Burns, N & Grove, SK. 2003a. *The practice of nursing research conduct: critique and utilization*. 6th edition. Philadelphia: Saunders.
- Burns, N & Grove, SK. 2003b. *Understanding nursing research*. 3rd edition. Philadelphia: Saunders.
- Burns, N & Grove, SK. 2001. *The practice of nursing research: conduct, critique and utilization*. 4th edition. Philadelphia: Saunders.
- Burns, N & Grove, SK. 1999. *Understanding nursing research*. 2nd edition. Philadelphia: Saunders.
- Buchan, J & Colman, L. 2005. *The global shortage of registered nurses: an overview of issues and actions*. International Council of Nurses: Geneva.
- Collins English Dictionary*. 1991. 3rd edition. Glasgow: HarperCollins.
- Creswell, JW. 2003. *Research design: qualitative, quantitative, and mixed methods approach*. 2nd edition. Thousand Oaks: Sage.

- Department of Health. 1999. *Draft health sector strategic framework, 1999-2004*. Pretoria: Government Printer.
- Department of Health. 1997. *White paper for the transformation of the health system in South Africa*. Pretoria: Government Printer.
- Department of Social Sciences. 2000. *Research in the social sciences*. Only Study Guide for PSC201-H. Pretoria: University of South Africa.
- De Vos, AS, Strydom, H, Fouche, CB & Delport, CSL. 2005. *Research at grass roots for the social sciences and human service professions*. Pretoria: Van Schaik.
- De Vos, AS. 2003. *Research at grassroots: a primer for the caring profession*. Pretoria: Van Schaik.
- De Vos, AS, Strydom, H, Fouche, CB & Delport, CSL. 2002. *Research at grass roots for the social sciences and human service professions*. Pretoria: Van Schaik.
- De Vos, AS (ed). 1998. *Research at grass roots: a primer for the caring professions*. Pretoria: Van Schaik.
- Eiselen, R & Geyser, H. 2003. *Factors distinguishing between achievers and at risk students: a qualitative and quantitative synthesis*. Johannesburg: Rand Afrikaans University.
- Exner, RJ. 2003. The identification of psycho-educational factors that inhibit first-year student performance. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Heliker, D. 1994. Meeting the challenge of curriculum revolution. *Journal of Nursing Education*. 33(1): 45-47.
- Johnson, B & Christensen, L. 2004. *Educational research: quantitative and qualitative mixed approaches*. Boston: Allyn & Bacon.
- Kortenbout, EW. 1999. *An analysis of student nurses in comprehensive four-year professional programme during 1997*. Cape Town: University of the Western Cape.
- Lekhuleni, EM. 2002. The perceptions of nursing students, nurse educators and unit supervisors on accompaniment of nursing students in the clinical setting. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Makoa, MG. 2003. The description of the views of nurse educators about their accompaniment role. Unpublished Master's dissertation. Pretoria: University of Pretoria.
- Management College of South Africa. 2003. *Research methods. Study Guide for Management in Business Administration*. Durban: Mancosa.
- Manzini, HN. 1998. Student nurses drop out. Unpublished D Litt et Phil. Pretoria: University of South Africa.

- Marshal, C & Rosemary, A. 1995. *Using quantitative methods in organizational research*. New York: Sage.
- Masele-sele 2000, MD. 2000. Problems in integrating theory with practice in selected clinical nursing situation. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Meltzer, M & Palau, SM. 1997. *Reading and study strategies for nursing students*. Philadelphia: WB. Saunders.
- Mhongo, TP.1998. Towards culture care nursing education: a study of TG Mashaba's transcultural themes. Unpublished D Litt et Phil. Pretoria: University of South Africa.
- Mofokeng, MA. 2003. Beliefs and practices of Sotho antenatal women. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Mokoena, JD. 1999. A career profile of persons who completed the B Cur programme at the Medical University of Southern Africa in the decade 1985-1994. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Mkhwanazi, IS, 2007. The role of the nurse educator in supporting pupil nurses. Unpublished Master's dissertation. Pretoria: University of South Africa.
- Mouton, J. 2003. *How to succeed in your Master's and doctoral studies: a South African guide and resource book*. 2nd edition. Pretoria: Van Schaik.
- Mouton, J. 2001. *How to succeed in your Master's and doctoral studies: a South African guide and resource book*. Pretoria: Van Schaik.
- Ngidi, DP, 2007. Students' and lecturers' perceptions of some factors influencing students' academic success or failure at a historically black university in South Africa. *SAJHE* 21(4):717-732.
- Nieswiadomy, RM. 2002. *Foundation of nursing research*. 4th edition. Upper Saddle River: Prentice Hall.
- Ntlokotsi, JS. 1999. Applied biophysics and biochemistry in the learning experiences of student nurses in the surgical unit. Unpublished Master's dissertation. Pretoria: University of South Africa.
- OECD Glossary of Statistical Terms. 2003. *Education and training statistics*. [Online]: <http://stats.oecd.org/glossary/detail.asp?ID=5437> (accessed on 05 February 2009).
- Oosthuizen, MJ. 2005. An analysis of the factors contributing to the emigration of South African nurses. Unpublished D Litt et Phil. Pretoria: University of South Africa.
- Pilane, CN. 2000. *An exploration of various clinical settings for the educational preparation of student nurses*. Pretoria: University of South Africa.
- Polit, DF & Beck, CT. 2008. *Nursing research generating and assessing evidence for nursing practice*. 8th edition. Philadelphia: Lippincott Williams & Watkins.

Polit, DF & Beck, CT. 2006. *Essentials of nursing research: methods, appraisal, and utilization*. 6th edition. Philadelphia: Lippincott Williams & Wilkins.

Polit, DF & Hungler, BP. 1998. *Nursing research: principles and methods*. 6th edition. Philadelphia: Lippincott.

Polit, DF & Hungler, BP. 1997. *Essentials of nursing research: methods, appraisal and utilization*. 4th edition. Philadelphia: Lippincott.

Polit, DF & Hungler, BP. 1995. *Nursing research: principles and methods*. 5th edition. Philadelphia: Lippincott.

Quinn, FM. 2000. *The principle and practice of nurse education*. 4th edition. Cheltenham UK: Stanley Thornes.

Reilly, DE & Oermann, MH. 1992. *Clinical teaching in nursing education*. New York: National League of Nursing.

SABC 2. 2006. *The news at ten past twelve*. 1 March. Auckland Park: SATVBC.

SANC see South African Nursing Council.

SAQA see South African Qualification Authority.

Saunders, MNK, Lewis, P & Thornhill, A. 2003. *Research methods for business students*. 3rd edition. London: Prentice Hall.

Shelton, JN. 2003. The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology* 5(3):1-4.

South Africa (Republic). 2005. *Nursing Act (Act 33 Of 2005, as amended)*. Pretoria: Government Printer

South Africa (Republic). 1997. *The Higher Education Act (Act 33 of 1997, as amended)*. Pretoria: Government Printer.

South Africa (Republic). 1978. *Nursing Act (Act 50 of 1978, as amended)*. Pretoria: Government Printer.

South African Nursing Council. 2007. *Circular 6. Processing of Applications for Registration with the South African Nursing Council prior to successful completion of the four-year programme by the Regulations Relating to the Approval of and the Minimum Requirements for the Education and Training of a Nurse (General, Psychiatric and Community) and Midwife Leading to Registration (Government Notice No. R425 of 22 February 1985)*. Re-entry into the Council examination to rewrite failed examination papers/portions. Pretoria. SANC.

South African Nursing Council. 2003a. *Circular 12. Retention of credits for paper/component passed in examinations conducted by SANC*. Pretoria. SANC.

South African Nursing Council. 2003b. Circular 11. *Criteria for registration of constituent assessors by South African Nursing Council*: Rivonia: Education, Training and Development Practices: SETA.

South African Nursing Council. 2003c. *Comments on draft standards (SGB)* Doornfontein: Technikon Witwatersrand.

South African Nursing Council. 2002. *Recognition of prior learning (RPL) implementation guidelines: inputs* (EDCO Workshop 29/c3). Report. Pretoria: SANC.

South African Nursing Council. 2001. *Circular 12 Amendment circular 18/99 dated 13 December 1999. Transformation of Nursing Education and Training in South Africa*.

South African Nursing Council. 1993. Regulations relating to the Course Leading to enrolment as a Nursing Auxiliary in terms of Nursing Act 1978 *Regulation R2176, in terms of the Nursing Act, 1978 (Act 50, 1978, as amended)*. Pretoria: SANC.

South African Nursing Council. 1993. Regulations relating to the Course Leading to enrolment as a Nursing Auxiliary in terms of Nursing Act 1978 *Regulation R2175, in terms of the Nursing Act, 1978 (Act 50, 1978, as amended)*. Pretoria: SANC.

South African Nursing Council. 1992. *The philosophy and policy with regard to professional nursing education*. Pretoria: SANC.

South African Nursing Council. 1985. *Regulations relating to the approval of and the minimum requirements for education and training of a nurse (General, Psychiatric and Community) and Midwife leading to registration. Regulation R425, in terms of the Nursing Act, 1978 (Act 50, 1978, as amended)*. Pretoria: SANC.

South African Nursing Council. [S.a]. *Academic record of education and training*. Pretoria: SANC.

South African Qualification Authority. 2002. *The recognition of prior learning in the context of the South African National Qualification Framework: Policy Document*. Waterkloof: Government Printer.

South African Qualification Authority. 2001. *Criteria and guidelines for assessment of NQF registered unit standards and qualifications*. Brooklyn: Government Printer.

South African Qualification Authority. 1995. *South African Qualification Act (Act 95 of 1995)*. Pretoria: Government Printer.

University of South Africa. Department of Health Studies. 2008. Tutorial Letter MNUALL/301/2008. Revised edition. Pretoria.

Van den Horst, H & McDonald R. 2001. Outcomes-based education. Unpublished Master's dissertation. Pretoria: University of South Africa.

Van den Horst, H & McDonald R. 1998. *Outcomes-based education*. 1st edition. Pretoria: Kagisho.

Van Lill, JB & Visser, D. 1998. Quantitative methods in human resource management. Unpublished Master's dissertation. Johannesburg: Rand Afrikaans University.

Van Rooyen, EJ. 2003. *Synchronous and asynchronous teaching options for geographically disposed learners in Public Affairs*. Pretoria: Juta.

Vasuthevan, S & Viljoen, M 2003. Educating for better health; a handbook for healthcare professional. Lansdowne: Juta

Withal, R & Jansen, J. 1997. *Designing your first research proposal*. Lansdowne: Juta.

ANNEXURE A

Letter of approval to conduct research from Unisa

ANNEXURE B

Letters to FSSON and clinical facilities requesting for approval to conduct research study

ANNEXURE C

**Letter of approval from Free State School of Nursing,
Southern Campus and clinical facilities**

ANNEXURE D

Consent form

ANNEXURE E

Questionnaire

UNIVERSITY OF SOUTH AFRICA
Health Studies Research & Ethics Committee
(HSREC)
Faculty of Humanities and Social Sciences
CLEARANCE CERTIFICATE

Date of meeting: 9 FEBRUARY 2006...

Project Title: FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME IN THE FREE STATE PROVINCE

Researcher: KL LEHASA

Supervisor/Promoter: DR U ALBERTS

Joint Supervisor/Joint Promoter: MRS L MONARENG

Department: HEALTH STUDIES

Degree: MACUR

DECISION OF COMMITTEE

Approved

Conditionally Approved

Date: 10 FEBRUARY 2006



Prof TR Mavundla
RESEARCH COORDINATOR

South African Nursing Council

P.O. Box 1123

PRETORIA

0001

The Principal
Free State School of Nursing
Southern Campus
BLOEMFONTEIN
9300

Dear Mrs Van Niekerk

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY

I hereby apply to be granted permission to conduct a research study at your institution. As a student who is doing Masters in Health Science Education at the University of South Africa (UNISA), research study is one of the requirements to complete my study. The title of my topic is **FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME.**

Attached is a letter of permission to conduct the study from UNISA

Yours sincerely



K.C. Lehasa

Student No 7762267

DATE 13/2/06

South African Nursing Council

P.O. Box 1123

PRETORIA

0001

The Nursing Service Manager

Orange Psychiatric Complex

Bloemfontein

9300

Dear Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY

I hereby apply to be granted permission to conduct a research study at your institution. As a student who is doing Masters in Health Science Education at the University of South Africa (UNISA), research study is one of the requirements to complete my study. The title of my topic is **FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME.**

Attached is a letter of permission to conduct the study from UNISA

Yours sincerely



K.C. Lehasa

Student No 7762267

DATE 13/2/06

South African Nursing Council

P.O. Box 1123

PRETORIA

0001

The Nursing Service Manager

Pelonomi Hospital

Bloemfontein

9300

Dear Madam

REQUEST FOR PERMISSION TO CONDUCT A RESEARCH STUDY

I hereby apply to be granted permission to conduct a research study at your institution. As a student who is doing Masters in Health Science Education at the University of South Africa (UNISA), research study is one of the requirements to complete my study. The title of my topic is **FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME.**

Attached is a letter of permission to conduct the study from UNISA

Yours sincerely



K.C. Lehasa

Student No 7762267

DATE 13/2/06



health

Department of
Health
FREE STATE PROVINCE

CLINICAL SERVICES

This serves as notification that Ms N Lehasa has been granted approval to conduct her research entitled "FACTORS INFLUENCING OUTPUT IN THE (4) YEAR TRAINING PROGRAMME IN THE FREE STATE PROVINCE" *for*

As part of the research she will have to conduct interviews with students in the clinical services and you are requested to give her the opportunity to do so

Thank you



S R van Niekerk

22 August 2007

FSSON: Southern Campus
S R van Niekerk Dean
Private Bag X20520
Bloemfontein.
Tel: (051) 403 9832 Fax: (051) 430 6469
E-mail Address: vnieksr@fshealth.gov.za

CONSENT FORM

CONSENT FORM TO PARTICIPATE IN THE RESEARCH STUDY

I.....give informed consent regarding the research study that I have agreed to participate on.

I am aware of the study and its significance as it was communicated to me and that I am free to participate or withdraw from the study at any time

.....

Signature of the participant

DATE:

.....

Signature of the researcher

DATE:

QUESTIONNAIRE

FACTORS INFLUENCING OUTPUT IN THE FOUR (4) YEAR NURSE TRAINING PROGRAMME IN THE Free State PROVINCE

1 OBJECTIVE

The purpose of administering this questionnaire is to determine the reasons of decreased output of student nurses following the four year basic programme. The benefits being that the results thereof will be communicated to the institutions and will assist in addressing some of the reasons identified in the study for future improvements. The questionnaire consists of four sections namely:

- | | |
|-----------|------------------------------------|
| Section A | Demographic information |
| Section B | Education and training |
| Section C | Training programme (curriculum) |
| Section D | Education and training Institution |

2 ETHICAL CONSIDERATIONS

All information herewith provided will be treated confidentially. It is not necessary to indicate your name in this questionnaire.

3 INSTRUCTIONS

- 3.1 Please answer all questions.
- 3.2 Answer the questions by marking with a ✓ mark on the box corresponding to the chosen alternative.
- 3.3 Answer all questions as honestly, frankly and objectively as possible.
- 3.4 Answer according to your own personal opinion and experience.
- 3.5 Give one best or single most appropriate answer.
- 3.6 The questionnaire will take approximately 15 minutes of you time

Answer the questions by marking with a ✓ in the box corresponding to the alternative which is applicable to you or write down your response in the space provided.

SECTION A: DEMOGRAPHIC DATA

1	To which ethnic group do you belong?	
1.1	Black	1
1.2	White	2
1.3	Indian	3
1.4	Coloured	4
1.5	Other (please specify)	5

2	Which language do you speak?	Yes	No
2.1	Afrikaans	1	2
2.2	English	1	2
2.3	Sesotho	1	2
2.4	Tswana	1	2
2.5	Tsonga	1	2
2.6	Zulu	1	2
2.7	Venda	1	2
2.8	Other (please specify)	1	2

3	What is your age	
3.1	<19 years	1
3.2	20-24years	2
3.3	25-29 years	3
3.4	30-34 years	4
3.5	35-40 years	5
3.6	<40 years	

4	Indicate your gender	Male	Female
		1	2

5	Indicate your marital status	
5.1	Partner	1
5.2	Married	2
5.3	Divorced	3
5.4	Single	4
5.5	Separated	5

6	Are you a breadwinner?	Yes	No
		1	2

7	Is your family supportive of your nursing career?	Yes	No
		1	2

8	If your answer is yes indicate which type of support?	
8.1	Financial	1
8.2	Emotional	2

9	How many children do you have?	
9.1	None	1
9.2	One	2
9.3	Two	3
9.4	Three	4
9.5	Four	5
9.6	Five and over	6

10	Did you pass Std 10 (Grade 12)?	Yes	No

11	Have you done the following subjects?	
11.1	Afrikaans	
11.2	English	
11.3	Biology	
11.4	Science	
11.5	Mathematics	

12	Are these subjects relevant in nursing now?	Yes	No
12.1	Afrikaans	1	2
12.2	English	1	2
12.3	Biology	1	2
12.4	Science	1	2
12.5	Mathematics	1	2

13	What medium of instruction was used in Std 10	
14.1	Afrikaans	1
14.2	English	2

SECTION B: EDUCATION AND TRAINING

14	Why did you choose nursing?	Yes	No
14.1	Career	1	2
14.2	Calling	1	2
15.3	Money	1	2
14.4	Passion	1	2
14.5	Encouraged by family	1	2

15	Indicate in the appropriate box how you were admitted to the four year course	
15.1	Through application	1
15.2	Through Recognition of Prior Learning (RPL)	2
15.3	Study Leave	3

16	Indicate your study level?	
16.1	First year	1
16.2	Second year	2
16.3	Third year	3

17	Are you taught how to use the library?	Yes	No

18	At what time does the library open		
18.1	07:30		33
18.2	07:45		34
18.3	08:00		35

19	At what time does the library close		
19.1	16:00		36
19.2	17:00		37

20	Do you have a librarian	Yes	No

21	Indicate in the appropriate box how you assisted in the library	Yes	No
21.1	To find the particular book		
21.2	To find articles about a subject		
21.3	Help with the internet		
21.4	Help with electronic information data base		
21.5	Other		

22	Are there prescribed books for your level of training	Yes	No
		1	2

23	If your answer is yes to no 26 indicate how you obtain them?	
23.1	Buy	1
23.2	Borrow	2
23.3	Share	3
23.4	Make copies	4
23.5	Other (please specify).....	5

24	Indicate if the following aspects are stressing you?	
24.1	Teaching method used	1
24.2	Tutor	2
24.3	Subjects	3
24.4	Money	4
24.5	Colleagues	5
24.6	College	6

26 How do you deal with stress?

.....

.....

25	Which emotional changes did you experience during your training?	Yes	No
25.1	Mood swings	1	2
25.2	Depression	1	2
25.3	Anger	1	2
25.4	Isolation	1	2
25.5	Despair	1	2

SECTION C: TRAINING PROGRAMME (CURRICULUM)

26	Did you receive policies with your learning contract?	Yes	No
		1	2

27	Are programme objectives of all disciplines explained to students?	Yes	No
		1	2

28. List which teaching methods are commonly used to present the programme?	
28.1 Lecture	
28.2 Assignment	
28,3 Case study	
28.4 Group discussions	

29 Indicate in the table below by marking X next to the subject of your level of study which subjects are difficult						
29.1 First year		29.2 Second year		29.3 Third year		29.4Fourth year
Basic Nursing Science 1		Basic Nursing Science 2		General Nursing Science 2		General Nursing Science 3
Fundamental nursing science		General Nursing Science 1		Psychiatric Nursing Science 1		Psychiatric Nursing Science 2
Community Nursing Science		Community Nursing Science		Midwifery 1		Midwifery 2
Nutrition		Sociology 2		Ethos & Professional Practice		Ethos & Professional Practice
Sociology 1		Pharmacology		Clinical Nursing Science		

30 Is four (4) year training programme too theoretical?	
30.1 Strongly agree	1
30.2 Agree	2
30.3 Not sure	3
30.4 Disagree	4
30.5 Strongly disagree	5

31 Which evaluation methods are used	
31.1 Test	1
31.2 Examination papers	2
31.3 Assignments	3
31.4 Practicals	4
31.5 Presentations in class	5

32 Is feed back given regarding the process in achieving the set objectives?	Yes	No
	1	2

33	How are your relationship is with your tutors?	
33.1	Good	1
33.2	Bad	2
33.3	Fair	3
33.4	Excellent	4
33.5	None	5

34	Have you ever failed a subject/s in your study level?	Yes	No
		1	2

35 Indicate in the table below by marking X next to the subject of your level of study which subjects are difficult							
35.1 First year		35.2 Second year		35.3 Third year		35.4 Fourth year	
Basic Nursing Science 1		Basic Nursing Science 2		General Nursing Science 2		General Nursing Science 3	
Fundamental nursing science		General Nursing Science 1		Psychiatric Nursing Science 1		Psychiatric Nursing Science 2	
Community Nursing Science		Community Nursing Science		Midwifery 1		Midwifery 2	
Nutrition		Sociology 2		Ethos & Professional Practice		Ethos & Professional Practice	
Sociology 1		Pharmacology		Clinical Nursing Science			

36.	Reasons for failure?	
36.1	Difficult subjects	1
36.2	Social problems	2
36.3	Sickness	3
36.4	Other	4
36.5	Did not fail	5

37	How many students were registered in your study level	
37.1	1 st year	1
37.2	2 nd year	2
37.3	3 rd year	3
37.4	4 th year	4

38	How many students dropped out of training	
38.1	1 st year	1
38.2	2 nd year	2
38.3	3 rd year	3
38.4	4 th year	4

39	Plan of related learning in practical setting provided	Yes	No
		1	2

40	Does the plan indicate how long you will be placed in the clinical area?	Yes	No
		1	2

41	Indicate in the appropriate box the reasons for drop out number of students	
41.1	Failure	1
41.2	Pregnancy	2
41.3	Sickness	3
41.4	Death	4
41.5	Other	5

42	Are there remedial facilities to student with learning problems?	Yes	No
		1	2

43	Tutors must also teach in the wards or clinics	Yes	No
		1	2

44	Which remedial activities are provided?	
44.1	Extra tuition for individual weak students	1
44.2	Extra allocation of assignments	2
44.3	Use of variety of teaching methods	3
44.4	Pairing of good students with weak ones	4
44.5	Assistance to students to address social problems	5

45	Indicate if you have worked in the following wards before receiving theoretical tuition about the discipline?	
45.1	General	1
45.2	Surgical	2
45.3	Gynae	3
45.4	Urology	4
45.5	Orthopaedic	5
45.6	Psychiatric	7
45.7	Neurology	8
45.8	Clinics	9

46	Who must do clinical nursing?	
46.1	Tutors	1
46.2	Professional nurses	2
46.3	Clinical instructors	3
46.4	Both tutors and professional nurses	4

47	Is there a official programme for clinical accompaniment	Yes	No
		1	2

48	Four (4) year training programme	
48.1	General Nursing Science	1
48.2	Psychiatric Nursing Science	2
48.3	Community Nursing Science	3
48.4	Midwifery	4

SECTION D: EDUCATION AND TRAINING INSTITUTION

49	Does this training assist a person to practice as a professional nurse?	Yes	No
		1	2

50	How many times were you given to rewrite failed examination?	
50.1	Once	1
50.2	Twice	2
50.3	Three times	3

SECTION E: CLINICAL FACILITIES

51	Does the training institution provide sufficient supervision to students?	Yes	No
		1	2

52.	What are the difficulties that you experience with placement in clinical facilities?	
52.1	Shortage placement	1
52.3	Lack of qualified staff to mentor	2
52.3	Overload of work	3
52.4	Lack of learning opportunities	4

THANK YOU FOR YOUR PARTICIPATION