

**THE PROBLEMS ASSOCIATED WITH PREGNANCY AMONGST
STUDENT NURSES IN THE NORTHERN PROVINCE**

by

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DECLARATION

I declare that "The problems associated with pregnancy amongst student nurses in the Northern Province" is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references.

ML Netshikweta.

ML NETSHIKWETA

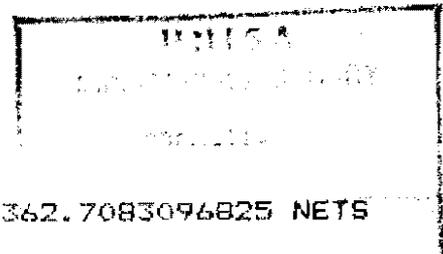
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DEDICATION

This work is dedicated to my daughters Londani, Livhuwani, Mulalo as well as to all the teenagers in the Republic of South Africa.



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THE PROBLEMS ASSOCIATED WITH PREGNANCY AMONGST STUDENT NURSES IN THE NORTHERN PROVINCE

SUMMARY

The purpose of this study was to explore possible problems associated with pregnancy amongst student nurses in the Northern Province, and to determine whether their studies were adversely affected by their pregnancies.

This study was designed as a quantitative, exploratory descriptive survey to look into the pregnancies of a specific group of students exploring their experiences in the classrooms and in the clinical areas.

During 1998 data was collected by distributing questionnaires to ninety three pregnant student nurses. Sixty-seven (71,0%) of student nurses fell pregnant because they lacked knowledge about contraceptives. Four-six (49,5%) of the respondents delayed seeking antenatal care, although they needed advice and support.

Whilst fifty-eight (62,4%) of the respondents suffered from minor ailments such as tiredness, pre-eclampsia, early bleeding prior to three months pregnancy, and dizziness. Fifty-eight (62,4%) of the respondents encountered problems with their academic progress, as revealed by decreasing marks scored before, during, and after delivery. Student nurses would willingly avail themselves of guidance, advice and support during their pregnancies if they could access such services.

KEY TERMS

- Adolescent
- Adolescent pregnancy
- Contraceptives
- Northern Province
- Premarital pregnancy
- Premarital sexuality
- Sex education
- Sex activity
- Student nurse
- Teenage pregnancy
- Teenage sexuality

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LIST OF ABBREVIATIONS

The following abbreviations were used in this study:

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
HIV	Human Immune Virus
NHS	National Health Services
NP	Northern Province
R425	South African Nursing Council Regulation 425 of 22 February 1985 as amended, pertaining to the basic comprehensive course for education and training as a nurse (general, community and psychiatry) and midwife
RSA	Republic of South Africa
SANC	South African Nursing Council
SPSS	Statistical package of social sciences
SSA	Sub Sahara Africa

UK	United Kingdom
UNICEF	United Nations Childrens' Fund
UNISA	University of South Africa
USA	United States of America
YWCA	Young Women Christian Associations

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Student pregnancies and parenting continue to be topics of intense debate world-wide, including in the Northern Province (NP) of the Republic of South Africa (RSA). Society finds it difficult to remain silent about issues relating to the birth and rearing of children, particularly when the parents in question are very young (Goosen & Klugman 1996:236). In the RSA experiences of very young mothers were confirmed in 1992 when the government made the prevention of pregnancy under the age of 16 one of the targets set for the National Health Service (NHS). In the interest of the health of the nation, the occurrence of conceptions under the age of 16 was targeted to be reduced by at least 50 per cent by the year 2000 (Department of Health 1992:2).

The primary concerns of society and the government include the far-reaching effects of pre-marital motherhood. Young mothers and their infants may experience numerous problems. A study conducted in the United States of America (USA) indicated that young people are at greater risk of serious medical complications, such as low birth weight and poorer outcomes than older women and their infants (Smith & Maurer 1995:581). The view is supported by Bayona & Kandji-Murangi (1996:7) who assert that in Botswana, pregnancy amongst young people entails high health risks in terms of birth complications and potential mortality for both mothers and children.

Student motherhood is not a new phenomenon, nor is it a critical issue. The issue is being a mother between sixteen to nineteen years of age. When adolescent girls become mothers some important future aspects of self-development might not be achieved.

The consequences of early pregnancy include the limitation of girls' education and employment opportunities as was found in research conducted in the USA and in Sub-Saharan Africa (SSA) (Auterman 1991:581; Levy, Perhats, Nash-Johnson & Welter 1992:198; Mmegi 1994:3).

In most black cultures, the important moral rule is that no child should be born out of wedlock, according to the customary laws. However, societies have not strictly adhered to this principle, because illegitimacy seems to be a persistent problem in most societies (Seabela 1990:1; Sikes 1996:26; Statistical Abstracts of the USA 1993:4).

The primary aim of this research is to explore the problems associated with student nurse pregnancies in the NP of the RSA. Unwed motherhood is regarded as being a socio-pathological phenomenon in the RSA both in terms of perspective and in terms of conventional morality (Boult & Cunningham 1993:9; Seabela 1990:3). Student pregnancies and motherhood retard or prevent the development and self-fulfillment of students and their illegitimate children across the world, and the RSA is no exception.

1.2 HISTORICAL BACKGROUND OF THE PROBLEM

The NP is located in the far northern region of the RSA (see Figure 1.1). It is one of the poorest provinces in the RSA with a population of about 4.1 million. It consists mainly of a rural area eighty-eight (88%) with women in the majority fifty-five (55%). The young people on whom the study focused, comprised almost sixty 60% of the population.

The people residing in the province are mostly Pedi, Shangaan and Vha-Venda (Central Statistics 1995:2; Central Statistics 1997:1).

Focusing on the above ethnic groups, the study identified problems associated with pregnancy amongst student nurses in the NP. Unplanned student pregnancies and unsafe abortions continue to be one of the most complex social problems facing the youth in the NP. Between

January 1995 and December 1997, records of two college campuses showed that one hundred and thirty five (135) students out of a population of 1,230 students reported being pregnant. Those who reported pregnancies ranged between the ages of seventeen (17) and twenty-two (22) years, and were either married or unmarried. These figures suggested that some adolescents were not knowledgeable about the consequences of their sexual practices. Furthermore these numbers warranted attention (Griffin 1994:4). These statistics suggested that student nurses might have had inadequate parental guidance on sexuality, making the task of sex education and contraception counselling more essential.

Although no accurate statistics on the student nurses' pregnancy rates were available from the NP hospitals' and clinics' records; college training records indicated that pregnancy among student nurses continued to be problematic. Statistics regarding pregnancies among student nurses were not easy to establish, because many students failed to report their pregnancies, especially during the early stages of their pregnancies.

This study was mainly concerned with the problems related to pregnancies among student nurses, including the causes of the high rate of pregnancies. Prior to the scrapping of the previous policy only one student nurse out of five hundred (500) became pregnant in the NP. Pregnant students reported to the principal or matron in writing within the first three months of pregnancy. Failure to do so could lead to disciplinary steps against the student, including the forfeiture of staying in the student nurses' hostels. All pregnant student nurses had to resign and reapply for re-admission to the programme six months after the birth of their babies (Rules & Regulations 1985:11).

Amendments to the NP regulations concerning pregnancies during training included:

- Pregnancies should be reported prior to twenty-four (24) weeks' gestation.
- No maternity leave would be granted.
- Students should not take more than thirty (30) days' vacation leave in one Calendar year.
- Students should make up for the lost periods/experiences by meeting the specific outcomes.
- Students who missed more than thirty (30) days in one calendar year would be regarded as not having complied with the training requirements, and would be regarded as having failed the level of study (Rules & Regulations 1996:4).

Various countries in SSA are committed to enhancing female education. To do this effectively, it is essential to critically review the existing policies in order to determine the survival of students in educational policies that would hinder rather than promote the attainment of the goal of "Education for all". These need to be reviewed thoroughly and replaced with new policies and strategies which could promote gender equality and reduce female school dropouts (Bayona & Kandji-Murangi 1996:84; Mmegi 1994:4; Munyako 1994:2).

It is in this light that the student nurses are required to report prior to twenty-four (24) weeks' of gestation (pregnancy). It might be possible that students failed to report within twenty-four (24) weeks, as required by college regulations, because of the implications that their pregnancies might have on their studies. This study tried to find out how highly expectant student nurses coped with their studies and their responsibilities for patients in the wards. The study also attempted to find out whether they took thirty (30) days or more vacation leave, and whether the periods of training were extended for those student nurses who did not achieve the predetermined specific outcomes (Rules & Regulations 1996:4).

Many causal factors might complicate the prevention of students' pregnancies. No single intervention could realistically address the diverse and multiple needs of the student nurses in the NP.

Most studies contended that the increase in student pregnancies would seem to be an outcome of social changes. Sexual attitudes and practices have changed and students rebelled against the authority or policies controlling pregnancies during training. These changes resulted in sexual permissiveness as a common feature of student nurses' lives in general (Nicholas 1993:293).

1.3 RATIONALE FOR THE STUDY

Prior to 1994, nursing colleges in the NP had policies stipulating that pregnant student nurses should report their pregnancies to the persons in charge of the colleges during their first three months of their pregnancies. Failure to do so resulted in disciplinary actions. This rule was abolished after 1994 in compliance with the provision of section 12(2)(a) which states: "Everyone has the right to bodily and psychological integrity, which includes the right (a) to make decisions concerning reproduction" (The Constitution of the Republic of South Africa Act 108 of 1996).

With the recognition of this right, one hundred and thirty-five (135) pregnancies were reported among student nurses at nursing colleges in the NP between 1995 and 1997 (Records of Northern Province Nursing Colleges, 1998). During the same period the learning progress of pregnant student nurses dropped. There was no attempt recorded by the nursing colleges to address the causes of these students' retarded progress. The rationale for this study was to explore possible problems associated with pregnancies that could affect the learning progress of pregnant students, attempting to explore the consequences of pregnancies.

Literature seemed to focus on the problems of school girls and their sexual activities, rather than problems experienced by pregnant students, including nurses. Carolissen (1993:5)

remarks on a study conducted in Mamre, Cape Town, that “adolescent pregnancies carry too heavy a penalty to be ignored for the adolescents involved, for their families, the and for our nation as a whole.” Whilst acknowledging that student pregnancies carry too many problems, Boulton & Cunningham (1993:3); Bughalo (1997:4); Stein (1997:2) also assert that African health and education systems are already strained by high population growth rates.

Many African countries, notably those in SSA, are currently unable to achieve the economic growth rate needed to provide equal access to resources for all their people. Social problems are surfacing that tax the welfare systems of many countries (Bayona & Kandji-Murangi 1996:2). The consequences of pregnancies and childbirth rates amongst young people in the RSA with special reference to the NP, justified the relevance and worthwhileness of this research.

1.4 STATEMENT OF THE PROBLEM.

Contrary to popular belief, young peoples’ pregnancies and childbearing are stressful events not only for young mothers, but also for their infants. Of concern is the fact that socio-economic, health, emotional and psychological well-being of many of these young people tend to be below standard. Viewing young peoples’ pregnancies from a health perspective, for example, due to the lack of early prenatal care, adolescent mothers are more likely than most women in other groups to experience problems during pregnancy, as has been proved in a study conducted in the USA (Jones & Battle 1990:7). The prevalence of premarital pregnancies and childbearing among student nurses in the NP gave rise to this study. These pregnant students who resumed their training programmes in order to continue with their peers, experienced problems unique to their situations.

An investigation into the problems associated with pregnancies among student nurses would identify decision-makers in addressing the identified problems. The following research questions summarised the problem and guided the study: “Which problems are related to pregnancy amongst student nurses in the NP?”

This question led to other related sub-questions:

- what factors cause pregnancies amongst student nurses in the NP?
- what methods can be used to prevent unplanned pregnancies among student nurses in the NP?
- what services do the pregnant student nurses need in the NP?
- what strategies should be employed to enhance the utilisation of reproductive health services by young people in the NP?

1.5 PURPOSE OF THE STUDY

The purpose of this study was to explore problems related to pregnancies among student nurses in the NP. The research results of this study could provide a basis for implementing appropriate interventions to assist the pregnant student nurses in the NP. Opportunities to explore some of the problems of the student nurses on a broader scale might be identified. Preventive measures and contraceptive services would also be explored.

1.6 OBJECTIVES OF THE STUDY

This study aimed to:

- identify factors giving rise to pregnancies among student nurses in the NP;
- determine whether student nurses utilised methods of preventing pregnancies;
- identify problems related to pregnancies among student nurses ;
- identify services needed for the pregnant student nurses
- identify what strategies could be employed to promote the utilisation of reproductive health services by young people in the NP.

1.7 SIGNIFICANCE OF THE STUDY

It was envisaged that pregnancy prevention educational programmes would result from this study. Recommendations would be made to the Provincial Department of Health, college campuses and Provincial Departments of Education on how the educational programmes for the prevention of pregnancies during training could be implemented more effectively.

1.8 ASSUMPTIONS UNDERLYING THE STUDY

The research was based on the following assumptions:

- There is a relationship between sexual permissiveness and sexual attitudes, behaviour and the incidence of pregnancies among student nurses.
- There is a relationship between sexual behaviour and the high incidence of pregnancies among student nurses in the NP.
- Premarital pregnancies affect young mothers' self-esteem and academic progress.
- Dissemination of knowledge about contraceptives to young people, can prevent occurrence of student pregnancies in the Northern Province.
- Pregnancies are associated with various minor ailments.
- Low socio-economic status of the families influences sexual behaviour of student nurses.

1.9 DEFINITION OF TERMS

The following terms are defined as used in this study:

1.9.1 Academic year

Period that extends from January to December in every calendar year in all three college campuses of the NP.

1.9.2 Adolescence

A period in the development of the individual between the age of twelve to twenty-one (12-21) in the female (Pilat 1997:7). Adolescence is also defined as a period of changing self-concepts. Contradiction and ambiguity surrounding the individual as he/she strives to gain adult status (Essential English Dictionary 1992:13).

1.9.3 Contraceptives

Agents used to temporarily prevent the occurrence of conception. They include pills, condoms, intra-uterine devices, diaphragms and injections (Ketting & Visser 1994:161).

1.9.4 Counselling

A field of study including a variety of guidance services that help people deal with personal, educational and vocational problems through consultation, discussion and advice (Plotnic 1992:807).

1.9.5 Illegitimacy

In this study, illegitimacy means a child born to parents who are not legally married to each other at the time of the child's birth (Musick 1993:3).

1.9.6 Northern Province (NP)

Northern Province (NP) is the part of South Africa located in the far north of the Republic of South Africa as indicated on the map provided in Figure 1.1 (Central Statistics 1997:2). Botswana borders the Northern Province in the North-West, Zimbabwe in the North and Mozambique in the north-east.

1.9.7 Pregnancy

Pregnancy is the condition of a female after conception until birth of the baby (Bennet & Brown 1998:248; Sellers 1993:173).

1.9.8 Promiscuity

Persons having sexual relations unrestricted by marriage or christian; casual, careless irregular sexual relations (The Oxford Handy Dictionary 1999:670).

1.9.9 Sexual Behaviour

The conduct of people in relation to sexual matters (Kau 1991: 4).

1.9.10. Sex Education

A socializing process, formal and informal, which includes instruction and training in all aspects which may help to form normal and wholesome attitudes, values and ideals in relation to sex (Musick 1993:18).

1.10 ORGANISATION OF THE RESEARCH REPORT

The study is presented as follows:

Chapter 1

It is an introductory chapter. It discusses the historical background, rationale, statement of the problem, significance and objectives of the study. Assumptions underlying the study and definition of terms were also presented.

Chapter 2

Consists of a literature review related to the field of study of this dissertation. Specific attention is given to local, national and international views on aspects relevant to adolescent pregnancies, with specific references to pregnancies among students including student nurses.

Chapter 3

Describes the research methodology applied in the study. It discusses the research design, sampling method and data collection, as well as the approach used to analyse the data.

Chapter 4

Analyses and interprets the data collected during the research.

Chapter 5

Provides conclusions and recommendations for further research and indicates the limitations to which the research had been subjected.

1.11 SUMMARY

This introduced the problems encountered by pregnant student nurses and indicated briefly which aspects will be researched. Relevant literature on student pregnancy and its consequences will be reviewed in the next chapter.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Data required for the literature review was identified with the aid of the following computer assisted data base bibliographies:

- University of South Africa (UNISA) library search, which included CDROM searches of references to South African material, periodical articles and books in the UNISA library and material in South African libraries as well as in international libraries.
- University of Venda library search.

The literature search revealed that considerable research has been done on teenage pregnancies and health related problems, as well as academic problems world-wide, but no previous studies on student nurses' sexuality and pregnancy conducted in the NP could be traced.

The aim of the literature review was to obtain information about the problems experienced by pregnant student nurses at nursing colleges and in the hospitals during their clinical exposure. According to Polit & Hungler (1997:78), the literature review could in addition, generate ideas and provide information to form the foundation of the study.

Furthermore, the literature review would enable the researcher to:

- become aware of what research has already been conducted
- delimit the research theme, and
- acquire certain attitudes and skills (Uys & Basson 1995:17).

There appeared to be limited information related to pregnancies among student nurses in the RSA. Related information about teenage and adolescent pregnancies would therefore form the basis for this study. Knowledge about the extent of premarital intercourse and its associated problems among student nurses in tertiary institutions appeared to come primarily from surveys of varying reliability in the developed countries (Burman & Preston-Whyte 1992:11). The literature revealed that a substantial proportion of unmarried young students in many countries including the RSA are sexually active (Boult & Cunningham 1992:305). In the metropolitan areas of the USA in 1991, 77% of adolescent females, aged 15 years, were reported to be sexually active. In Kenya, 80% of the young female population was found to have had sexual intercourse by the time they reached the age of 16 and in Nigeria 68% of all female adolescents were reported to have been sexually active by the time they reached the age of 17 (Boult & Cunningham 1991:45; Plotnick 1992:809).

The discussion in this chapter was guided by the research question. "Which problems are related to pregnancies amongst student nurses in the NP?"

The question led to other related sub-questions:

- what factors contribute to pregnancies amongst student nurses in the NP?
- what methods could be used to prevent unplanned pregnancies among student nurses in the NP?
- what services do pregnant student nurses need in the NP?
- what strategies could be employed to enhance the utilisation of reproductive health services by young people in NP?

2.2 FACTORS CONTRIBUTING TO HIGH PREGNANCY RATES

This section discusses reasons for becoming sexually active, causes of and reasons for becoming pregnant; attitudes and beliefs about contraceptives and cultural perceptions regarding sexuality and pregnancy with special reference to the NP.

2.2.1 Reasons why students become sexually active

This study's primary objective focussed on an exploration of the problems associated with pregnancies amongst student nurses, and causes of high pregnancy rates. The main assumption of this study was that a relationship existed between permissive sexual attitudes and behaviours, and the occurrence of pregnancies amongst the students (Schofield 1994:16). Therefore, the reasons contributing to sexual activities by students at early ages needed to be explored.

Moilwa (1993:10) states that there is a high level of teenage and adolescent sexuality in Botswana. About 85% of teenage girls are reportedly sexually active by the age of nineteen (19), some of them experiencing their first intercourse at an age as young as twelve (12) years. The problem is compounded by the fact that girls do not limit their sexual involvement to one partner (Moilwa 1993:10)

Children in African villages are often left without parental care for long periods. There might be poor communication between parents and children on the topic of sexual education as it is a cultural taboo in many African cultures. The high rate of sexual practice among girls might be due to the breakdown in moral standards and economic constraints. Young girls might be using their bodies to make money. These factors interact and contribute to the complex problem of teenage pregnancies. It is therefore appropriate that the analysis of teenage sexuality and pregnancy seriously consider contributing societal factors (Duncan 1998:20; Haywood 1996:121; Phoenic 1991:18; UNICEF 1992:20).

Various authors in the USA and the United Kingdom (UK) concur that lack of parental supervision is a major contributory factor to this high rate of sexual practices among teenagers and adolescents.

The majority of student pregnancies in the RSA might be unintentional as a result of a lack of information, ignorance, myths, non-use of contraceptives and low socio-economic status (Kaseke 1996:4). Similarly, in Australia, a study indicates that lack of knowledge on the part of teenagers leads to teenage pregnancies. Due to this predicament nearly fifty (50%) of unplanned pregnancies end in abortion in Australia, where fifteen-thousand (15,000) babies were born to teenagers in 1990. This presents six percent (6%) of all births in Australia (Allen, Haggison & Philliber 1990:87). It appears as if most of the factors mentioned could be common to student nurses as well. This study will attempt to identify factors contributing to student nurses' pregnancies in the NP.

2.3. CAUSES OF PREGNANCY AMONG STUDENT IN GENERAL

The decrease in the age at menarche may be related to early sexual encounters. Studies conducted in the USA indicate that the increase in sexual activities has not been accompanied by increased knowledge about sexual functions, procreation or birth control. Students remain ignorant about conception and the menstrual cycle (Burman & Preston-Whyte 1992:16; Miller, Card, Painkoff & Peterson 1992:47; Musick 1993:52; Smith & Maurer 1995:487). It was discovered at the University of Port Elizabeth that many adolescents believe that a woman cannot get pregnant either during her first intercourse or without experiencing an orgasm. Reportedly twenty (20%) conceived during their first sexual experiences, and fifty (50%) conceived within the first six months of commencing sexual activities (Boult & Cunningham 1992:306; Woolett 1991:56). A study conducted by Ntombela (1992:5) in the Umlazi area of Kwazulu-Natal, revealed that eighty-one (81%) of the respondents were sexually active and that the average age of menarche (onset of menstruation) was found between eleven to twelve and half 11-12.5 years.

The age at menarche seems to influence adolescents' early sexual behaviour. A decreased age at menarche would seem to be an outcome of social changes in life style, sexual attitudes and practices. These changes have resulted in sexual permissiveness as a common feature of life in contemporary society (Peat, Sherratt & Turker 1998:9; Seabela 1990:75). Young people are living in socio-cultural environments, which are markedly different from that in which the older generations lived. Their world is characterised by sexual intercourse and the consequent risk of premarital pregnancies. These are found in the developing and developed countries, including the NP and the rest of the RSA. The average age at which the first pregnancy occurred amongst Zulu girls was reported to be 20 years; and 53% of all primigravidae were women between the ages of 15-19 years (Ntombela 1992:22). This implies that there have been changes in the traditional social structures in general and in the traditional family in particular. The attitudes and reactions towards sexual permissiveness are apparently not strict enough to discourage teenage girls from becoming pregnant.

A study conducted by Ramalebana (1995:27) amongst Vha-Venda schoolgirls in Venda revealed that the average age at which first pregnancies occurred was 11-12 years. This drastic change in the age at which first pregnancies occurred was associated with the onset of early menarche among girls of almost all tribes. Smith & Maurer (1995:587) suggest that in the USA pregnancy among teenagers is not planned but occurs simply through chances. They hold that, as a result of certain factors in the life style of teenagers, they are more at risk of unintentional pregnancies. Counselling might help, but the problem is that by the time the teenagers or adolescents enter the nursing profession, they might already been sexually active, because these students are admitted as from 17 years of age, after successful completion of grade 12.

2.3.1 Lack of insight

Student pregnancies are associated with lack of understanding of the likelihood of pregnancy following sexual intercourse (Parekh & De la Rey 1996:5). A study conducted in London, by Hudson & Ineichen (1991:19) suggests that issues of student pregnancies be predominantly

related to a lack of education and career opportunities for girls from lower socio-economic groups. They may regard early pregnancies as logical ways of finding their roles in life. Poor performance at college, low self-esteem, and poor communication with parents was found to be additional factors associated with student pregnancies in this study.

Schofield (1994:28) at the university of East Anglia, London, found that ignorance about contraceptives, coupled with poor control, are major factors that put young adolescents at risk of unwanted pregnancies. A study conducted in Umlazi, Kwazulu-Natal showed that lack of information appear to be the most significant factors resulting in adolescent pregnancies. This is clear from responses indicating that, "you cannot get pregnant if you have sex few days after you have your period"; You will not get pregnant if you drink much water after sex (Ntombela 1992:3). Although these misconceptions are not exclusive to adolescents, lack of access to reliable information compounds teenagers' problems. Student nurses are no exception. Studies in the RSA, USA and SSA indicate that peers are the most common sources of information about sex and contraceptives. Literature and parents are distant second and third resources for sexual information, followed by schools, ministers and health professionals (Beake & Zimbizi 1996:239; May 1992:499; Moilwa 1993:67; Parekh & De la Rey 1996:5). Researchers in the USA Pollack (1992:288); Walsh & Corbett 1995:278) found that poor performance at tertiary institutions, low self-esteem, as well as poor communication with parents were additional factors associated with student pregnancies.

2.3.2 Peer group pressure

Adolescents may entertain the idea that being sexually active is fashionable, and that the opposite, being sexually inactive, is a sign of abnormality. They may therefore, become sexually active and conceive merely to be accepted by peers. More recent research has looked at the issue from a rather different perspective. A study conducted in Umtata states that peoples' literacy training, education and intellect co-determine the decisions and choices, income category, life styles and living conditions (Dunjwa 1990:7)

This holds true for the students at tertiary institutions in the USA where students with higher intellectual ability, also from the higher or middle income group, are usually more informed on how to control their sexual behaviour, as well as to recent misinformation from their friends (Miller et al 1992:84). Cultural as well as peer group pressures also play an important role in teenage pregnancies. In most rural areas in the RSA, there is a belief that a girl has to prove her fertility to a boy before he will marry her (Dlamini & Mckenzi 1991:28). A study conducted in Botswana revealed that attitude and reactions towards teenage pregnancies are not strict enough to discourage teenage girls from falling pregnant (Lucas 1994:4). World-wide contemporary views and attitudes of societies towards teenage pregnancies are apparently less rigid and strict than at any other time in history.

2.3.3 Experimentation

Teenagers may experiment with sexual intercourse or try to demonstrate their ability to care for a baby or demonstrate maturity by becoming sexually active. A study conducted in three urban areas of the RSA (Soweto, Umlazi, and Khayelitsha) about the knowledge of reproductive functioning and sexual behaviour, found that experimentation was the factor that contributed most to sexual permissiveness and pregnancy (Richter 1996:8).

A similar study conducted in Port Elizabeth found that 37% of the respondents were in favour of becoming pregnant as a means of making the partner responsible for her, because she feared losing him, and also seeking physical pleasure as an escape from loneliness or for encountering new experiences (Boult & Cunningham 1993:10).

Other researchers are of the opinion that in the USA students from low-income families, those with intellectual problems and students who have other problems such as resentment of authority and need to prove their fertility usually engage themselves in sexual activities (Beck 1994:260; Lindsay 1995:18; Young 1990:17).

2.3.4 Resentment of authority

Studies conducted in London and in the USA prove that there are conspicuous signs of tension among adolescents and increased rebellion against authority at home and at school. Boys are more negative towards authority than girls (Callister 1991:232; Field 1994:24). Feelings of resentment towards parents, teachers and/or other authority figures, and lack of responsibility for their own actions may also lead them to use pregnancy as a cry for help (Schofield 1994:17). In addition, adolescents in the USA perceive pregnancy as a way of attempting to gain respect from society or a way of attempting to replace a loss in their lives and perhaps being a failure at school or resentment towards any form of oppression, especially from the management of the school, or they can even see it as a response to stress in their lives (Simpson 1992:25).

A study conducted among the Washington Highland Community in the USA indicates that a teenager said she had always suffered from low self-esteem because of her dark-skinned complexion. The girl decided to have sexual relationship with a light skinned boy so that she would acquire prestige from the community and friends, she therefore decided to have his baby so that he would always be hers (Williams 1991:220).

Some studies indicated that black family structure might exert a significant influence on their decisions about their daughters' sexual permissiveness, and about adolescent pregnancies. It was also found that daughters of matriarchies tended to be more permissive than daughters from patriarchal homes (Flisher, Roberts & Blignaut 1992:104; Johnson 1993:304; Plotnick 1994:880; Smith 1995:140).

Similar studies conducted in Africa indicate that some of the adolescent students, especially those who have had a long or close relationship with their boyfriends, may admit quite openly that they wished to become pregnant. This could be to hasten the date of the marriage which both had planned, albeit in uncertain terms, or to bring to the fore the question of their boyfriends' commitment to them. Many marriages are prompted by such pregnancies.

It also happens that women misjudge their own reactions, and those of their boyfriends, to pregnancy. Faced with such crises one, or both of them, may find their relationship had changed and may be unwilling to proceed with a marriage which seems to have been engineered (Kau 1991:10; Nash 1990:308 & Ntombela 1992:7).

All listed factors might be similar to those that cause high rates of student pregnancies in the NP. This study will explore the reasons prevalent in the NP.

2.3.5 Attitudes and beliefs about contraception

Lack of knowledge about contraceptives and non-use of methods of contraception amongst young people have been identified to be factors contributing to adolescent pregnancies. However, causes of this apparent lack of knowledge about contraceptives and their non-use or ineffective use, need to be further explored.

Various studies conducted on attitudes towards the use of contraceptives in SSA and in the USA report that attitudes against the use of contraceptives are associated with early pregnancies. Research conducted among low-income black adolescents has revealed that such adolescents have negative attitudes towards birth control. They consequently used contraceptives less effectively than their white counterparts (Moiwa 1993:18; Morrison 1990:449; Pilat 1997:51; Shuma 1991:90; Wetsho 1992:33).

Research also indicates the ignorance of 100 respondents who were interviewed in the USA. All stated that they had heard about contraception. However, seventy-seven (77%) stated that they did not know about contraception prior to their pregnancies. Out of this seventy-seven (77%) who had been informed for the first time about contraception following confinement, twenty (20%) were informed at the clinic during pregnancy and 10% by their mothers, older sisters or relatives during pregnancy (Paikoff 1990:204). Whilst sixty-six (66,0%) of the respondents admitted that they had obtained their birth control knowledge primarily through

encounters with health care professionals during their pregnancies (Humerick, Wilkerson & Paul 1991:291).

There is a strong belief among adolescents that should a boy know that you are on contraceptives (family planning) he will think that you are permissive to everybody. There is also uncertainty about who should use contraception, the boy or the girl. Other studies agree that the best and most effective contraceptive was the condom used by males (MacGregor 1993:4; Jones & Battle 1990:420). Similarly, Delamater & MacCorguadale (1990:190) college USA respondents felt that both partners should make sure that contraception is used, regardless of who actually uses a method.

Many students' negative attitudes towards contraceptives are based on traditional concerns about contraceptive methods. More often, these are a result of doubts about their efficiency and concerns about the effects on sexual pleasure, convenience, safety and side effects on the user (Barr, Monserrat & Berg 1992:281).

Most parents and community leaders in the USA believe that contraceptives contribute to promiscuity and associated irresponsible behaviour in society. This view is not confined to the USA only but is also prevalent in the NP of the RSA. They believe that the pill would cause serious side effects such as high blood pressure and infertility (Howard & McCabe 1992:118; Makhetha 1996:31; Page 1990:64). Similar findings were made from a study about pre-natal care among African-American women in Georgia. The respondents are concerned about the side effects of birth control. Contraception was also seen as an interruption of the romantic idea. Most respondents remark that it is so unnatural, it makes sex seem so contrived (Pilat 1997:64; Rakesh 1992:106). This was supported by three researchers who found that most males in the RSA and the USA are strongly against the use of contraceptives by their female partners, because they believe these could encourage prostitution among females (Beitz 1995:10; Hayward 1993:34; Kau 1991:11). Some believe that contraceptives are detrimental to health and reduce sexual libido. Some believe that side effects are amongst other things

skin irritation, weight gain, swollen ovaries nausea, and vomiting and many more (Bhardwaj, Hassan, Zaheer, Bano 1990:229; Woman's health project 1994:14).

It is clear that there is a need to provide a better and more honest view of both contraception and pregnancy to all students. Students need to be informed of the health risks to both the mother and infant and about the emotional stress that is often associated with adolescents', deliveries and parenthood.

It might be possible that these attitudes also apply to student nurses. This study will attempt to explore how student nurses in the NP felt about using contraceptives.

2.3.6 Cultural perceptions regarding sexuality and pregnancy in the Northern Province.

Woodward (1995:17) points out the influence of different cultural groups on teenagers in the RSA with regard to participation in sexual activities. This could be the result of many changes in the social organisation. According to Pilat (1997:74) most African societies fail to identify which of the many changes have contributed to the increased permissiveness with regard to pre-marital sexual behaviour.

Recent literature indicates that issues such as the upbringing of children, traditional sex-education, society's attitude towards teenage pregnancy which is less rigid and strict, teenage contraception, discos and night clubs, alcohol abuse, sex education and so on, almost equally and jointly influence the problem of school pregnancies (Buga, Amoko & Ncayiyana 1996:526; Dlamini & Mckenzi 1991:28; Flisher et al 1992:106).

Unmarried girls' sexual behaviour in SSA is a subject of great interest. In many communities in the SSA customs have changed dramatically within the last few years, from restrictiveness to permissiveness (Shuma 1991:196). Society has failed to identify those morals that contribute to the increase in permissiveness with regard to pre-marital sexual behaviour.

A study was conducted in Venda about problems related to the learning situation of schoolgirls' mothers. The researcher reports some cultural attributes such as the prevention of sexual penetration that was associated with premarital sexual behaviour. The study demonstrated that premarital sexual permissiveness was associated with a change in the cultural practices of Vha-Venda, Shangaans and Pedi (Ramalebana 1995:25).

Culturally, Vha-Venda, Shangaans and Pedi, believe that the attainment of adulthood "puberty" was recognised by puberty rites followed during the initiation ceremony. It is at the initiation ceremony where young men and women are given education about sexual behaviour before and after marriage.

Studies conducted in the RSA and in the USA report that the presence or absence of adolescent initiation ceremonies played a vital role in the sexual expression of these black tribes (Bodibe 1994:16; Hunter 1993:36; Ramalebana 1995:17). Although premarital sexual intercourse was allowed, sexual penetration was forbidden (verbal communication with Vele Mulea of Nzhelele village Venda 1998). Surprisingly, conception was not explained to the initiates.

The unmarried mother in traditional black societies was subjected to punishment and became the subject of scorn. These attitudes towards premarital sexuality and pregnancy were also common for Vha-Venda, Shangaans and Pedi. If the lovers were discovered, severe punishment was inflicted on both, such as killing of the illegitimate child by her parents, and being sent to the Headman where elderly people and young persons have gathered together, in order to be shown to people (Mwamwenda 1990:10). In addition sexual intercourse before marriage among the Northern Sotho (Pedi) and Vha-Venda, was strictly prohibited (Gage & Berliner 1991:140; Khumalo 1996:12). A researcher reports the periodical examination of girls by their mothers and older women of the tribe to ensure that virginity was maintained until after marriage. Surprisingly these three tribes did not talk openly about prevention of pregnancy. Only when young men and women were at the initiation school were they told about masturbation, which they believed may prevent penetration.

These cultural practices were useful in the NP and were found to be positive in the prevention of premarital conception among teenagers. Sexuality education prepares young people to face the changes taking place in their bodies. The correct information can prevent all kinds of tragedies (Goosen & Klugman 1996:236).

2.4 PREVENTION OF PREGNANCY AMONG STUDENTS IN THE NORTHERN PROVINCE

2.4.1 Preventative measures to be taken to help students.

Having a child is a huge step, which involves serious responsibilities, and the decision to have a baby should not be taken lightly. A report published in the USA says that every child has the right to be wanted, loved, and cared for (Miller 1993:159). With the recognition of the Constitution of the RSA, Chapter 2 Section 28(1) every child has the right to a name and a nationality from birth (The Constitution of the Republic of South Africa Act 108 of 1996). The literature suggest that women have to be responsible in preventing the conception of an unwanted child. (Goosen& Klugman 1996:239; Ladner & Gouridine 1992:14).

In most studies conducted world-wide, young people fall pregnant because of lack of information, poor communication between parents and young people, and young people's myths (Kaseke 1996:4). Despite poor communication between parents and young adolescents about sex education, very little has been done towards involving parents in sex education programmes. Researchers, however, have become increasingly concerned about parental involvement in children's sex education. Mayekiso & Twaise (1993:21) at the University of Transkei investigated parental involvement in imparting sexual knowledge to adolescents. These authors found that parents play an important role in transmitting attitudinal and behavioural norms regarding proactive behaviour. They further believe that if sexual matters can be discussed at home in a warm and nurturant environment where parents are supportive

and understanding, the adolescent is likely to make appropriate decisions regarding sexual behaviour.

In some studies it was showed that seventy-two (72%) of teenagers believed that pregnancy can be one of the happiest times in a woman's life, and fifty-four (54%) believed that it would improve relationships (Mwasa 1994:14; Schoeman 1990:15).

Other findings indicate that many young people feel pressurised into sexual relationships with boys because of fear of losing their boyfriends if they do not comply. Intercourse may be a means of ensuring a continued, exclusive, caring relationship (Dearden, Hale & Alvarez 1992:140; Lommel & Taylo 1992:201; Marchbanks 1991:180).

These views show that not only contraceptives need to be taught in schools, but also the effect that pregnancies and parenthood can have on young people. The statistics worldwide show that a great need exists for improved education for teenagers in these areas. Although teenage pregnancy may be a subject touched on in secondary schools, there is a greater need for classes by well informed people to be provided in the teenage years. If these issues were addressed in honesty, students would have a better view of adolescent parenthood. Students need to be informed of the health risks to both the mother and the baby. There is clearly a need to provide a better and more honest view of both contraception and pregnancy to all students.

The following suggestions were made at a Women's seminar about held at on the prevention of teenage pregnancy a World Population Day in July 1996 at Giyani in the RSA:

- families be empowered to disseminate information to their children
- health workers be sensitised to be more pro-active when dealing with the youths
- the male as a factor be given much attention
- the church should be more involved in information dissemination (Kaseke 1996:5).

A study conducted in London concurs that attention should be given to the prevention of pregnancy by:

- declaring student pregnancy a priority
- improving information flow
- promoting the home as the primary focus to control adolescents and introducing comprehensive reproductive health education programmes which are accessible to the youth (Bongiovanni 1997:291).

Lutenbacher & Hall (1998:30) are of the opinion that there is a great need for improved education for students in these areas. Russel, a Professor in Obstetrics and Gynaecology in London, found that increased adolescent pregnancies in many areas is caused by social deprivation. The professor recommended the establishment of recreational facilities as well as informing teenagers about sexuality and pregnancy at an early stage (Hudson & Ineichen 1991:24). Some of the authors in the USA share the same view. Their findings show that lack of recreational facilities were among the major contributory factors to adolescent pregnancies (Allen et al 1990:50; Zabin 1990:250). Recent literature by Bode (1996:278) recommends the introduction of sex education at an extremely young age. All women agreed that to realistically combat student pregnancy, young girls (primary school age) must be explicitly informed of the consequences of sexual intercourse and must be taught how to use and to negotiate the use of birth control methods.

A study on women's health in South Africa, found that thousands of women die every year from illegal abortions and those who survive, suffer the effects of illness, infertility and depression (Goosen & Klugman 1996:474). The right of women to choose whether or not to have children is fundamental. It is possible that, the problems mentioned, are common among student nurses in the NP. The study would therefore suggest that students should also be informed about these options.

South Africa, has announced the release of E-GEN-E, an emergency post coital contraceptive which prevents pregnancy if taken within 72 hours of unprotected sexual intercourse, or in the

obvious failure of mechanical contraceptive methods. Students must be alerted to such readily available information, as well as the availability of emergency contraceptives.

Miller's study showed that teenage participants thought that early sex education was needed from teachers, peer educators, physicians, and parents in order to inform children about sexual intercourse, the consequences of intercourse and birth control methods. The teenagers believed that early sex education would reduce embarrassment, increase knowledge and motivate young people to protect themselves if and when they had sex (Miller 1993:14). In the RSA people can obtain contraceptives free of charge from clinics. Some young people complain that health workers are disapproving and unhelpful to them. Students should know where must they go, to access contraceptive services. Every person has the right to help and support from health workers in taking this responsibility (Goosen & Klugman 1996:240).

2.4.2 Choice of termination of pregnancy

With the recognition of the constitution of the RSA, the president of South Africa assented to the Choice on Termination of Pregnancy Act No. 92 of 1996. The Constitution protects the right of persons to make decisions concerning the reproduction and security in and control over their bodies, recognising that both women and men have the right to be informed. To have access to safe, effective, affordable and acceptable methods of fertility regulation of their choice. Women have the right of access to appropriate health care services to ensure safe pregnancies and childbirth. The decision to have children is fundamental to women's physical, psychological and social health. Access to reproductive health care services includes family planning and contraception, termination of pregnancy, as well as sexuality education and counselling programmes and services.

The State has the responsibility to provide reproductive health to all, including safe conditions under which pregnancies can be terminated without fear or harm.

With the recognition of this right, a pregnancy may be terminated:

- upon request of a women during the first 12 weeks of the gestation period, of her pregnancy.
- if a medical practitioner, after consultation with the pregnant woman, were of the opinion that the continued pregnancy would pose a risk of injury to the women's physical or malformation of the foetus.
- would pose a risk of injury to the foetus (Choice on Termination of Pregnancy Act, No 92, 1996).

2.5 PROBLEMS RELATED TO PREGNANCY AMONGST YOUNG PEOPLE.

This section discusses the consequences of pregnancy for young mothers and fathers as well as the reactions of the pregnant students.

2.5.1 Consequences of pregnancy

Pregnancy has consequences even when it is planned for. However, the consequences become more severe if the pregnancy occurs during teenage years since it is usually unplanned for (McDermott, Drews, Adams, Berg, Hill, & McCarthy 1996:369).

2. 5.1.1 Consequences for the mother

As a result of pregnancy, students may have to drop out of school or fail. There is likely to be poor progress because the pace of studying may decrease. Career opportunities may be limited and force them into low paying jobs. If they decide to marry, their marriage may be unstable or may eventually end in a divorce. For pregnant students who decide to raise their children while remaining unmarried, some could be destined for a life of poverty and reliance on welfare (Malivha 1994:49).

The report presented by Kaseke (1996:4) at a womens' seminar held on World Population Day on 11 July 1996 in Giyani Hall, RSA states that student pregnancies disrupt schooling in the following ways:

- it affects the student mothers' self-esteem
- it increases the risks of becoming HIV/AIDS positive
- it affects the working abilities of the students (Kaseke 1996:4).

A study conducted in London supported that student pregnancies in many ways, truncated education and indicated a poor outlook for mothers and childrens, physically, emotionally and materially. Testing HIV positive increased in London by 1,58%, in 1990, six (6,48%) in 1994 and escalated to ten (10,4%) in 1995. This state of affairs increased demands on the welfare system (Seligman 1997:18).

It was also found in the RSA that pregnant adolescents who get married at younger ages, have a fifty (50%) chance of having more children in life than women who get pregnant at later stages in life (Goosen & Klugman 1996:241). Women in India still begin child bearing at young ages between twelve to eighteen years (12-18), which carries higher health risks than pregnancies between twenty-one to thirty-four (21-34) and can interfere with schooling and other socio-economic opportunities (Sarin 1995:40).

Buga, Amoko & Ncayiyana (1996:525) Sikes (1996:26); Smith & Maurer (1995:581) in the students conducted in USA and RSA listed greater obstetric risks for young people such as:

- bleeding during the first three months of pregnancy
- cephalopelvic-disproportion, and
- pre-eclamptic toxæmia and other complications during labour.

This group of mothers is also prone to experiencing :

- premature labour,
- prenatal death,
- backstreet abortion,

- infanticide, and
- suicide.

Similar studies carried out by the Indian Council of Medical Research, found that sixty-five (65%) of girls aged between fourteen to twenty years (14-20) surveyed in the cities of Hyderabad, New Delhi and Calcutta were anaemic (Humerick et al 1991:194; Sarin 1995:41; Tewari & Gulati 1990:237). Anaemia is particularly widespread among women during pregnancy, when iron requirements increase, and is supported by various research reports in the RSA and the USA. The reports indicate that many pregnant women showed some degree of anaemia and that more women had severe anaemia (Card 1993:241; Ellickson & Bell 1990:1302; Emoungu 1996:18; Glossop 1991:294; Weitsz 1990:14; Wodarski 1995:84).

Students as young mothers experience academic problems. Students suffer from minor ailments from conception to twenty-five (25) weeks of gestation (pregnancy). The pregnant students lag behind other students of their age group due to failure or poor progress (Burman & Preston-Whyte 1992:188).

One of the major problems facing young students might be tiredness, which could result in lack of concentration on classwork and during clinical work. Arrangements need to be made as to who should remain with the baby when the mother goes back to class (Goosen & Klugman 1996:241).

It might be possible that pregnant student nurses at college campuses are no exceptions. Other findings were that young students who became young mothers reported having lower academic abilities and lower educational aspirations than their colleagues did. An investigation (Dilorio 1996:371) concluded, in the USA, that regardless of background factors, early parenthood is a direct cause of "truncated" schooling or shortening the training programme where you find that a student has dropped out of the programme.

Young pregnant mothers were twice as likely to have their first antenatal consultation after the second trimester, or last trimester, or not at all. Perkins (1991:15); Smith & Maurer (1995:591) state that in the USA many pregnant students delay seeking prenatal care or do not receive regular care. Only one in every ten pregnant students initiates care during the first three months.

Their findings further indicate that most of their respondents did not seek antenatal care because of the following reasons:

- fear of losing friends,
- boyfriends not supporting them,
- fathers not talking to them,
- degrading the status of the boyfriend
- students also stated that they experienced a tremendous amount of pain because of late consultations. Desmond (1994:321) confirmed late consultations for antenatal care in the RSA.

2.5.1.2 Consequences for the father.

If the father is young and decides to marry the girl, he may also end up having limited educational and career opportunities which may cause life long financial problems. In cases where a married man is responsible for the pregnancy, family disorganisation may result for his real family, if his wife becomes aware of the relationship with the young pregnant woman. A study conducted in London, found that father may develop psychiatric problems due to isolation (Howe, Sawbridge & Hinings 1992:20; Kaplan & Sadock 1998:299).

2.5.1.3 Consequences for the child

Brown, Ellis, Guerrina, Paxton & Poleno (1997:17) as well as Dryfoos (1990:65) reported in the USA that a child born out of wedlock is more likely to be deprived than a longed for and expected addition to a happy family. These authors further indicate that the child may suffer

as far as education is concerned, especially if the mother lacks the necessary finances required to bring up the child. These babies might also suffer from nutritional deficiencies, especially if looked after by grannies who lack the knowledge and skills to prepare artificial feeds. In addition, neglect, abandonment, being called illegitimate, child abuse and isolation from other children who have fathers are likely to occur (Burman & Preston-Whyte 1992:23).

There is a greater probability that the child will have a low self-esteem due to the parent's lack of ability to conceptualise the child's needs and fulfil them. The child's cognitive development is likely to be impaired unless there is interaction with several caregivers (Defrain 1999:4 ; Smith 1994:27).

This view has been supported by the findings of various studies conducted in Botswana, in the RSA and the USA, which state that eighty percent (80,0%) of all respondents believed that the manner in which illegitimate children were raised in their families and communities could be partly responsible for teenage pregnancies and delinquency (Lucas 1994:3; Lesch 1996:4)

Preston-Whyte & Zondi (1991:1393) state that most students have feelings of denial when pregnant. This explains why so many students go for medical care only at later stages of their pregnancies. According to these authors they have a tendency to become very energetic, with frequently bizarre behaviour so as to direct attention away from their pregnancies. Another study to determine the attitude towards pregnancy was carried out in the Eastern Transvaal by Dlamini & McKenzie (1991:28) on fifty (50) girls, of whom ninety-two (92%) were frustrated and unhappy, and only eight (8%) were happy about their pregnancies. Similar findings from a study conducted in Northern Pretoria, RSA, Mogotlane 1993:3 that amongst the forty-six (46) respondents, only three were happy with their pregnancies. Forty-three (43) respondents were miserable due to their unplanned and unwanted pregnancies.

2.5.2 Student reaction

Many studies reveal that most female students admit being initially surprised and unhappy about becoming pregnant. The primary crisis for unmarried young mothers/students in the RSA start when they first realise they are pregnant. Such students usually did not engage in sex because they wanted to have babies at that stage, but became pregnant accidentally (Harris 1996:263).

A similar study reports that most students in the USA experience a variety of feelings when pregnant. Their feeling range from being lonely, unhappy, proud, frustrated, happy or even "great" (Dryfoos 1990:66). Similar findings were reported in New York, that loneliness, a painful frightening and undesirable experience, is prevalent among pregnant students. This study further revealed that pregnant students display less ego identity than their non-pregnant counterparts. A study conducted in Los- Angeles about the experiences of students during their first pregnancy, where the researcher was checking their self-esteem in order to evaluate their feelings concerning their own worth, high scores sixty-eight (68,8%) reflected greater self-esteem (Griffin 1997:217).

The same view was reported by Jones & Battle (1990:227) as well as by Winkleby & Boyce (1996:146) that young peoples' attitudes towards pregnancies appeared to be more positive than negative. The participants stated that they liked to feel the baby move, they were excited about having something growing inside them, and that they got lots of positive attention from strangers and family. On the negative side, most of the young mothers mentioned that they were depressed, suffered from low esteem and feared going out because they might be criticised. All teenage mothers expressed frustration and resentment that they were the ones who had to deal with birth control issues, and that they were the ones who faced the negative consequences of sexual intercourse (Levy et al 1992:196; UNICEF 1992:5; Winkleby & Boyce 1994:149).

Pregnant students in the young mothers' programme at Yale-New Haven Hospital USA Harris (1996:264) found that respondents agreed to discuss how they felt about their pregnancies. One third of the group acknowledged that they had considered procuring abortions because they were scared of raising the children while studying. Others expressed themselves by saying: "I was so frightened, I didn't know what to do".

The rest of the group actively voiced opposition to abortion. When they were asked about being pregnant, one said: "It was best because a person is treated like a baby when pregnant". They also identified difficulties such as physical discomfort during pregnancy. One third expressed loss, because they could not participate in most social activities, or in sport. Almost half of the group did not think that having babies would ever change the plans they had for their careers and marriages (Harris 1996:265).

2.5.3 Male partners' reactions

Not all fathers to babies of teenage girls or students are themselves teenagers, though some are still teenagers. In most cases students fall pregnant by married men who refuse to carry the responsibilities (Miller 1993:159; Pilat 1997:4). In the USA teenage mothers, when asked: "who, if anyone looked after the baby apart from the mother?" Only twenty percent (20%) said they used the baby's father or his family for this purpose. Miller et al (1992:34) also found that even though the baby's father had probably known the mother for up to a year before the birth, his attentions become less and less after the event. He provided the odd necessities such as nappies and money, but infrequently and inconsistently.

Papalia & Olds (1990:588) report that fifty-six (60,2%) boyfriends in New York, especially the married refused to accept being the father of the child even though they were seriously involved in sexual activities. In most cases, the boyfriend did not even bother to support the child. According to Burman & Preston-White (1992:100) in the RSA, even those who support the child via the courts or social welfare, and usually after a legal battle. Benson & Torpy (1995:281) state that after young boys have had some fun, they become fathers but not

husbands. Such boys are less sure than girls about what to do in their new roles. Allen (1998:240) further gives a typical case that occurred in Farmville USA to illustrate rejection by a boyfriend:

“Patti Davis (all names are fictitious), age 16, stood in a Farmville phone booth crying. She dialled number after number, but hung up before one had a chance to answer. She was upset, confused, and at times angry. The reason? She was pregnant, and had no idea where to turn for help. Her boyfriend had left her (Callister 1991 : 44).”

Some boyfriends develop a feeling of failure if they cannot manage to find money for the girl to attend the clinic. This feeling may contribute to the waning involvement, and it may be linked to feelings of depression in the young father (Desmond 1994:329). A study was conducted in London on thirty-five (35) fathers who were neither married nor cohabiting at the time of the hospital-booking interview. Sixteen (16) had gone from their pregnant partners' life by the time they gave birth. Many fathers were not ready for parenthood, but were ready for a full time relationship (Hudson & Ineichen 1991:129). Boulton & Cunningham (1992:305); Nash (1990:144) reported the same findings that young married fathers in most cases may not be prepared to carry the responsibility especially when the pregnancy was not planned, and if the relationship had not focused seriously on settling down.

The reactions of young student mothers, might be common to every young unmarried mother with an unplanned pregnancy. This study will try to explore how pregnant students perceive their pregnancies. The study will also find out about support systems provided by family members, male partners, colleagues and college administrators available to pregnant student nurses in the NP.

2.6 WHAT SERVICES ARE NEEDED BY THE PREGNANT STUDENT NURSE

2.6.1 Counselling services

Whatever statistics are obtained to produce profiles of the typical school age pregnancies, individuals will continue to need a range of different resources to enable students to make decisions about the outcomes of unplanned pregnancies. For some, this may mean a school's acceptance of the mother's decision without criticism. For others, there are conflicts, within the family, which may need help in order to be resolved. An opportunity to discuss the matter with someone outside the family might lessen pregnant mothers' sense of isolation, as shown by studies conducted by various authors in the RSA (Boult & Cunningham 1992:304; Gillis 1990:121; Goosen & Klugman 1996:333). From an organisational point of view, it seems inevitable that counseling units for young pregnant girls need to be attached to college or tuition units. Other factors, however, must be taken into account. Various researchers concur that when counselling services are provided, issues such as confidentiality, the type of counselling, the amount of space for counseling services and transportation need to be considered (Schofield 1994:128; Goosen & Klugman 1996:333).

Makhetha (1996:46); Mkhize (1995:29) also speculate that mothes' inability to talk to someone, render them incapable of making decisions about whether to keep the babies or to have abortions performed. Gillis (1990:121) argues that some South African studies of adolescent pregnancies among black teenagers have failed to find the relationship between the maternal position of hiding the information from anyone else and making a decision for undergoing an abortion. However, the abortion decision is seen as taking responsibility for what is regarded as an unfortunate and undesired event, and an obligation towards the child that had been created (Schofield 1994:128).

Alternatively, mothers may prefer to keep their babies at their time of birth. However, there seems to be concern among Moilwa (1993:121); Schofield (1994:148); Sikes (1996:26) about the counseling of young pregnant adolescent mothers. Studies conducted in Africa, in the

RSA and in the USA have proved that keeping in close touch with the pregnant and parenting teenagers, anticipating their tendencies to drop out of school, withdraw and feel isolated. It is difficult to imagine anyone, more in need of support and counselling than pregnant adolescents. Ironically this is a time when they are least likely to receive such help (Moilwa 1993:121; Schofield 1994:148; Sikes 1996:26).

Musick (1993:151) as well as Miller et al (1992:86) in the USA assert that pregnant adolescent students are usually the last in line to receive attention while teachers are often busy interacting with many students at a time.

2.6.2 Prenatal health care services

Once pregnant students decide to continue with their pregnancies, efforts are directed toward ensuring healthy outcomes for both mothers and infants. Early initiation and regular attendance of prenatal care significantly reduce the risk for both adolescents and their infants.

2.6.2.1 Prenatal programmes available to pregnant students

Smith & Maurer (1995:592) in the USA State that women who attend pre-natal care are better able to prevent problems with their pregnancies and deliveries. They can also take action to improve their chances of having healthy babies.

The choice of programme depends on the accessibility and the financial circumstances of the pregnant student and her family. Various authors in the USA support the idea that private practice service is provided mainly to people who are covered by medical insurance plans or who can afford to pay (Humenick et al 1991:596; Marshal, Buckner & Powell 1991:102; Perrin 1992:29).

Families without insurance or financial resources can choose from several options as found in the RSA and the USA. One option in the USA is medical assistance. With a medical

assistance card, prenatal and other services are paid for by a combination of state and federal funds. Therefore pregnant students have variety of options to choose from (Goosen & Klugman 1996:237; Nicholas 1991:594; Stevens, Register & Sessions 1992:331). In the RSA services are free for all pregnant mothers at state clinics/hospitals.

2.6.3 School based prenatal services

Marshall et al (1991:97); Jones (1991:341) School-based services need to be offered in conjunction with other school run clinic services or in separate schools designed for the exclusive use of pregnant students in the USA. They further indicate that school-based prenatal services also employ a comprehensive approach to care and are usually found in large school districts with high rates of adolescent pregnancies. Smith & Maurer (1995:588) found that prenatal school-based programmes generally result in a high degree of compliance with appointments, care regimen, reduction in the number of complications, and a secondary benefit of increased school attendance both before and after delivery.

Women who attend antenatal clinics have greater advantages. Their health status is improved, and complications can be prevented (Gillis 1990:121; Sellers 1993:163).

2.6.4 Antenatal and childbirth education

Adolescents are likely to get information about pregnancy, labour and delivery from their peers. Much of this information may be erroneous. Community health nurses can assess pregnant students' knowledge bases, correct misconceptions and reinforce valid information. Antenatal education helps the pregnant students to understand what happens during pregnancy and childbirth.

Mukasa (1997:421) as well as Kenny (1997:8) reported that antenatal education in the RSA helps to prepare women physically and mentally for pregnancy and childbirth. Antenatal classes teach relaxation, breathing and different birthing positions. It is apparent that pregnant

students are in need of such information, which will add to their knowledge. This study seeks to explore physical problems as well as misinformation, which pregnant student nurses might experience in the NP.

2.7 STRATEGIES TO BE UTILISED TO PROMOTE THE USE OF REPRODUCTIVE HEALTH SERVICES

2.7.1 Contraceptive services

A study about problems affecting young people in the RSA found that many young people afraid to discuss contraceptions with their parents, (Beake & Zimbizi 1996:239). Parents mistakenly believe that information about contraception will lead their children to be promiscuous. Authors further indicate that some of their respondents pointed out that their parents had never told them about sex and contraception. Some young people put the blame on their parents for not being realistic (Beake & Zimbizi 1996:239).

Access to and regular use of birth control methods is the goal of contraceptive services for adolescents. A university organised project in South Carolina USA Norr (1991:98) emphasises that delaying sexual activity for adolescents, and providing information on contraception, thus, promotes consistent contraceptive use by sexually active teenagers. The programme includes consultation with community leaders, training on sex education with teachers, mini-courses for parents, church and community leaders, and implementation of sex education. Most parents provide misinformation to their daughters and sons about the utilisation of contraception and this discourages young people from using contraception (Nicholas 1991:131; Norr 1991:98).

2.7.2 Life optional programmes

Life options programmes attempt to expand an adolescent's future goals and expectations by improving educational and employment prospects. Goosen & Klugman (1996:240) who found that, in the RSA, most future-orientated, goal directed adolescents are not likely to become pregnant support this. The expected result is a reduction in the rate of teenage pregnancies. Programmes may be school or community based and targets especially risky populations such as low-income teenagers. Efforts are directed toward reducing social factors associated with increased pregnancy rates. Norr (1991:603) suggests that public enthusiasm and funding are minimal because these programmes are hard to evaluate and costly, and cannot provide speedy results. However, long-term evaluation is needed.

2.7.3 School-based prenatal services

School-based clinics have been seen in some of the developed countries, like in the USA and developing countries like in the RSA, not only as a means of providing basic health care, but also as a promising way of addressing some of the complex health and social problems, particularly unintended pregnancies, that face young people. These clinics often serve low-income youths with limited access to other sources of health care (Goosen & Klugman 1996:236; Waszak & Neidell 1992:191).

The most widely findings are those based on students who raised their concern about using the family planning services and contraception with their parents and other elderly people. (Goosen & Klugman 1996:238; Smith & Maurer 1995:591). The study was supported by findings from a study conducted in Kenya, which found that sixty-five (65%) of the respondents reported feeling very embarrassed when coming for contraceptive services with their teachers, parents and any other older person.

Thirty five percent (35%) of the respondents, complained that health workers disapproved and were unhelpful to young people (Bam 1994:51; Bayona & Kandji-Murangi 1996:84). This

happened even though the law allowed people to get contraceptives from a clinic (Goosen & Klugman 1996:239).

Beake & Zimbizi (1996:241) mentioned that it might be difficult in the RSA to ask for contraceptives if one does not want anybody to know that one is sexually active. In the SSA area, findings of a study showed that young people are under-utilising contraceptive services for various reasons. These include lack of knowledge, and stigmatisation that they are sexually active. Young people are embarrassed and reluctant to use contraceptive clinics for fear of the community's reaction towards them (Beitz 1995:9). Additional evidence for the effectiveness of school-linked services was found in a study examining an experimental pregnancy prevention programme offered at universities in the RSA. It was found that reproductive health services provided to the students at universities were highly utilised mainly because students were by themselves without other members of the community (Boult & Cunningham 1991:33).

On the other hand, in SSA parents and community leaders maintained a hard line and insisted that the supply of contraceptives to teenagers promoted poor attitudes and values towards sex (Bayona & Kanji-Murangi 1996:8). Family planning and other sex-related topics were rarely discussed among family members in most of the communities. Levy et al (1992:201) were of the opinion that the government, politicians, church and educators should use all available means such as radio and public ceremonies to educate all sectors of the society including parents about the use of reproductive health services. Parents and health professionals should influence adolescents to make use of sex education programmes by encouraging them and by displaying positive attitudes towards sexually active adolescents and use of contraceptives.

2.8 SUMMARY

This chapter reviewed literature related to pregnancy amongst adolescents because the literature overview was not only concerned with student nurses, but with other students and with other adolescents as well. The literature review assisted in providing a better understanding of the complex and multifaceted dynamics of adolescent pregnancies. It also describes services that pregnant adolescents would need, as well as programmes that could be used to enhance the use of reproductive health services. The next chapter deals with the research methodology used in conducting this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 INTRODUCTION

Chapter 3 discusses the research methodology used in the study. The research design, format of the questionnaire and method of study will be presented.

3.2 RESEARCH DESIGN

This was designed as a quantitative, exploratory descriptive survey.

3.2.1 Quantitative

The study was quantitative since it was concerned with the number of responses by pregnant students.

3.2.2 Exploratory

It was exploratory in that the study intended to explore the complexity of and the increase of insight into the experiences relating to problems associated with pregnant student nurses during their training.

According to Polit & Hungler (1997:457) an exploratory research is a study designed to explore the dimensions of a phenomenon. It is particularly appropriate when a new area or topic is investigated. An exploratory study was considered appropriate for this study as very little was known about student nurses' pregnancies in the NP (Burns & Grove 1993:293). The

literature search showed no reported research on the problem associated with student pregnancy at nursing colleges in the RSA.

3.2.3 Descriptive Survey

This study is a descriptive survey in that it attempted to describe a specific phenomenon in which the researcher investigated the problems associated with pregnancies among student nurses at nursing college campuses in the NP.

A descriptive research design was selected for this study to describe and document aspects that give rise to the high rate of student nurses' pregnancies and to identify problems related to pregnancies during the period of training in the NP.

It was considered appropriate to determine the background of students, their perceptions of pregnancy, and coping mechanisms implemented during pregnancy in particular, with their studies, their working capabilities and caring for the infants after deliveries.

3.3 POPULATION AND SAMPLING METHODS

3.3.1 Study Population

The population consisted of student nurses who became pregnant during the period of conducting this study between 1998 and 1999.

3.3.2 Sampling method

A non-probability convenience sample was used. Convenience sampling consists of using the most readily available or most convenient group of people for the sample (Polit & Hungler 1997:244; Brink 1996:140).

Burns & Grove (1993:245) support that subjects happened to be in the right place. A convenient sample was used to select all student nurses who were pregnant during their training in the NP between 1998 and 1999.

Criteria for inclusion

The criteria used to select the sample was that:

- the respondents should be pregnant,
- or should have been pregnant,
- or should be the mother of a child/children born during the period of training.

3.3.3 Selection of student sample

The sample size was discussed with a statistician, Professor VC Vabanova, from the Department of Statistics, at the University of Venda who initially recommended a sample size of 100 students. The researcher's supervisor advised that the sample size should not be limited to 100 students. The final sample was 93 student nurses. After the discussion with the statistician, a sample of 93 pregnant student nurses was accepted.

3.3.4 Selection of College Campus sample

All three (3) nursing college campuses in the NP were included in the sample.

3.3.5 Selection of hospital sample

The criteria for selection of hospitals in the NP were that they had to be registered with the South African Nursing Council as training hospitals for basic education and training as a nurse (general, community and psychiatry) and midwifery (Regulation R425 1985).

TABLE 3.1

College	Hospitals	Training Offered
1. Giyani	Elim Hospital Nkhesani Hospital	Diploma (General, Community, Psychiatric) and Midwifery.
2. Sovenga Campus	Dr Machupe ❖ Mphahlele Memorial Hospital Mankweng Hospital	Diploma (General, Community, Psychiatric) and Midwifery.
3. Thohoyandou Campus	Donald Fraser Hospital Siloam Hospital Tshilidzini Hospital	Diploma (General, Community, Psychiatric) and Midwifery.

❖ excluded

Hospitals registered for education and training as a nurse (general, community and psychiatry) and midwifery.

The sample consisted of seven (7) hospitals and three nursing college campuses. One hospital was selected for conducting a pilot study.

3.4 DATA COLLECTION

3.4.1 Data collecting instrument

An open-ended and close-ended computer coded questionnaire (see annexure E) was designed by the researcher with the assistance of the statistician from the University of Venda, and guided by the researcher's supervisor. The questionnaire was designed and developed after an in-depth literature review.

The final questionnaire was discussed with the researcher's supervisor, statistician and nursing colleagues and was accepted in terms of face and content validity.

3.4.1.1 Format of the questionnaire

- Section A: Questions related to demographic information of pregnant student nurses (Section 4.2.1 to 4.2.10).
- Section B: Questions related to sex and pregnancies (Section 4.3.1 to 4.2.23).
- Section C: Questions related to physical reactions during pregnancies (Section 4.4.1 to 4.4.6).
- Section D: Questions related to emotional reactions to pregnancies (Section 4.5.1 to 4.5.3).
- Section E: Questions related to social reactions during pregnancies (Section 4.6.1 to 4.6.13).
- Section F: Questions related to the mothers' viewpoints (Section 4.7.1 to 4.7.1).

- Section G: Questions related to academic records (section 4.8.1 to 4.8.7).

3.4.2 The research question

The overall purpose of this study was to explore the problems associated with pregnancy among student nurses and to determine whether pregnancy affected students progress.

The following research question summarised the problem and guided the study: “Which problems are related to pregnancy amongst student nurses in the NP?”

The question led to other related sub-questions as follows:

- What factors cause pregnancy amongst student nurses in the NP?
- What methods can be used to prevent unplanned pregnancies amongst student nurses in the NP?
- What services do the pregnant student nurses need in the NP?
- What strategies should be employed to enhance the utilisation of reproductive health services by young people in NP?

3.4.3 Reliability and Validity

3.4.3.1 Reliability

Reliability can be defined as ... *the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure* 5:65). (Polit & Hungler 1997:297). The reliability of a quantitative measure is a major criterion for assessing its quality (Brink 1996:171;

3.4.3.2 Validity

Validity can be defined as ...*the degree which an instrument measures what it is intended to measure* (Brink 1996:168; Polit & Hungler 1997:299) Validity testing actually validates the use of an instrument for a specific group or purpose (Burns & Grove 1993:342; Uys & Basson 1995:80).

Several criteria were considered in the construction of the instrument in order to standardise the evaluation:

- The questions were formulated as simply as possible to reduce any ambiguities.
- Instructions to the respondents were as clear as possible.
- Sufficient time was allowed to complete the questionnaires.

After the construction of the research instrument was completed, it was submitted to the following persons for constructive criticism:

- The promoter of this study at the Department of Advanced Nursing Sciences at Unisa.
- Senior professional nurses in the clinical areas in the three hospitals in the Northern Province (Donald Fraser Hospital, Tshilidzini Hospital and Siloam Hospital).
- A panel of three statisticians at the department of Statistics at the University of Venda.
- A Computer analyst to assist in the coding of the questionnaires.

3.4.4 Pre-testing of the Research Instrument

A pretest is a trial run to determine whether the instrument is clearly worded and free from major biases. It solicits the type of information it is intended to collect (Polit & Hungler 1997:25).

Pre-testing is a small scale study using a small sample of population, but not the same group who will eventually form part of the sample group. Armstrong & Grace (1994:78); Uys & Basson (1995:107) further indicate that its purpose is to provide a miniature trial run of the methodology planned for the major project and opportunity, to refine or adjust methods and techniques or instruments.

One local training hospital was chosen for pre-testing. Out of six wards the following were selected using simple random sampling, so that every ward had an equal chance of being included in the sample.

The number of students who experienced pregnancies were distributed among the wards as shown in Table 3.3.

TABLE 3.2
Students who experienced pregnancies

Wards	Number of Students
Medical Ward	2
Surgical Ward	4
Maternity Ward	3
Paediatric Ward	2
TOTAL	11

N = 11

The results of the pre-testing showed that some of the questions were not clearly understood. Questions that were not clearly stated were reconstructed for improved comprehension and correct interpretation. Some questions were discarded and others were rephrased to give greater clarity.

3.4.5 Ethical considerations

3.4.5.1 Informed consent

This aspect was undertaken to ensure that respondents agreed to participate in the study without being deceived and without any form of constraint (Burns & Grove 1993:104). Clear explanations were given so that they fully understood what they agreed to do.

3.4.5.2 Anonymity

Anonymity was assured because the respondents were informed that their names not would be revealed and that the questionnaires would not be connected with any name.

3.4.5.3 Confidentiality

The information would be solely used for the purpose of this research, and that it would be made accessible to the promoter, and if the respondents are interested in the study, the findings would be made available to them.

3.4.5.4 Persuasion

The respondents were not forced nor persuaded to participate in the study. It was done out of their free will.

3.4.5.5 Sponsorship

The decision to undertake this study was the choice of the researcher. Sponsorship had no influence or input in this regard. The loyalty of the researcher is therefore only to the informants.

3.4.5.6 Benefits

It was explained that the study would not endanger the lives of participants, so no life was at stake. It was also explained that participation in the study would not benefit participants. However, the information they contributed might enhance the improvement of health services for pregnant student nurses in the NP in future.

3.4.6 Permission for the study

In order to proceed with this study permission was obtained from the Superintendent General, Northern Province Department of Health (See Annexure 3). Permission was obtained from the Regional Director of Region four (4) of Thohoyandou (See Annexure 4). Covering letter requesting student nurses to participate in the study (See Annexure 1) is included in this dissertation.

3.4.7 Collecting of data

Appointments were made with principals of nursing college campuses and matrons of hospitals. In each nursing college campus and hospital, one person was chosen and made responsible for distributing to and collecting questionnaires from the respondents. It was planned so that biases would be avoided as much as possible. Data was collected between November 1998 and April 1999.

Structured interviews were conducted by the researcher with 93 pregnant students nurses in the NP. It took an average of twenty (20) minutes to complete each questionnaire. Structured interviews as a method of collecting data was considered appropriate for this study because the researcher knew what information was required.

3.5 ANALYSIS OF DATA

Data analysis refers to systematic organisation and synthesis of research data (Polit & Hungler 1997:455). Data was analysed with the assistance of the statistician. The Statistical Packages of Social Science (SPSS) was used to analyse the data. Data was analysed presented and discussed with the aid of tables and graphs in chapter 4.

3.6 SUMMARY

This chapter discussed the methodology followed in conducting this study. The design of the study was presented. The population and sampling procedures were described. The ethical considerations and permission to conduct the study were also presented. The data collecting instrument and collection of data were also presented. The following chapter presents an analysis of data obtained from the ninety-tree (93) structured interviews conducted in the NP with pregnant student nurses.

CHAPTER 4

ANALYSIS AND PRESENTATION OF DATA

4.1 INTRODUCTION

Chapter 3 described the manner in which this study was conducted. In this chapter findings of the collected data are analysed. The purpose of this study was to explore the problems related to pregnancy amongst student nurses, and to determine how pregnancy affects academic progress of student nurses in the NP.

The SPSS software was used to analyse the data presented in this chapter. The data was obtained from questionnaires used during the structured interviews with ninety-three (93) student nurses in the NP nursing college campuses who were pregnant during training, between December 1998 and March 1999.

Findings related to the research question guided the study. Other factors that are likely to influence problems related to pregnancy amongst student nurses in the NP were also analysed.

The data is presented according to the research question: "Which problems are related to pregnancy amongst student nurses in the NP"?

The question led to other related sub-questions as follows:

- What factors cause pregnancies amongst student nurses in the NP?
- What methods can be used to prevent unplanned pregnancies amongst student nurses in NP?
- What services do the pregnant student nurses need in the NP?
- What strategies should be employed to enhance the utilisation of the reproductive health services by young people in the NP?

SECTION A

4.2. DEMOGRAPHIC INFORMATION OF PREGNANT STUDENT NURSES

This section consisted of ten (10) questions. Data yielded the following findings:

4.2.1 Ages of pregnant student nurses

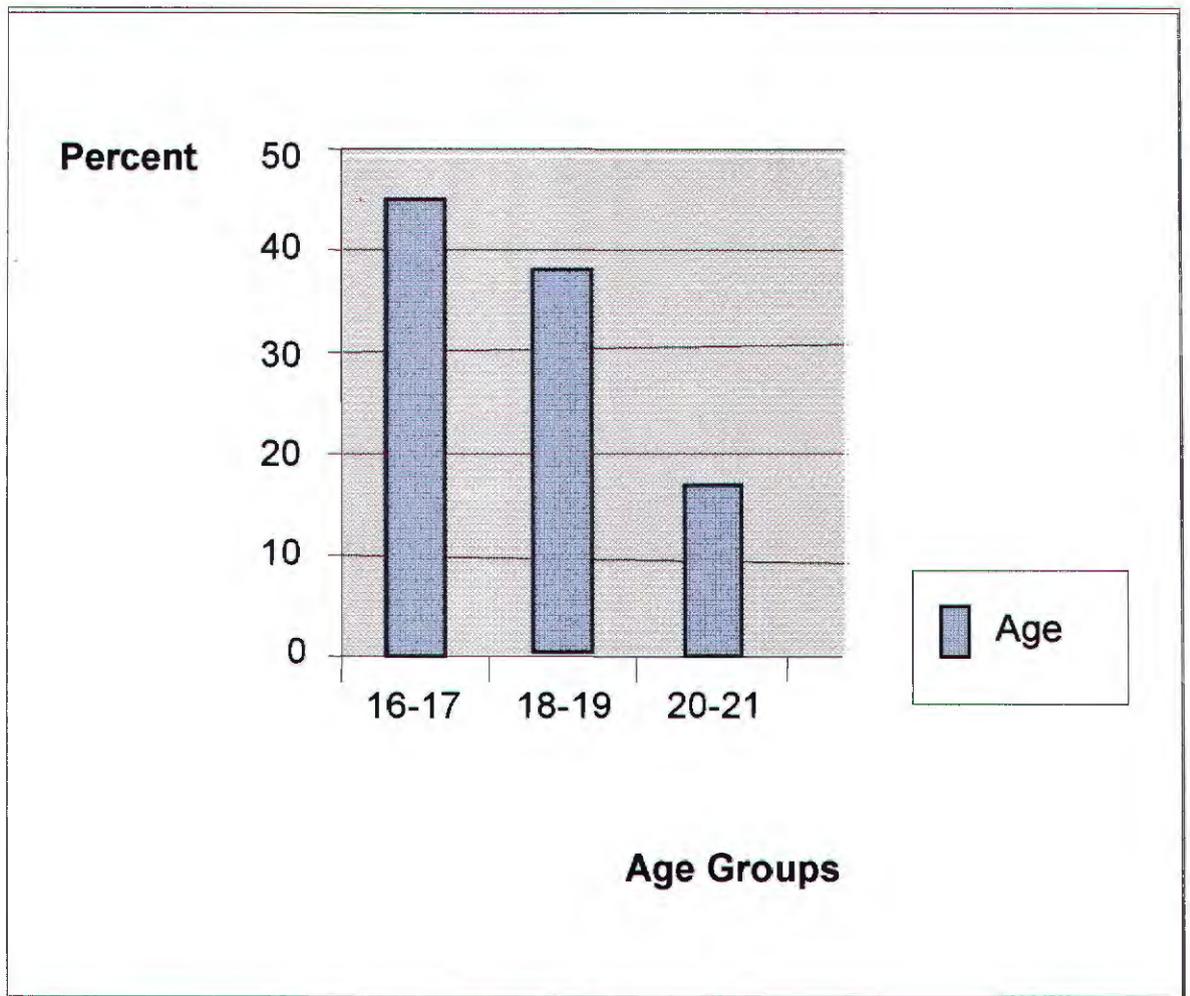


Figure 4.1

Ages of pregnant student nurses (n=93)

Figure 4.1 shows that the majority forty-two (45,0%) of the respondents were between sixteen to seventeen (16 to 17) of years of age, thirty-one (38,3%) were 18 to 19, of years and fourteen (16,7%) were 20 to 21, of years. It was interesting to note that the majority of respondents were still at teenagers' years sixteen and seventeen years of age (16 to 17) forty-two (45,0%).

4.2.2 Year of training of respondents

Table 4.1 *Year of training of respondents* (n=93)

YEARS OF STUDY	FREQUENCY	PERCENTAGE
1 st year	18	19,3
2 nd year	56	60,2
3 rd year	13	14,0
4 th year	6	6,5
TOTAL	93	100,0

Table 4.1 indicates that the majority of the respondents fifty-six (60,2%) were second years.

4.2.3 Number of children of nurses

Table 4.2 Number of children of nurses (n=93)

<i>TOTAL NUMBER OF CHILDREN</i>	<i>FREQUENCY</i>	<i>PERCENTAGE</i>
None	28	30,1
One	36	38,7
Two	20	21,5
More than two	9	9,7
TOTAL	93	100,0

Table 4.2 shows that twenty-eight (30,1%) of the respondents had no children, thirty-six (38,7%) had one child and twenty (21,5%) had two children. The last group of respondents, nine (9,7%), had more than two children. It is interesting to note that the majority of respondents (38,7%) were pregnant for the second time, whilst other respondents (21,5%) were pregnant for the third time. These findings seem to support the previously conducted research on student pregnancies which reported that some students seem to have had inadequate parental guidance on sexuality (Boult & Cunningham 1991:40; Pilat 1997:5). These findings are significant in terms of lack of knowledge on the prevention of premarital pregnancies. They indicate the importance of sex education, including information of contraception, even subsequent to the first pregnancies.

4.2.4 Persons taking care of children

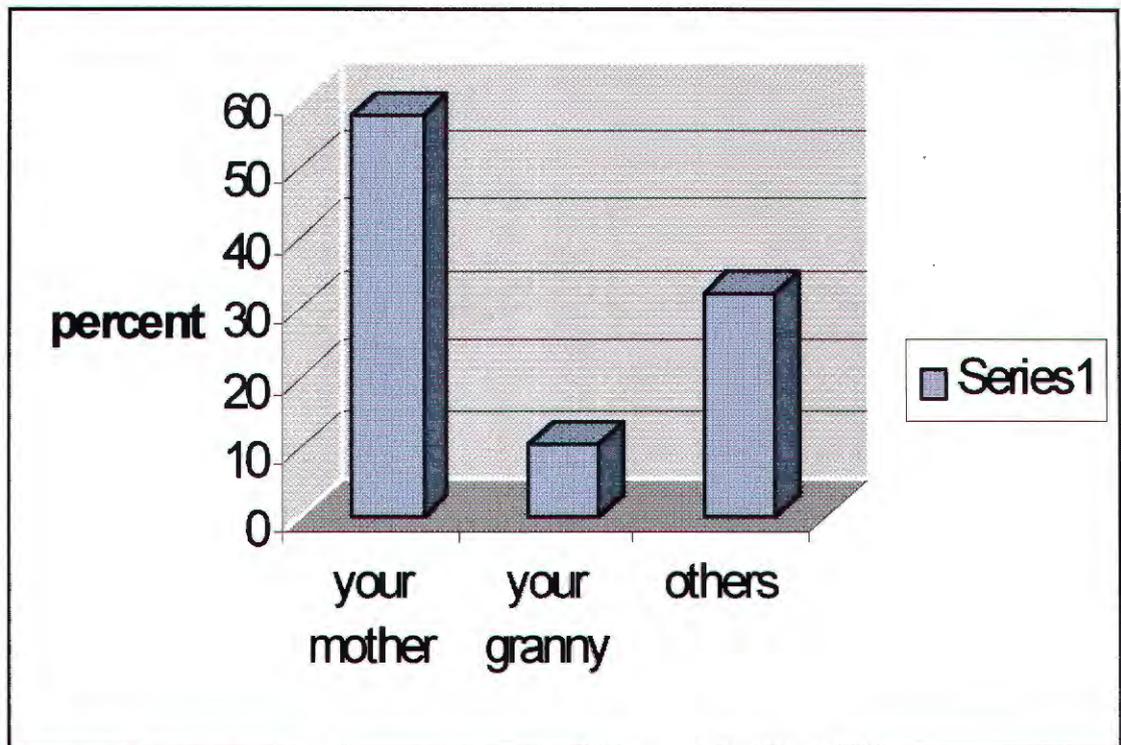


Figure 4.2

Persons taking care of children (n=93)

Figure 4.2 shows that fifty three of the respondents (57,6%) indicated that their mothers would look after their babies soon after birth, and (10,2%) indicated that their babies would be looked after by their grannies, whilst (32,0%) would have other unspecified people looking after their babies. It would seem from these findings that no respondent would look after her own baby. A large percentage of the mothers of the students were not working (see section 4). It proved impossible to ascertain whether these grand mothers would be in a position to prepare artificial feeding at an early stage for the new born babies.

4.2.5 Marital status of pregnant student nurses

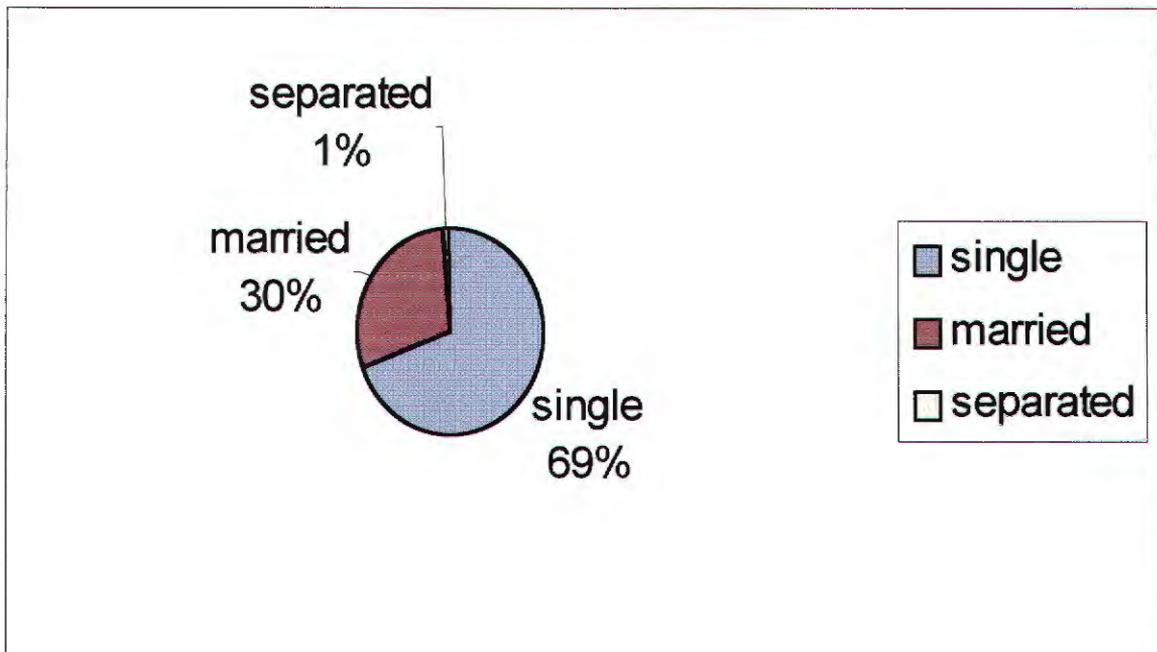


Figure 4.3
Marital status of pregnant student nurses (n=93)

Figure 4.3 shows that majority of the respondents were single, sixty-four (69,0%). Only twenty eight (30,1%) were married. One student (1,1%) confirmed those findings made by Smith & Maurer (1995:586) that the majority of the respondents believed that a girl must prove her fertility before marriage, even those respondents thirty-six (38,7%) who were pregnant for the second time remained single. According to Schofield (1994:71); Reader's Direct (1999:31) single mothers pose potential risks to their babies if they forced to discontinue breast feeding their babies. This might increase these babies' risks of suffering from malnutrition.

4.2.6. Employment status of student nurses' fathers

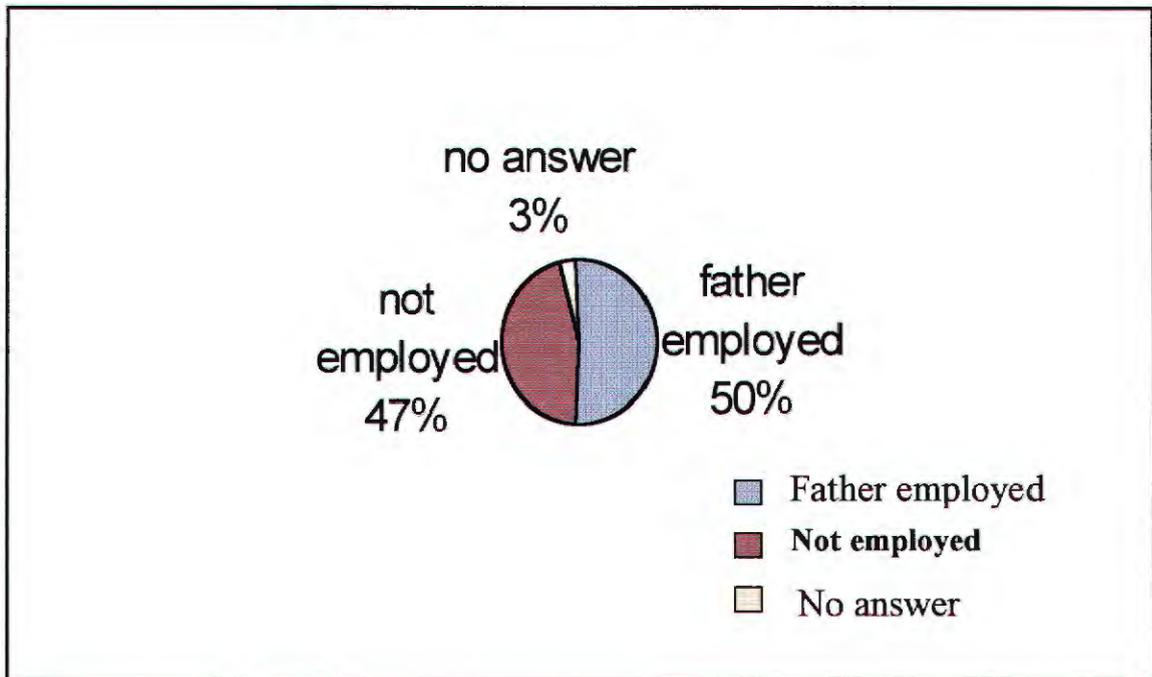


Figure 4.4
Employment status of student nurses' fathers (n=94).

Figure 4.4 shows that only forty-five (50,0%) of the respondents' fathers were employed and forty-four (48,4%) were unemployed, whereas (3,0%) of the respondents did not respond to this question. These are common and important findings amongst blacks in South Africa, especially in the rural areas (Department of Welfare 1997b:9). These findings are significant in terms of comparison as to whether student nurses who become pregnant were from the households of the unemployed parents or not.

4.2.7 Employment status of student nurses' mothers (n=93)

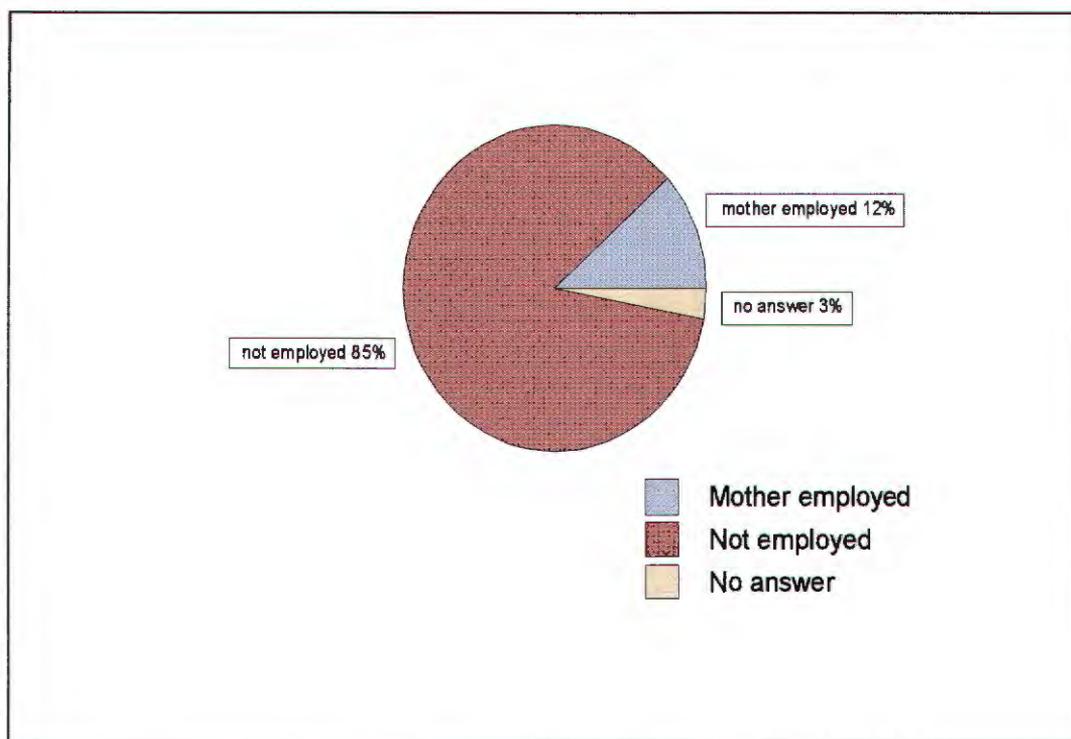


Figure 4.5

Employment status of student nurses' mothers (n=93).

Figure 4.5 shows only eleven (12,0%) of the respondents' mothers were employed and seventy-nine (85,0%) were unemployed, whilst three (3,2%) were not active, they did not answer to the question whether their mothers were working or not.

These are common and important findings among black women in South Africa. This is consistent with the findings of a survey conducted in South Africa, found that unemployment has been the most prevalent amongst women, especially in rural areas. The NP is no exception (Department of Welfare 1997b:9; Dunjwa 1990:5). The findings of this study would have been more significant if the respondents of unemployed mothers seventy-nine (85,0%) were known, so that comparisons would be possible to find the relationships between the

unemployment of students' mothers, and the prevalence of pregnancies as a means to improve household's incomes.

4.2.8 Average monthly household income

Table 4.3 Average monthly household income (n=93)

INCOME PER MONTH IN RANDES	FREQUENCY	PERCENT
100-200	1	1,1
300-500	6	6,5
600-900	5	5,4
Above 1000	61	65,6
Missing	20	21,4
TOTAL	93	100,0

Table 4.3 shows that sixty-one (65,6%) of the respondents had an average income of R1 000 or more, and five (5,4%) had an income ranging from 600 to 900 per month. However, there is a sharp contrast between these findings and one (1,1%) respondents and six (6,5%) who had an average income of between R100 to R500 per month. Whilst twenty (21,4%) of the respondents did not answer. Previous studies on adolescent pregnancies identified low income as the main cause of becoming sexual activity (May 1992:596; Seabela 1990:34).

4.2.9. Other sources of income of students

Table 4.4 Sources of income of student nurses (n=93)

Source of Income	Frequency	Percent
Husband	14	15,1
Relatives	10	10,6
Boyfriend	2	2,2
None	41	44,1
TOTAL	93	100,0

Table 4.4 shows that fourteen (15,1%) of the respondents were assisted financially by their husbands whilst ten (10,6%) were supported or assisted by relatives and only two (2,2%) of the respondents' boyfriends provided some income. It would appear from these findings that the rest of the respondents forty-one (44,1%) were independent without any other sources of support. These findings indicate the potential risk of being sole breadwinners needing to explore other opportunities that would help them gain more income. These findings were apparently not consistent with the findings in section 4.2.6 where forty-four (48,4%) of the respondents' fathers were reported to have been employed. However, these fathers' incomes might have been too small to support their pregnant daughters financially.

4.2.10 Sole breadwinners

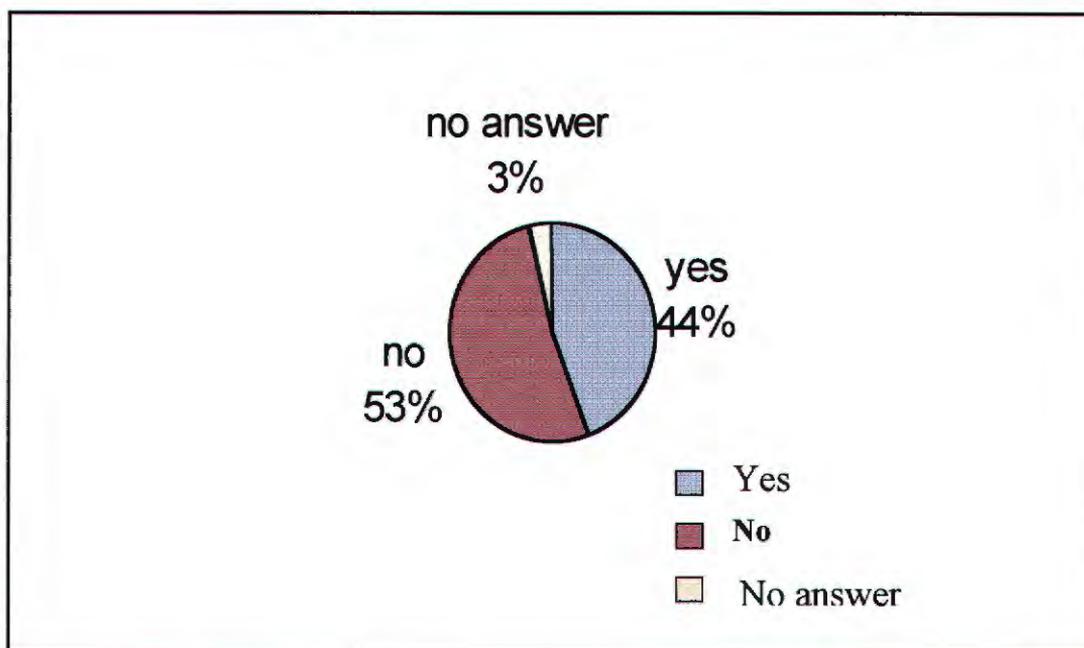


Figure 4.6
Sole breadwinners (n=93)

Forty one (44,0%) respondents indicated that they were sole breadwinners whilst forty nine (53,0%) indicated they were not. These findings appear to be consistent with the previous findings in Secion-4.29 which showed that fourty-one (44,1%) of the respondents had no other sources of income except that of their own training allowances. These findings are significant in terms of low socio-economic status which may lead to sexual permissiveness in order to increase income because nobody was employed in the household except the student nurse. These findings complement those of Ramalebana (1995:12). The author found that the low socio-economic status of the household was a leading reason for sexual permissiveness by the schoolgirls in Venda.

SECTION B

4.3 SEX AND PREGNANCY

4.3.1 Age of student at first sexual intercourse.

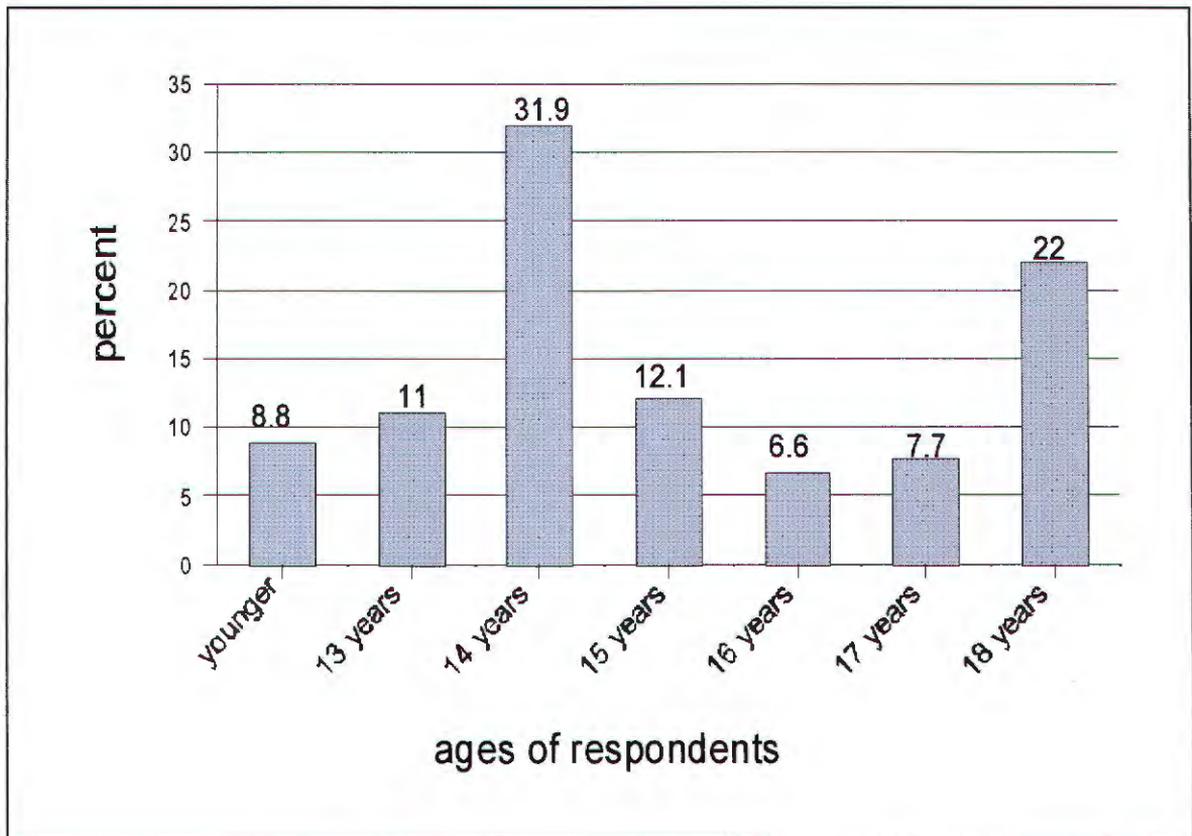


Figure 4.7

Age of student at first sexual intercourse (n=93).

It is clear from this diagram that the critical age at which the respondents in this study commenced sexual intercourse was twelve (12) years showing a trimodal distribution at fourteen (14), fifteen (15) and eighteen (18) years. The mean average was fourteen (14) years. These findings support those of Griffin (1994:217) as well as Schoeman (1990:14) when they established that respondents in the school in Texas had a mean age of 12.8 years at commencement of sexual intercourse.

4.3.2 Age of the first sexual partners

Table 4.5 Ages of first sexual partners (n=93)

Age of First Sexual Partner	Frequency	Percent
<i>Younger than 13</i>	10	10,8
14	52	55,8
15-20	22	23,6
21-25	6	6,5
26-30	1	1,1
Older than 30	2	2,2
TOTAL	93	100,0

The majority of the respondents' first sexual partners were fourteen 14 years of age fifty-two (55,8%), showing a trimodal distribution at younger than thirteen, fourteen and fifteen (13, 14 and 15) years. These findings complement those in figure 4.3.1 and reveal a higher percentage of respondents who were highly sexually active at age fourteen (14) in terms of frequency of sexual activities per week fifty-two (55,8%). Of concern is the fact that some of the respondent's first sexual partners were men older than thirty (30) years of age two (2,2%). These findings apparently do not confirm those of Bayona & Kanji-Murangi (19996:71); Moilwa (1993:18). These authors found that over seventy (70,0%) of students' pregnancies in Botswana were attributed to adult working males and elderly men in the communities.

4.3.3. Knowledge that pregnancy could take place at first sexual encounter

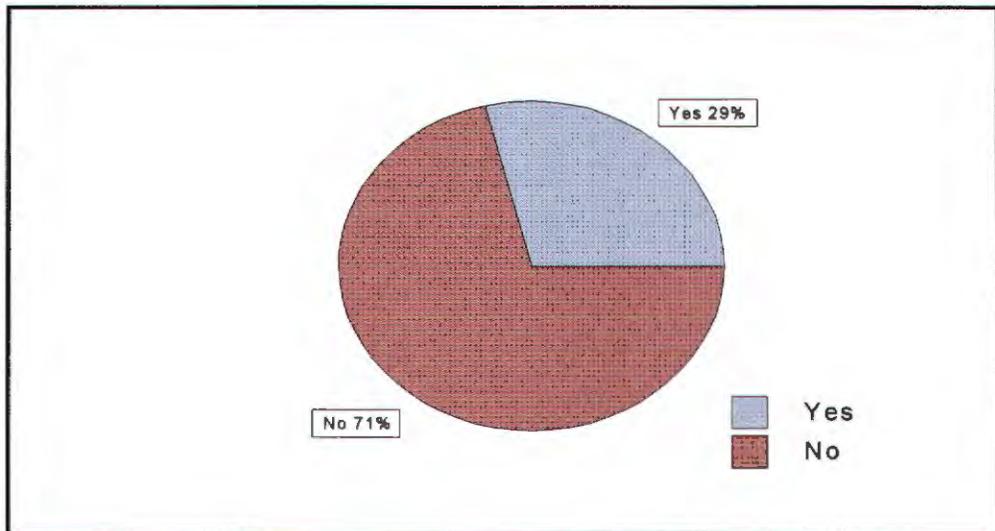


Figure 4.8

Knowledge that pregnancy could take place at first sexual

It was clear from figure 4.8 that the majority of the respondents did not have information that conception could take place at the first sexual encounter. These were significant findings since sixty-seven (71,0%) of the respondents reported that they did not know that pregnancy could take place at the first coitus. Whilst only twenty-seven (29,0%) of the respondents had some knowledge that pregnancy could take place at this stage. This is significant in terms of protection against premarital pregnancies. Of greater concern is the fact that the greatest percentage sixty-seven (71,0%) of respondents had no idea about possibilities of pregnancy at first coitus. These findings complement those of May (1992:581); Smith & Maurer (1995:587). Who found that respondents had misconceptions about pregnancy at first coitus in Chicago, USA.

The following were some of their beliefs:

- “You cannot get pregnant the first time you have sex”.
- “You will not get pregnant if you do not have sex regularly”.
- “You cannot get pregnant if you drink much water after sex” (Smith & Maurer 1995:588)

These findings are significant as they indicate the great need for sex educational programmes which should be commenced as early as during primary school age.

4.3.4 Information about family planning

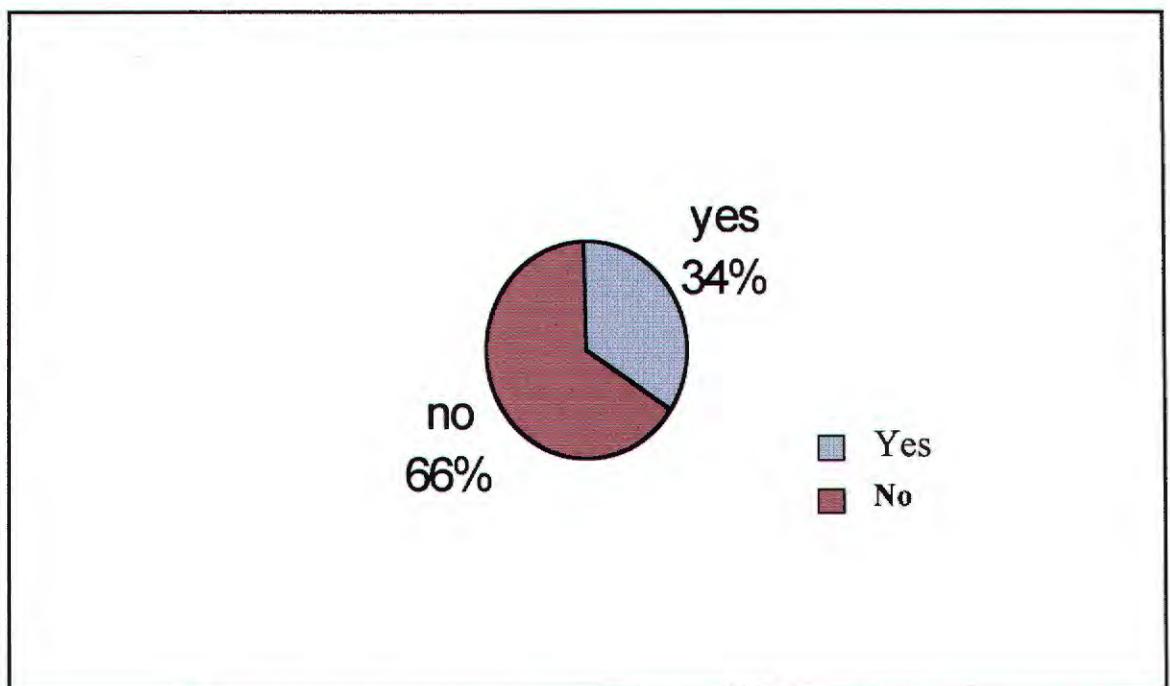


Figure 4.9
Information about family planning (n=93)

The majority of the respondents, sixty (66,0%) had no information about contraceptives, whilst only thirty-one (34,0%) had some information about contraceptives. These findings are

significant to form a basis for the establishment of sex education in all the primary and secondary schools in the NP.

4.3.5 Sources of information about contraceptives (n=93)

Seven (7,5%) respondents indicated that they got information from their parents, one (1,1%) indicated that she got the information from her granny, eleven (11,8%) got the information from their friends, one (1,1%) respondent got her information from her sister, eight (8,6%) respondents got information from nurses, whilst the majority of respondents did not give their view concerning this information about contraceptives, sixty-one (65,6%). These findings supported Pilat (1997:24) who discovered that friends constituted the main sources of advice and information on sex relations, pregnancies and contraceptives.

4.3.6 Current state of pregnancy

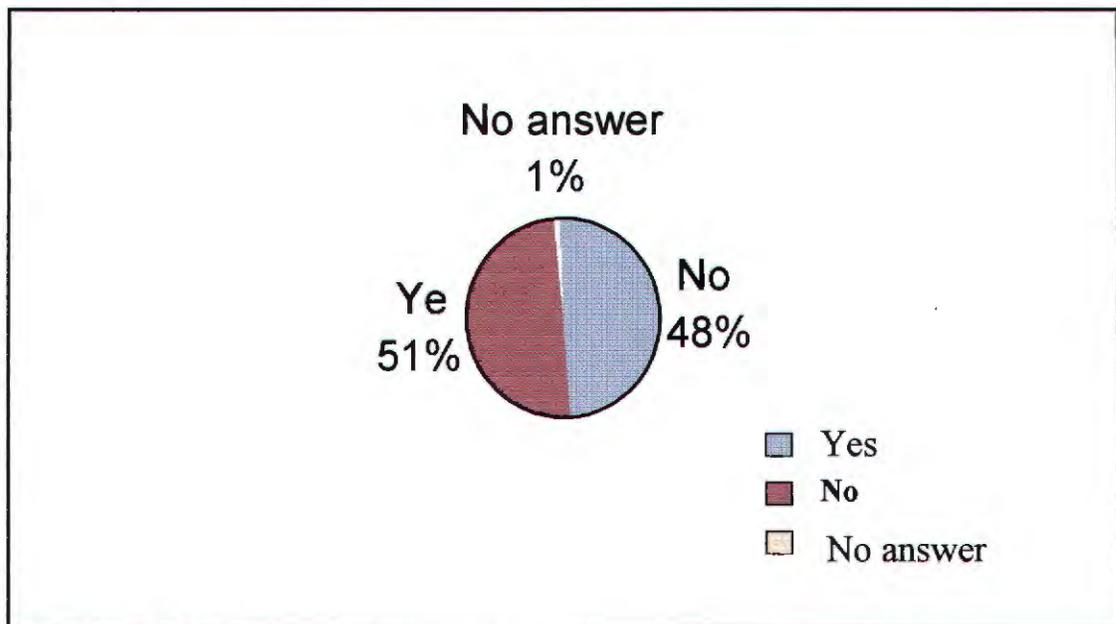


Figure 4.10

Current state of pregnancy (n=93)

Figure 4.10 shows that forty seven (51,0%) of the respondents reported that they were pregnant at the time at which they completed the questionnaires, whilst forty five (48,0%)

reported that they were not pregnant. However, the latter graph had delivered babies at earlier stages during their training as student nurses. Thus, all the respondents had been or were pregnant student nurses in the NP.

4.3.7 Number of pregnancies



Figure 4.11
Number of pregnancies (n=93)

Figure 4.11 shows that fifty-one (54,0%) of the respondents had never had a baby. Twenty-two (24,0%) were pregnant for the second time and eleven (12,0%) had more than two pregnancies. It would appear from these findings that the majority of the respondents (54,0%) were not knowledgeable about the consequences of their sexual practices (Boult & Cunningham 1992: 306; Pilat 1997:5). The findings of this study would have been more significant if the ages of the last group with high percentages of being pregnant for the first time were known. Follow up studies could attempt to establish their ages.

4.3.8 Whether pregnancies were planned

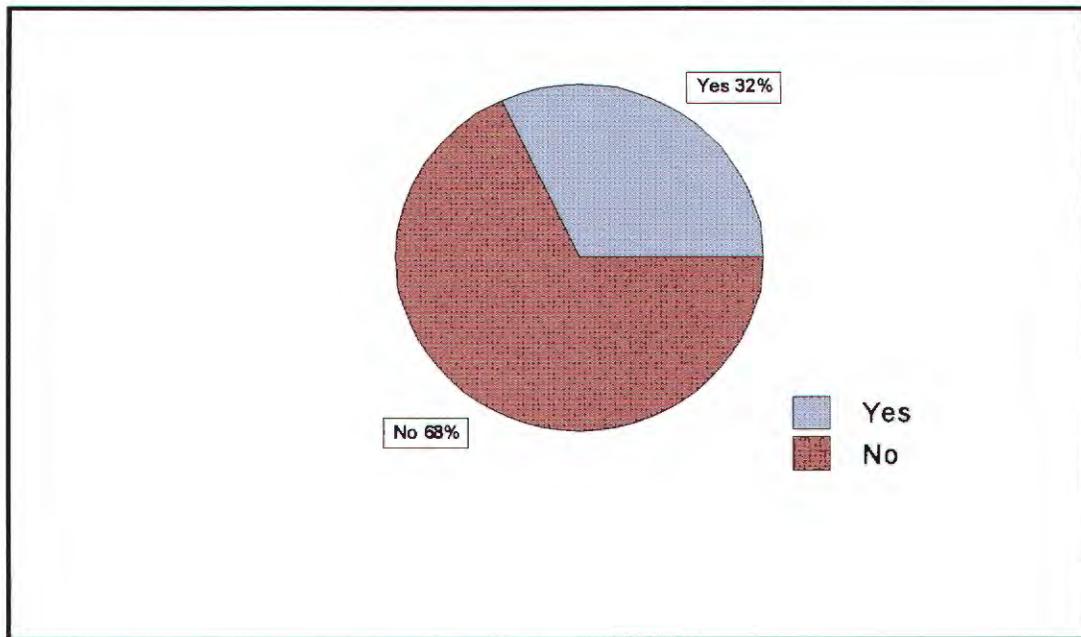


Figure 4.12

Whether pregnancies were planned (n=93)

Figure 4.12 shows that sixty-eight (68,0%) of the respondents reported that their pregnancies were not planned, whilst twenty-nine (32,0%) reported that their pregnancies were planned, deserting to have babies. Similar findings were reported by Boulton & Cunningham (1991:57); Mkhize (1995:14); Mukasa (1997:422); Seabela (1990:45). These authors found that their respondents were sexually active and had sexual intercourse on a regular basis, yet they all reported that their pregnancies were not planned. Findings appeared to be consistent with Section 4.3.15 findings indicating a high percentage of respondents who lacked knowledge about contraceptives. The latter group with unplanned pregnancies might be those without knowledge of contraceptives.

The data obtained in this research could not establish to which extent knowledge about contraceptives might have prevented some of these pregnancies from occurring. Future research should address this issue.

4.3.9. Information about unprotected sex

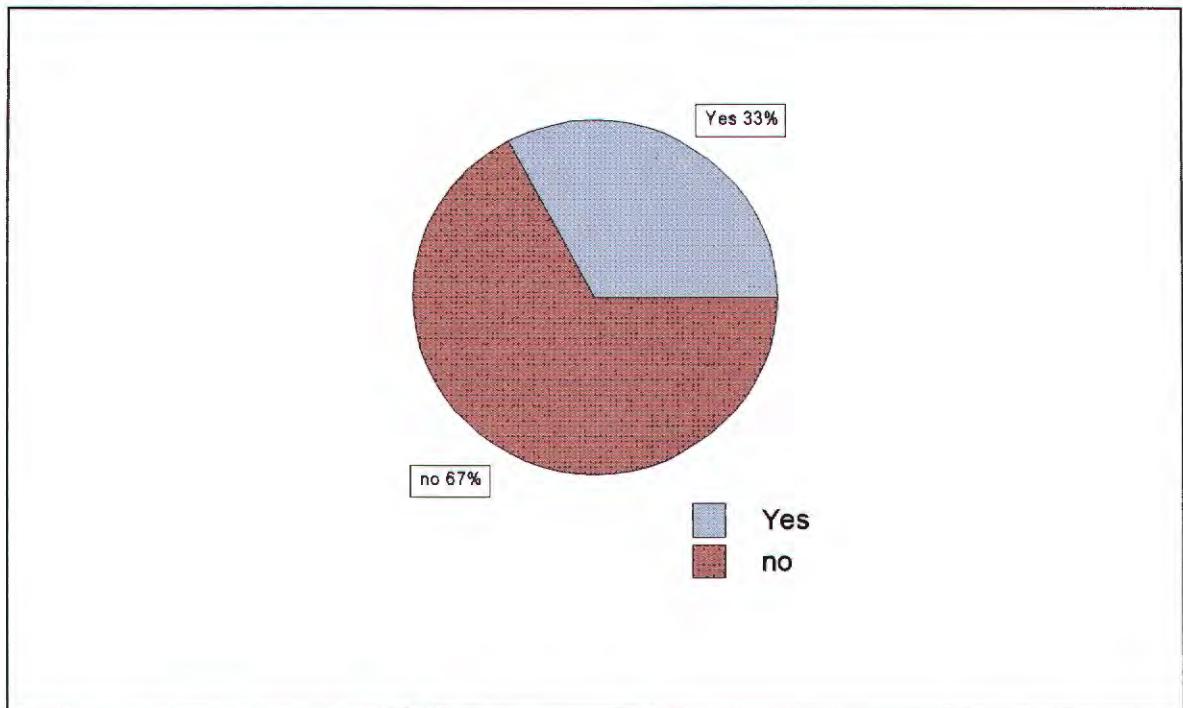


Figure 4.13
Information about unprotected sex (n=93)

From figure 4.13 it is clear that the majority of the respondents fifty three (67,0%) did not use any method of contraception. These findings confirm those of Bayona & Kanji-Murangi (1996:6); Miller et al (1992:253); Seabela (1990:90). These authors found that their respondents were sexually active but did not use contraceptives. These authors also revealed that their respondents were ignorant about contraceptives and their effects. Some of the reasons given by the respondents in their studies were fear of rejection by partners and fear of appearing immature by refusing unprotected sexual intercourse. These findings

could be significant in terms of designing more effective sex educational programmes in the NP.

4.3.10 Time intervals during which contraceptive pills were taken

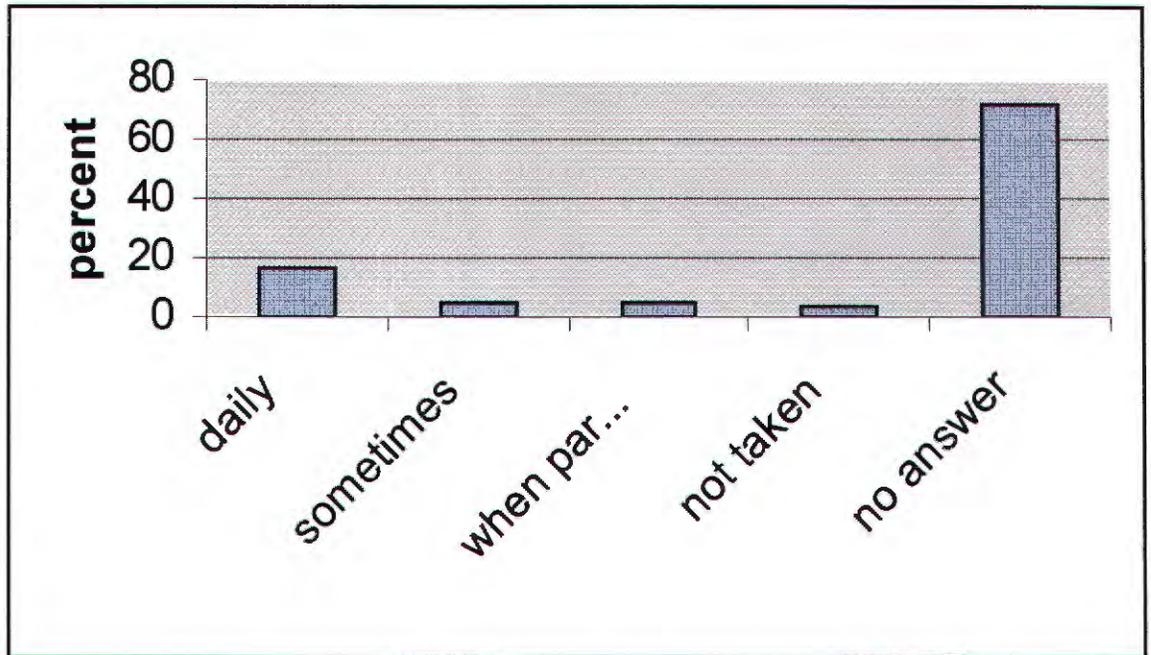


Figure 4.14

Time intervals during which contraceptive pills were taken (n=93)

Figure 4.14 shows that fifteen (16,2%) of the respondents reported that they were taking contraceptive pills on a daily basis, four (4,3%) reported that they were taking contraceptive pills sometimes and another four (4,3%) reported taking pills only when their male partners would be coming, three (3,2%) did not answer. Whilst the majority of the respondents were sexually active, (70,0%) were not taking contraceptives. The last findings confirmed those of Miller et al (1992:253) who revealed that respondents in a study conducted in the USA were ignorant about contraceptives and their effects.

4.3.11 Knowledge about side effects of contraceptives (n=49)

Thirty-nine (41,9%) of the respondents indicated that they were knowledgeable about the side effects of contraceptives. Only six (6,5%) reported that they did not have any information about side effects. Whilst the majority of the respondents did not answer forty-eight (51,6%). These findings complement those in figure 4.9 and reveal a higher percentage of respondents who did not take contraceptive pills (66,0%).

4.3.12 Side effects experienced while using contraceptives (n=38)

Fourteen (15,1%) reported nausea and vomiting, four (4,3%) indicated dizziness, five (5,4%) indicated headaches, fifteen (16,1%) reported weight gain whilst the highest percentage is fifty-five (59,1%) provided no responses. These findings, appeared to play a significant role in the causes of pregnancy amongst the student nurses who might have discontinued using contraceptives because of these side effects. Future research should investigate the side effects experienced by adolescents using contraceptives in the NP.

4.3.13a Availability of contraceptives at nursing college campuses (n=93)

Seventy-seven (82,8%) respondents indicated that contraceptives were not available at the nursing colleges, whilst sixteen (17,2%) did not respond to the question. It would appear from these findings that contraceptive services were not rendered at the nursing college campuses. These findings are significant in terms of motivation for the establishment of campus-based health services, including freely accessible contraceptives.

4.3.13b Availability of contraceptives at hospitals (n=93)

Twenty nine (31,2%) respondents indicated that it was possible to get contraceptive methods from hospitals, whilst the highest percentage (64,5%) indicated that they could not get contraceptives from their hospitals, reasons were not specified. It is interesting to

note that respondents had indicated that contraceptives are neither obtainable at hospitals nor at the college campuses in the NP. It would appear from these findings that pregnancies occurred as a result of non-availability of contraceptives within students' reach at both the college campuses and the hospitals in the NP. It was beyond the scope of this research to establish reasons for such non-availability of contraceptives but future research should address this issue.

4.3.14 Reasons for non-availability of contraceptives at college campuses (n-93)

Thirty four (36,6%) of the respondents indicated that they could not get contraceptives because it was not allowed culturally, forty nine (49,5%) indicated that contraceptives were not readily available, whilst twelve (12,9%) did not respond to this question. These findings are significant in terms of motivating student nurses to use contraceptives. This research could not ascertain in which specific ways contraceptives were culturally forbidden. Future in-depth reasons should strive to identify potential cultural communication barriers and suggest ways of overcoming these to enhance the effective communication of knowledge about contraception.

4.3.15 School-based health services more affordable than hospitals and clinics (n-93)

Four (4,3%) respondents indicated that hospital and clinic services were accessible without difficulties, whilst the majority of the respondents eighty-six (95,6%) supported the idea of school-based health services. These findings confirm those of Miller et al (1992:172) and Smith & Maurer (1995:602) in the USA, who stated that school-based clinics are more recent efforts but very effective in the USA. They are more accessible than hospitals and clinics. They further stated that adolescents feel free to utilise such services as the services are meant for adolescents.

If further research in the NP could support these findings, then the NP's Department of Health could enhance their reproductive health services by establishing such school based

family planning clinics throughout the NP. Adolescents pregnancies education quality of life.

4.3.16 Number of sex partners student have

Table 4.6 *Number of sex partners (n=93)*

NUMBER OF PARTNERS	FREQUENCY	PERCENT
One	89	95,7
Two	2	2,2
More than two	1	1,1
Missing	1	1,1
TOTAL	93	100,0

From this table it is clear that the majority of the respondents reported having single sex partners eight-nine (95,7%). This might be important measure against (AIDS), but not against pregnancy, as ninety-three (100%) of a respondents were either pregnant of had babies at the time of conducting these interviews. This research could not establish to what extent the AIDS health education drives, emphasising the use of condoms to prevent AIDS, might have impacted on these students' behaviour. It seemed possible that the students who had single sex partners, and were thus not sexually promiscuous, found the use of condoms to be unacceptable.

4.3.17 Most important reasons for pregnancies (n=93)

Forty-nine (52,7%) respondents indicated that pregnancy was unplanned, twenty-nine (31,2%) indicated that it was a mistake, whilst only twelve (12,9%) indicated that their male partners encouraged them to become pregnant because they wanted babies to bind

them as husbands and wives, whilst three (3,2%) indicated that it was definitely planned. These findings could be linked with the previous findings in Section 3.19 and 4.3.10 which showed that (70,0%) of the respondents were sexually active and were ignorant about contraceptives, but they claimed not to have planned their pregnancies.

4.3.18 Information concerning pregnancies (n=93)

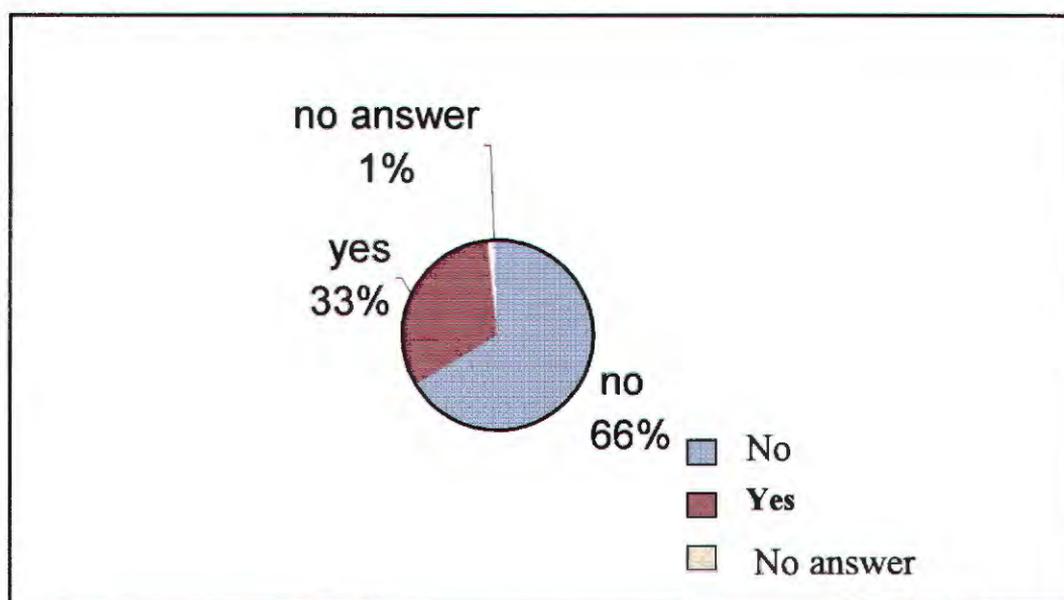


Figure 4.15
Information concerning pregnancies (n=93)

Figure 4.15 shows that sixty one (66,0%) of the respondents indicated that they were not informed about pregnancies, whilst thirty one (33,3%) indicated that they were then informed. It would appear from these findings that the number of respondents who were not informed (66,0%) confirmed those findings of Mayekiso & Twaise's (1992:22) study conducted in the Transkei. These authors found that sexuality and pregnancy were the most difficult topics to be discussed between parents and their adolescent children. Adolescents openly indicated that this was a taboo topic to be discussed with their parents. It would appear from these findings that parents' education about sex education for their adolescent children should be addressed by future research. Whereas most family

planning efforts are directed at women in their childbearing years, the impact which parents might have on their childrens' knowledge and behaviour should not be underestimated.

4.3.19 Information concerning deliveries (n=93)

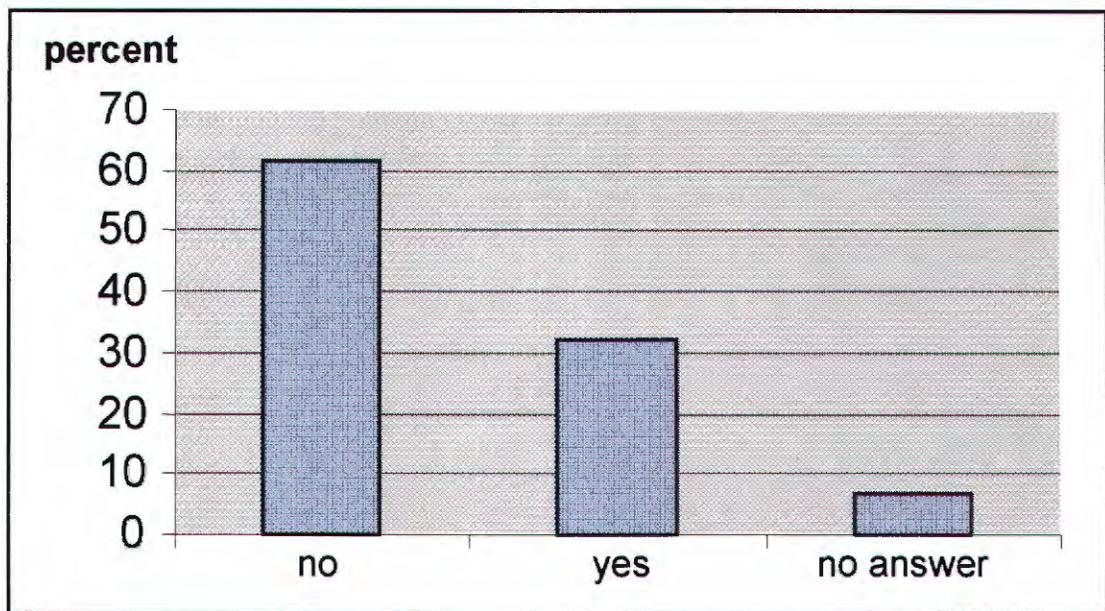


Figure 4.16
Information concerning deliveries

Figure 4.16 shows that only thirty (32,3%) of the respondents indicated that they were informed about deliveries, whilst the majority of the respondents had no information in this regard, namely fifty-seven (61,3%). It would appear that findings of Section 3.18 would link with these findings, and that the problems were that such topics could be discussed between elderly people and adolescents. Future culture-sensitive research should aim to identify such potential cultural, communication barriers and suggest ways of overcoming these.

4.3.20 Sources of information (n=93)

Only five (5,4%) respondents indicated that their sources of information about pregnancies and deliveries were from their mothers, eleven (11,8%) indicated that their sources of information were friends, five (5,4%) indicated that their sources of information were from others, that were not specified, whilst thirty (32,3%) did not respond, and the majority of the respondents forty-two (45,2%) indicated that they were informed by nurses. These findings are significant because they are indicative of cultural barriers, that such information could not be discussed amongst parents and teens. However, it also seemed to indicate that nurses do succeed in providing education about reproductive health issues to adolescents in the NP.

4.3.21 Weeks at which antenatal care (ANC) commenced

Table 4.7 Weeks at which antenatal (ANC) commenced (n=93)

Weeks of Antenatal Clinics	Frequency	Percent
12 weeks	11	11,8
20 weeks	18	19,4
28 weeks	12	12,9
30 weeks	7	7,5
36 weeks	17	18,3
Other	23	24,7
Not active	5	5,4
TOTAL	93	100,0

Table 4.7 shows that the majority of respondents, twenty-three (24,7%), begin to attend antenatal care (ANC) after thirty-six (36) weeks gestation. Whilst only seven (7,5%) commenced ANC after thirty (30) weeks, seventeen (18,3%) respondents chose to start

ANC at thirty-six (36) weeks. These findings confirmed those of May (1992:591); Schofield (1994:71) who reported that many pregnant students in the USA delayed seeking prenatal care or did not receive regular care. Similar findings were reported by Boulton & Cunningham (1992:305) amongst black teenagers at the University of Port Elizabeth. They found that only one in every five teenagers initiated ANC during the first trimester. These authors further indicated that delay in seeking ANC might also be influenced by denial of their pregnancies. Pregnant students were not receiving regular care, and were not encouraged to see the importance of early ANC attendance. Recommendations to policy makers of the NP might be necessary to enhance the pregnant adolescents' utilisation of reproductive health services in the NP.

4.3.22 Reasons for late attendance of ANC

Only six (6,5%) respondents indicated that their late seeking of ANC services was due to poor relationships with the antenatal staff, whilst forty one (44,0%) respondents indicated that they never sought ANC. The majority of the respondents reported that they feared their colleagues' reactions forty-two (45,2%). The large percentage forty-one (44,1%) of these respondents who did not attend ANC services indicated that the mere availability of free health services might not enhance their utilisation. Whether this could be due to some problems, could be an area for further research.

4.3.23 Usefulness of health education talks to pregnant students

Only twenty-five (26,9%) of the respondents indicated that health education talks were useful to them whilst the majority of the respondents sixty-seven (72,0%) did not benefit from the health education talks. It would appear from these findings that majority of the respondents sought ANC services at a later stages seventy-two (72,0%). These findings correlated with those of Section 3.21 where twenty-four percent (24,7%) booked after thirty-six (36) weeks of pregnancy.

SECTION C

4.4. PHYSICAL REACTION DURING PREGNANCIES

4.4.1 Physical discomfort

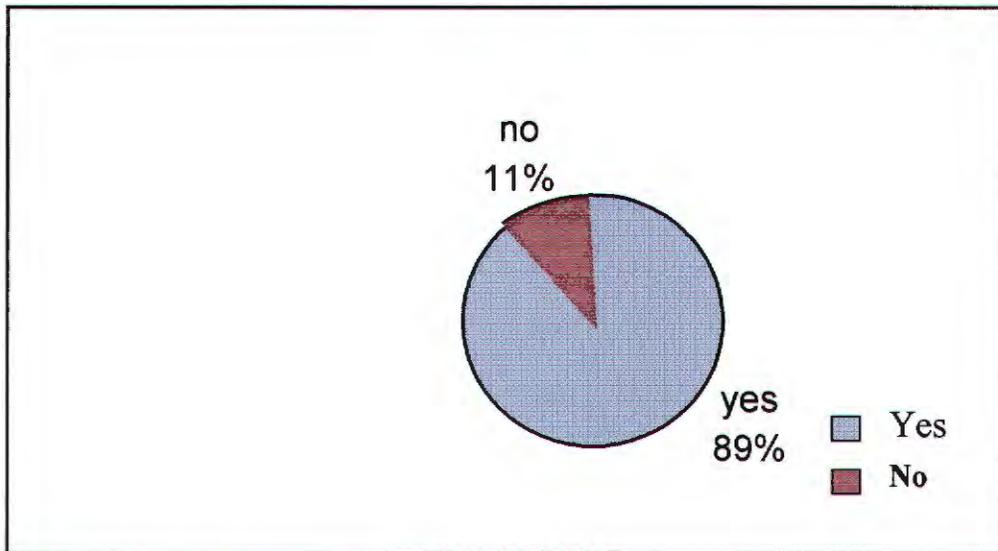


Figure 4.17
Physical discomfort (n=93)

Figure 4.17 indicated that only ten (11,0%) of the respondents did not experience any physical discomfort, whilst eighty-two (89,0%) did so. These findings confirmed those of Boulton & Cunningham (1992:70); Schofield 1994:71; Smith & Maurer (1995:581). These authors reported that adolescents' pregnancies had far-reaching physical effects.

Pregnant adolescents were at greater risks of experiencing serious medical obstetrical complications, including:

- pre-eclampsia toxemia,
- morning sickness,
- pre-mature labour, and
- anemia.

4.4.2 Feelings regarding physical changes

Table 4.8. Feelings regarding physical changes (n=93)

ARE PHYSICAL DISCOMFORT	FREQUENCY	PERCENT
Dizziness and Headaches	14	15,1
<i>Tiredness</i>	33	35,5
Morning sickness	29	31,2
Backaches	9	9,7
Other	6	6,5
TOTAL	93	100,0

Table 4.8 indicates that fourteen (15,1%) of the respondents suffered from headaches and dizziness, whilst thirty three (35,5%) reported to being tired. Twenty-nine (31,2%) also had problems of morning sickness. Only nine (9,7%) were troubled by backaches and six (6,5%) did not indicate specific discussion facts. These findings supported those reported by Bayona & Kanji-Murangi (1996:7); Smith & Maurer (1995:581) in the SSA and in the USA. These authors reported that adolescent pregnancies carried greater risks of serious medical obstetrical complications

4.4.3 Information regarding to appetite

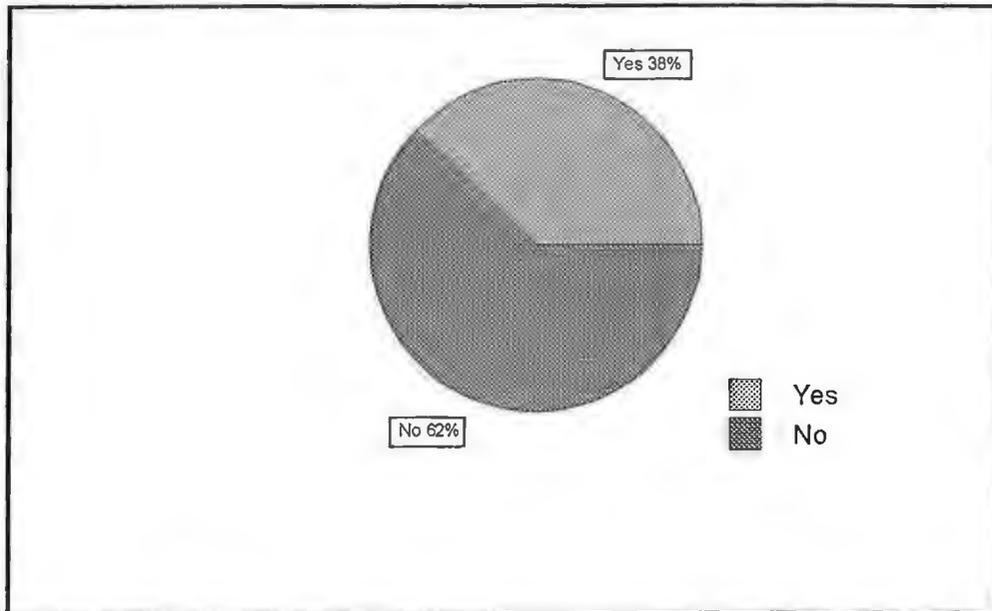


Figure 4.18
Information regarding to appetite (n=93)

Figure 4.18 shows that only thirty-seven (37,6%) of the respondents had good appetites whilst fifty-eight (62,4%) indicated that their appetites were poor. The majority of the respondents seemed to experience some problems with maintaining their nutritional intakes at satisfactory levels. Specific foods which were not tolerated and/or not consumed could not be identified during this survey neither could the visitants hemoglobin (Hb) levels be checked. Thus the potential relationships between the students' tiredness, nutritional intakes and Hb levels would need to be explored by further studies.

4.4.4a Feelings about foetal movements

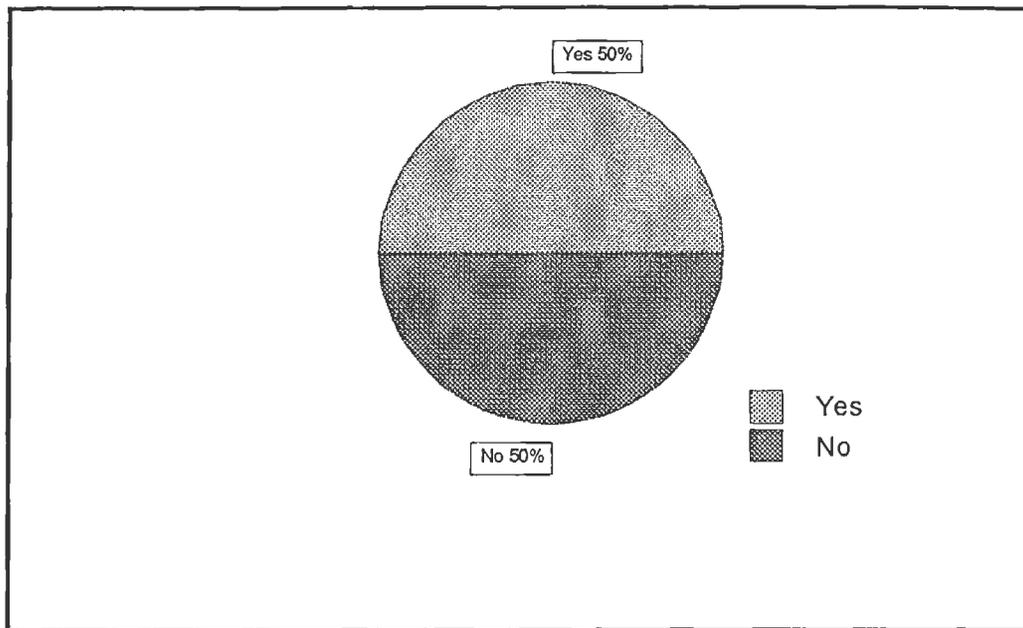


Figure 4.19
Feelings about foetal movements (n=93)

Figure 4.19 revealed that half respondents forty-seven (50,0%) responded negatively, indicating that they never enjoyed feeling foetal movements. Forty-six (50,0%) reported that they felt good about foetal movements. This is in contrast to the responses given in Section 4.3.8. where the majority of the respondents indicated that it was not in their plan to fall pregnant sixty-eight (68,1%), but now 50,0% in Section 4,19 enjoy feeling the foetal movements. This might indicate that the majority of these students who did not plan their pregnancies, (68,1%) managed to accept their situations and might even have started bonding with their unborn children. However, exploration of these possibilities fell beyond the scope of this survey.

4.4.4b Reasons for not enjoying foetal movements

Table 4.9 Reasons for not enjoying foetal movements (n=93)

PROBLEM	FREQUENCY	PERCENT
Did not want pregnancy	45	48,4
Boyfriend denied responsibility	16	17,1
I am always sick	5	5,4
Other	1	1,1
TOTAL	93	100,00

Forty-five (48,4%) of the respondents indicated that they could not enjoy foetal movements because they did not plan to fall pregnant, whilst sixteen (17,1%) reported having been abandoned by their male partners, and (5,4%) reported that they always felt sick. However, one (1,1%) remained neutral without giving reasons, problems for not enjoying the foetal movements. These were expected where most pregnancies were unplanned. This Section could be linked with Section 3.8 where the majority of the respondents (68,1%) did not plan to fall pregnant.

4.4.5 Number of weeks available for maternity leave (n=93)

Only nine (9,7%) of the respondents indicated that they went on maternity leave at thirty-six (36) weeks of gestation. Whereas 31 (33,3%) indicated that they only left at forty (40) weeks at the expected time of delivery. The greatest number forty-six (49,5% of respondents did not report their pregnancies, therefore did not go on maternity leave forty-six (49,5%). However, three of the respondents (3,2%) at all statements did not answer. Only four (4,3%) of the respondents did not specify at which weeks they went on

maternity leave. These findings complemented those from figure 4.17 and revealed a higher percentage of respondents who experienced symptoms such as anaemia, morning sickness, tiredness. Although 88,2% and 49,5% of the respondents both from Section 4.1 and Section 4.2 experienced physical/medical problems, but did not apply for maternity leave. These findings should be noted with concern, especially in terms of enhancing health services to the adolescents of the NP.

4.4.6 Problems experienced last trimester (n=93)

Only thirteen (14,0%) of the respondents indicated that they never experienced any difficulties during the last trimester of their pregnancies. Whilst twenty-seven (29,0%) reported having suffered from oedema, thirty-one (33,3%) indicated suffering from continuous tiredness, only twelve (12,9%) respondents failed to respond to this question. These findings are significant if linked with those of Section 4.1 and Section 4.2 having placed only the highest percentages in mind, seventy-nine (84,9) for recommendations about the importance of resting during postnatal period as a means for enhanced well being of mothers.

SECTION D

4.5. EMOTIONAL REACTIONS TO PREGNANCIES

4.5.1 Students' feeling about pregnancies

Table 4.10 *Assessment of students' feelings about their pregnancies (n=93)*

Assessment of student Feelings	N	Frequency	%	F	%	F	%	F	%
Happy	93	17	18,3	7	7,7	11	11,8	55	59,1
Proud	93	4	4,3	10	2,2	10	10,8	61	65,6
Guilty	93	45	48,4	6	21,5	6	6,5	2	2,2
Angry	93	39	41,9	14	15,1	14	15,1	4	4,3
Frustrated	93	51	4,8	12	24,7	12	12,9	1	1
Depressed	93	49	52,7	17	9,7	17	18,3	11	11,8
Disappointed	93	62	66,7	3	7,7	3	3,2	1	1,1

Key= A = Extremely

B = Moderately

C = Slightly

D = Not at all

Table 4.10 shows that 55 (59,1%) respondents were not happy, whilst only seventeen (18,3%) satisfied with their feelings. Sixty-one (65,6%) of the respondents indicated that they were not proud being pregnant, only four (4,3%) respondents expressed that they were extremely proud. Forty-five (48,4%) of the respondents expressed feelings of guilt, and two (2,2%) of the respondents occupied neutral positions about their pregnancies.

Thirty-nine (41,9%) of the respondents expressed extreme anger at finding themselves in the situations of pregnancy, whereas four (4,3%) of the respondents felt good about their pregnancies. They reported that they were not angry at all. Fifty-one (54,8%) respondents expressed their frustration, being overwhelmed by their situations, whilst one (1,1%) respondent indicated that she was not frustrated, she felt well and good about her pregnancy. Forty-nine (52,7%) of the respondents indicated that they were extremely depressed by their situations, whilst eleven (11,8%) saw no reason for complaining, they felt good with no depression at all. Sixty-two (66,7%) of the respondents indicated that they felt satisfied.

Although a thirty-three percent (33%) of the respondents did not respond to any of these statements, unplanned pregnancies apparently left the majority of students' feeling overwhelmed, sixty-two (66,7).

The reasons for the large numbers thirty-three (33,0%) of pregnant students who failed to respond to these questions in this study could not be established. The researcher, who is familiar with cultural practices in the NP, would recommend that the possibility be investigated that respondents might refrain from providing negative responses, as this might portray them as being "bad persons".

4.5.2 Feelings of loneliness

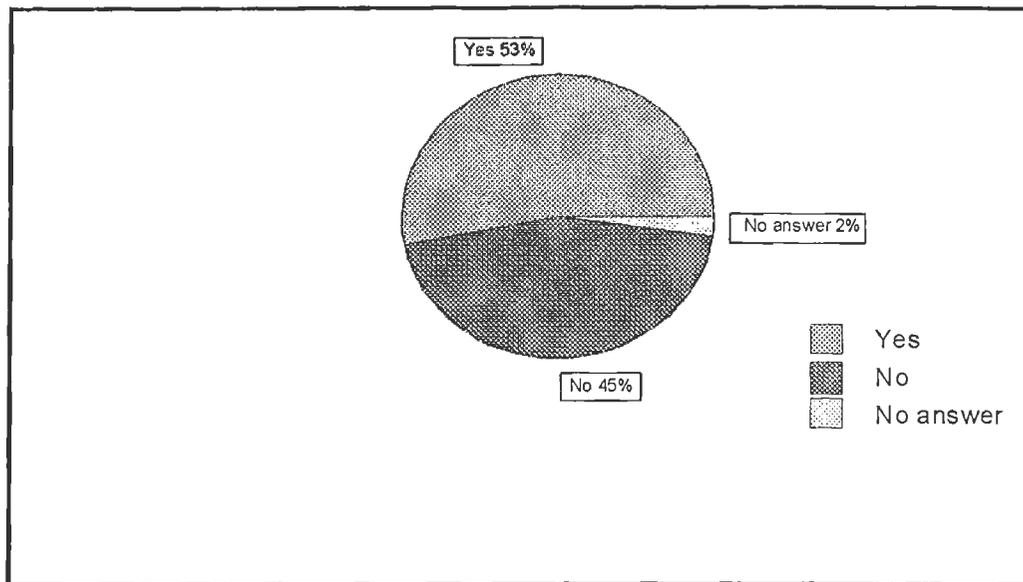


Figure 4.20
Feelings of loneliness (n=93)

Figure 4.20 shows that forty-nine 49 (52,7%) of the respondents expressed feelings of loneliness, whilst forty-two (45,2%) indicated that, they were not lonely. Sex Education Programme should alert adolescents to the fact that loneliness might lead to isolation. Loneliness is a very bad feeling, which will soon lead to isolation as was proved in the USA (Kaplan & Sadock 1998:598).

4.5.3 Problems causing loneliness (n=93)

Only four (4,3%) of the respondents indicated poor relationships with parents. Ten (10,8%) indicated that their male partners denied their responsibilities, whilst twenty-seven (29,0%) indicated that their male partners were elderly married men.

Only eight (8,6%) of the respondents indicated that poor relationships between students and college staff members contributed to their experiences of loneliness. However, approximately forty-one (44,1%) of the respondents, did not respond to any of these statements. Those respondents who were lonely because their male partners were married men, confirmed the findings of Bayona & Kandji-Murangi (1996:2). These authors reported that over seventy percent (70,0%) of adolescent pregnancies in Botswana were caused by adult working males and elderly men in the communities.

SECTION E

4.6. SOCIAL REACTIONS DURING PREGNANCY

4.6.1 Persons first informed about pregnancies (n=93)

One (1,1%) of the respondents reported to their aunts, whilst ten (10,8%) reported to others, not specified. The greatest percentage of the respondents seventy-nine (84,9%) reported to their male partners for the very first time. No respondent indicated that she respond to the nursing college staff members, hospital staff and parents.

4.6.2 Parents' reactions to pregnancies (n=93)

Twenty-eight (30,1%) respondents indicated that their parents were very happy, fifteen (16,1%) indicated that their parents were angry, whilst thirty-seven (39,8%) indicated that their parents were disappointed. Only three (3,2%) of the respondents were presented to their male partners' homes. Seven adolescents (7,5%) failed to respond to this questions.

4.6.3 Male partners' reactions to pregnancies

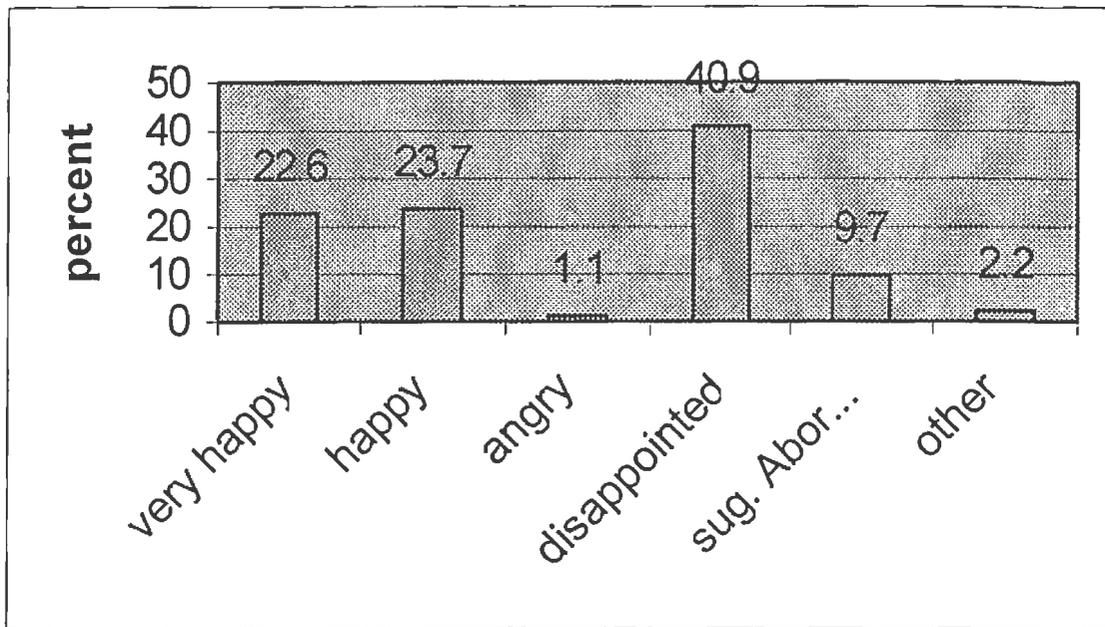


Figure 4.21

Male partners' reactions to pregnancies (n=93)

Figure 4.21 shows that twenty-one (22,6%) respondents indicated that their male partners were very happy, whilst twenty-two (23,7%) reported that their male partners' were happy, only one (1,1%) respondent's male partner was angry, but thirty-eight (40,9%) respondents reported that their male partners' were disappointed. Whilst nine (9,7%) of the respondents indicated that their male partners' suggested abortion. Two (2,2%) respondents did not indicate their male partners' reactions. These findings were consistent with section 4.5.2 findings which indicated that one of the problems causing loneliness amongst the pregnant students, was the marital status of their sexual partners. These findings supported those of Bayona & Kandji-Murangi (1996:2); Smith & Maurer (1995:592).

These authors reported that in Botswana and in the USA at over seventy percent (70,0%) of adolescent pregnancies were caused by working males and elderly men, who often

denied responsibilities, leaving adolescents frustrated. Policies appeared to be silent on these issues in many countries. If further research should support this finding that married and older men might be responsible of many adolescents' pregnancies in the NP, health education efforts should emphasise the risks involved in these types of relationships.

4.6.4 Support from family members

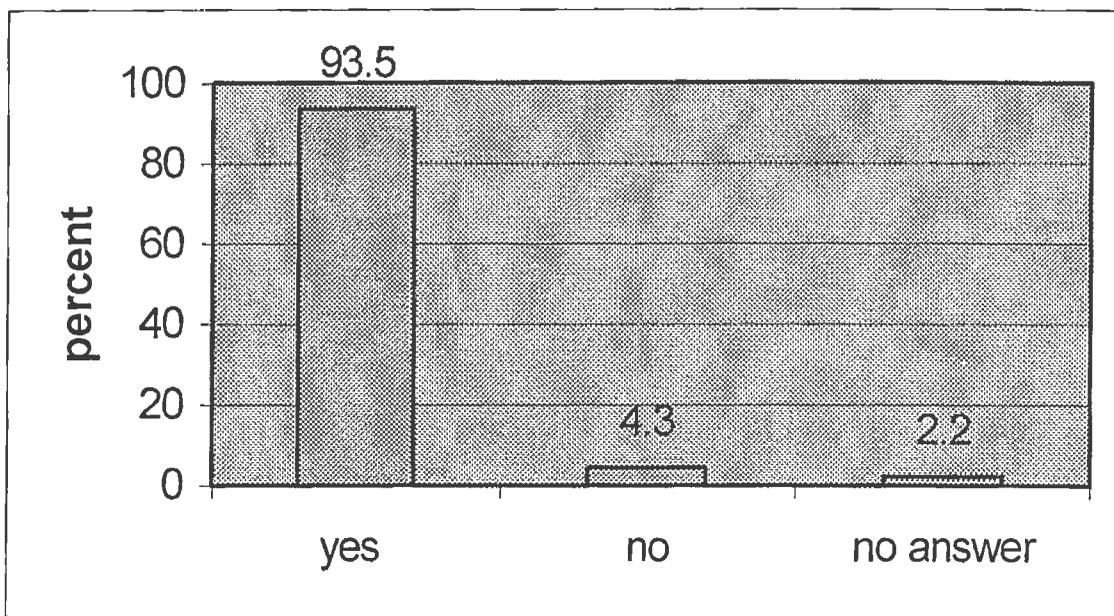


Figure 4.22

Support from family members (n=93)

Figure 4.22 Shows that only four (4,3%) respondents expressed feelings of being unsupported by family members. Only two (2,2%) of the respondents occupied a neutral position. Almost all the respondents eighty-seven (93,5%) indicated that family members were highly supportive during this critical time of need.

This appeared to be inconsistent with findings from Section 4.6.2 with a very low percentage of parents supporting their children, increasing their loneliness, and Section 4.6.2 where only twenty-nine (30,1%) parents were very happy after having been told

about the pregnancies of their daughters. These apparent inconsistencies could not be explained by the data gathered during this survey. However, it might be possible that both the pregnant adolescents and their families managed to accept the situation and could provide support to each other during the later stages of pregnancy.

4.6.5 Close relationships due to pregnancies with boyfriends

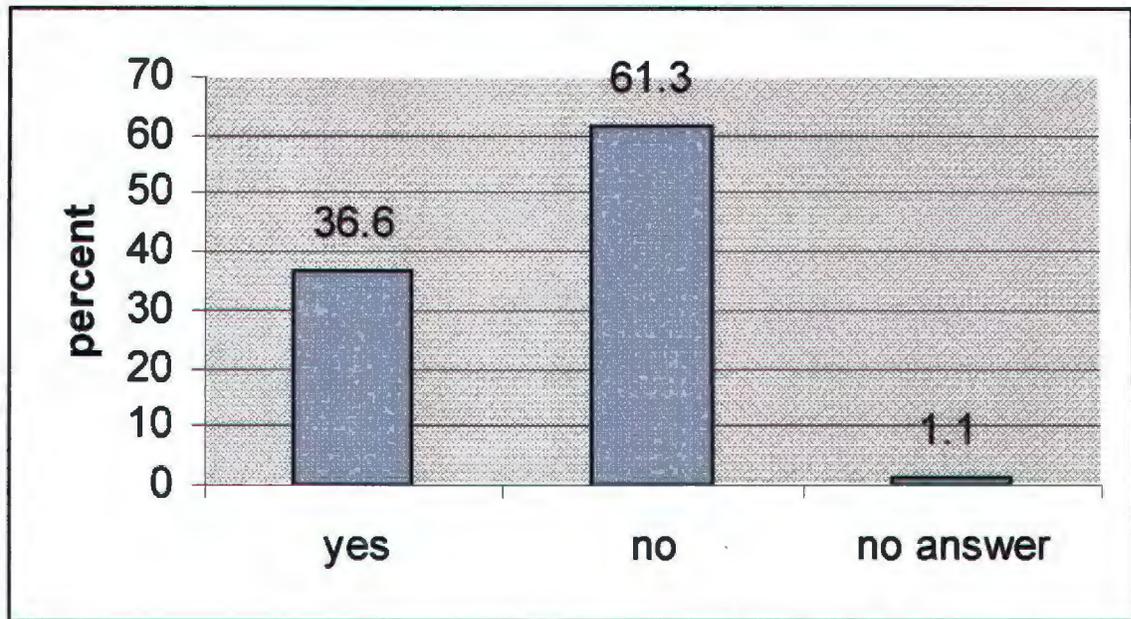


Figure 4.23

Close relationships due to pregnancies with boyfriends (n=93)

Figure 4.23 shows that only thirty-four (36,6%) of the respondents indicated that they maintained good relationship with their male partners. Whilst fifty-seven (61,3%) of the respondents reported rejections by male partners. These findings appeared to be consistent with Mukasa's (1992:422) findings, reporting that in the Transkei most teenagers remained alone during labour, often facing complications such as hemorrhage and pre-eclampsia without any persons to support them.

4.6.6. Reasons that kept respondents and their male partners' apart

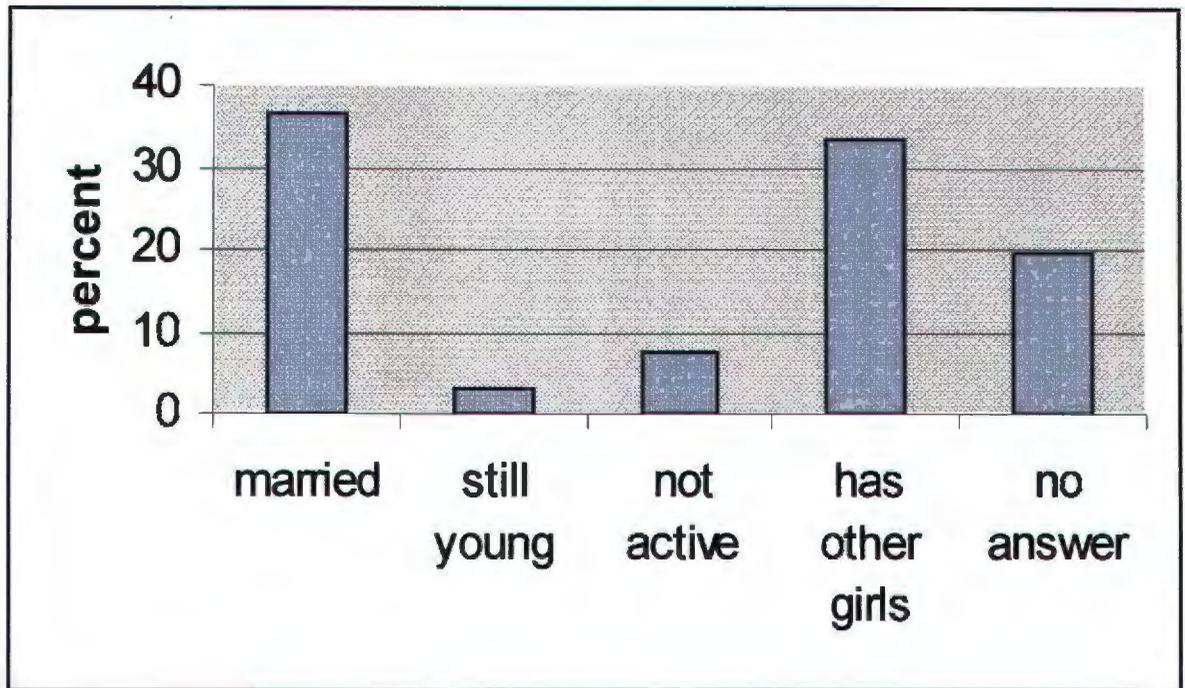


Figure 4.24

Reasons that kept respondents and their male partners apart (n=93)

Figure 4.24 shows that thirty-four (36,6%) of the respondents reported that their male partners were married. Only three (3,2%) of the respondents reported that their male partners were still young. Thirty-three (33,3%) of the respondents indicated that their male partners are not faithful, they were having other girlfriends. Whilst eighteen (19,4%) of the respondents did not indicate specification of their problems that cause a distance relationships between student nurses and male partners. These findings could be linked with the previous findings in Section 4.5.3. which showed that twenty seven (29,0%) of the respondents' male partners were married. These findings are consistence with those in section 4.3.16 where (95,7%) of the students indicated that they had only one sex partner, were:

- Not promiscuous,
- Protected from AIDS

If such a large number of respondents knew that their male partners were not faithful to them, they might indeed be exposed to an unknown high risk of getting AIDS, especially if they did not use condoms to prove their faithfulness to their male partners. Health education should include the right of women to use condoms.

4.6.7 Relationships between pregnant students and college staff members

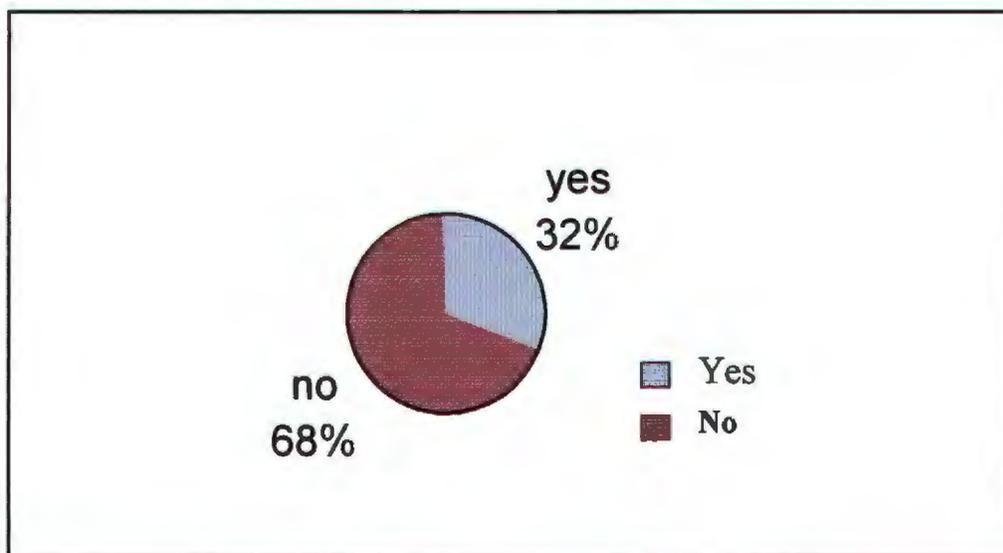


Figure 4.25

Relationships between pregnant students and college staff members (n=93)

From figure 4.25 it is clear that majority of the respondents did not favour discussing their pregnancies with staff members of nursing colleges, sixty-eight (68,5%), where only twenty-eight (31,5%) of the respondents indicated that they had no problems discussing their conditions and pregnancies with nursing college staff members. It would appear from these findings that the majority of the respondents were concerned about the relationships between college staff members and pregnant student nurses. Whether this was indeed a problem could not be ascertained. However, the majority of pregnant students perceived problems in communicating with the college staff members. Future

research should establish reasons for these perceptions and recommend ways of improving this situation.

4.6.8 Reasons for poor perceived relationships between pregnant student nurses and college staff members (n=93)

Only three (3,2%) respondents reported that college staff were unfriendly, six (6,5%) indicated that they may talk about students and nine (9,7%) that they were not supportive. However, seventy-five (80,6%) of the respondents did not indicate reasons for not discussing their conditions with the college staff members. It would appear from these findings that there might be poor relationships between student nurses and the college staff members as very few might seek advice from the college staff members.

4.6.9 Support from the clinical tutors (n-93)

Fifty-seven (61,3%) respondents reported that they experienced much support from their clinical nurse educators, whilst twenty-two (23,7%) reported receiving no such support from their clinical nurse educators. However, fourteen (15,1%) respondents did not respond to these two statements.

4.6.10 Support from the ANC (n=93)

Sixty-nine (74,2%) respondents indicated that they experienced great support from the professional nurses in ANC clinics, whilst seven (7,5%) indicated that there was no support. Only seventeen (18,3%) students failed to respond. These findings are consistent with those of Section 4.6.9.

4.6.11 Plans to return to colleges after deliveries

Table 4.11 Plans to return to colleges after deliveries (n=93)

PLANS TO RETURN	FREQUENCY	PERCENT
Within 9 days	13	14,0
After a week	34	36,6
One month	14	15,1
Two months	1	1,1
Other specify	11	11,8
TOTAL	93	100,0

Table 4.11 shows that the majority of the respondents preferred not to take maternity leave for three (3) months nor even for thirty (30) days. Only one (1,1%) reported taking two months' leave and eleven (11,8%) taking leave unspecified, whilst fourteen (15,1%) reported that they would take a month leave. The highest percentage (36,6%) of the respondents indicated that they would only take one week's leave. The majority of the respondents did not take three month maternity leave. These findings could be linked with the previous findings in Section 4.38 where 46 (49,5%) respondents indicated that they did not take maternity leave, whilst thirty-one (33,3%) only left at forty (40) weeks' gestation.

4.6.12 Who takes care of a newborn baby

Table 4.12 Persons taking care of newborn babies (n=93)

PERSONS TAKING CARE OF BABIES	FREQUENCY	PERCENT
Self	1	1,1
<i>Mothers</i>	62	66,6
Grannies	6	12,9
<i>In-Laws</i>	8	8,6
Other specify	10	10,8
TOTAL	93	100,0

Table 4.12 shows that only one (1,1%) of the respondents indicated that she would look after the baby herself, six (12,9%) reported that grannies would look after the babies, only eight (8,6%) indicated that in-laws would look after their babies. The highest percentage of the respondents (66,6%) indicated that their infants be cared for by their mothers. These findings correlate with figure 4.5 indicating that large numbers of mothers were not working and therefore could look after their babies. These findings are of concern in terms of the numbers of respondents who indicated that their babies soon after birth will be cared for by other people. A question could be raised as to whether caregivers would be able to prepare artificial feeds for these new born babies?

4.6.13 Perceptions of health personnel attitudes.

Table 4.13 Perception of health personnel attitudes (n=93)

ADVICE TO HEALTH PERSONNEL	FREQUENCY	PERCENT
Friendly & Approachable	45	48,4
Give advice	39	41,9
Not to look down upon students	9	9,7
TOTAL	93	100,0

Table 4.13 shows that forty-five (48,4%) respondents indicated that health personnel should be friendly and approachable, thirty-nine (41,9%) would be willing to give advice and support. Whilst nine (9,7%) respondents indicated that health personnel should not look down upon them.

SECTION F

4.7 THE ADOLESCENT MOTHERS' VIEWPOINTS

4.7.1. Knowledge of emergency contraceptives

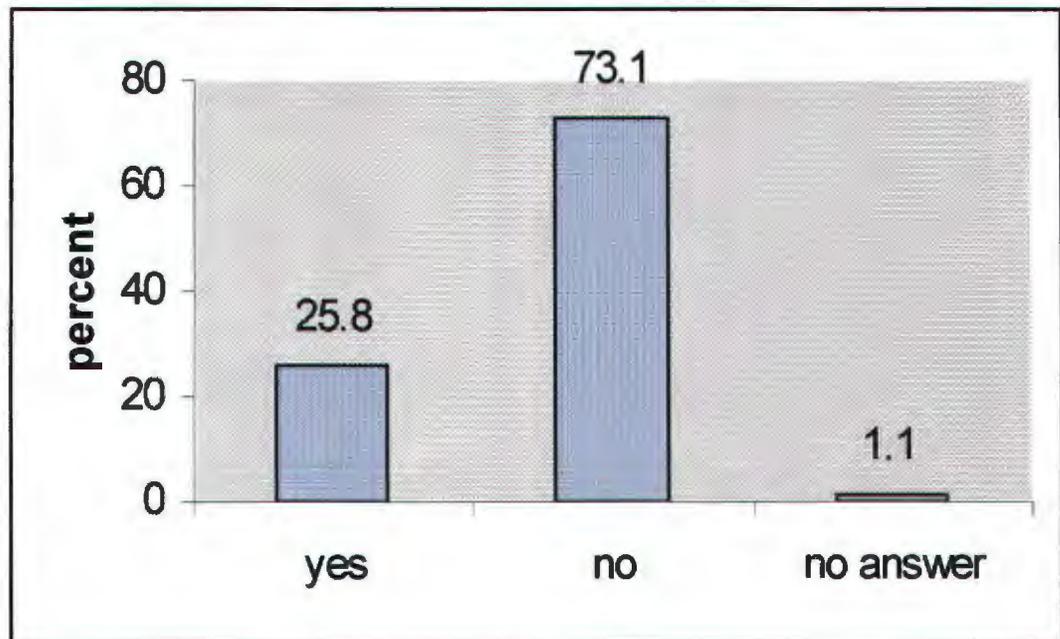


Figure 4.26

Knowledge of emergency contraceptives (n=93)

Figure 4.26 shows that sixty-eight (73,1%) respondents had no information about emergency contraceptives which could be taken after having unsafe sexual intercourse whilst twenty-four (25,8%) of the respondents indicated that they knew about these new of contraceptives. It would appear from these findings that only a few of the respondents had some knowledge of emergency contraceptives. This might be significant in terms of sex education programmes in the NP.

4.7.2 Decisions about abortions

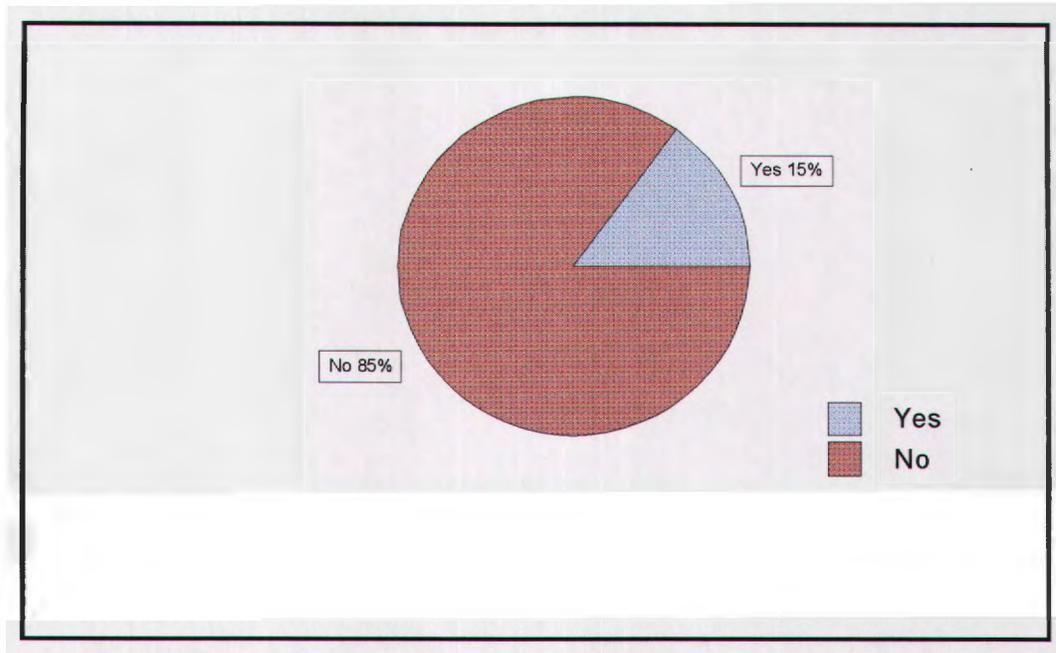


Figure 4.27
Decisions about abortions (n=93)

Figure 4.27 shows that fourteen (15,1%) respondents indicated that they thought about abortions, but the seventy-nine (84,9%) preferred to keep their babies. These findings are satisfactory as the majority of the respondents had exercised their choice whether to keep their babies or to abort.

4.7.3 Rights of individuals to keep their babies

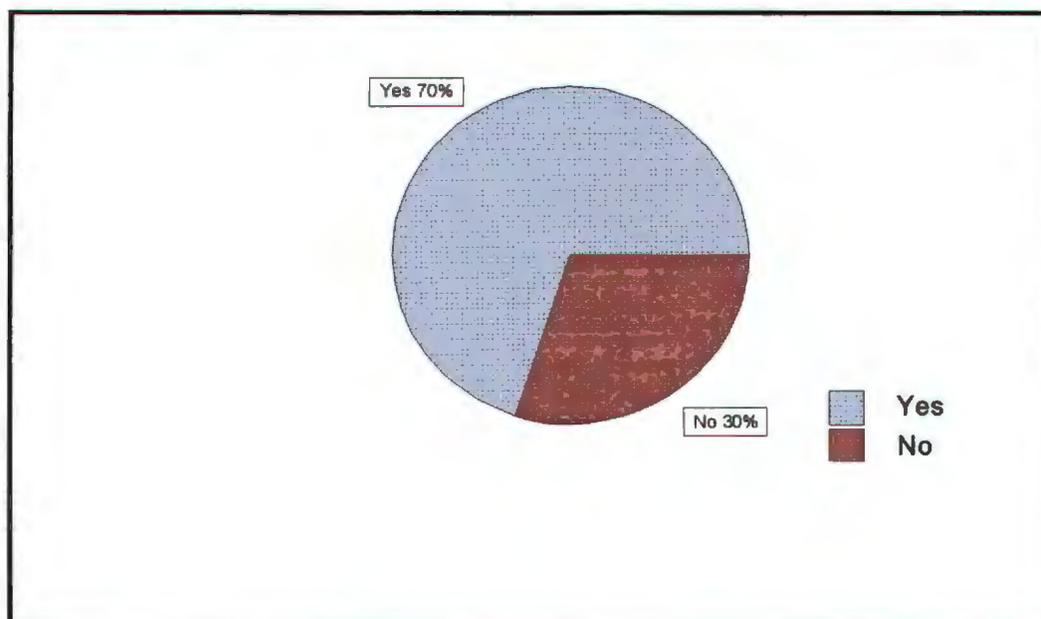


Figure 4.28
Rights of individuals to keep their babies (n=93)

Figure 4.28 shows that only twenty-eight (30,1%) respondents had information about the rights of individuals to exercise their choices about the termination of their pregnancies. The greatest percentage of the respondents sixty-five (70,0%) reported that they were not informed about these choices (Act, No 1891 of 1996). These findings are significant in terms of inclusion in the sex education programmes to make adolescents aware of their choices in terms of the (choice on termination of pregnancy Act no, 92,1996). Although only 15,1% indicated in Figure 4.27 that they considered procuring abortion, it could not be ascertained whether more would have done so if they had the knowledge about legal abortions available on demand, in terms of choice on termination of pregnancy (Act no, 92:1996).

SECTION G

4.8. ACADEMIC RECORDS

4.8.1 Coping abilities with studies in classrooms

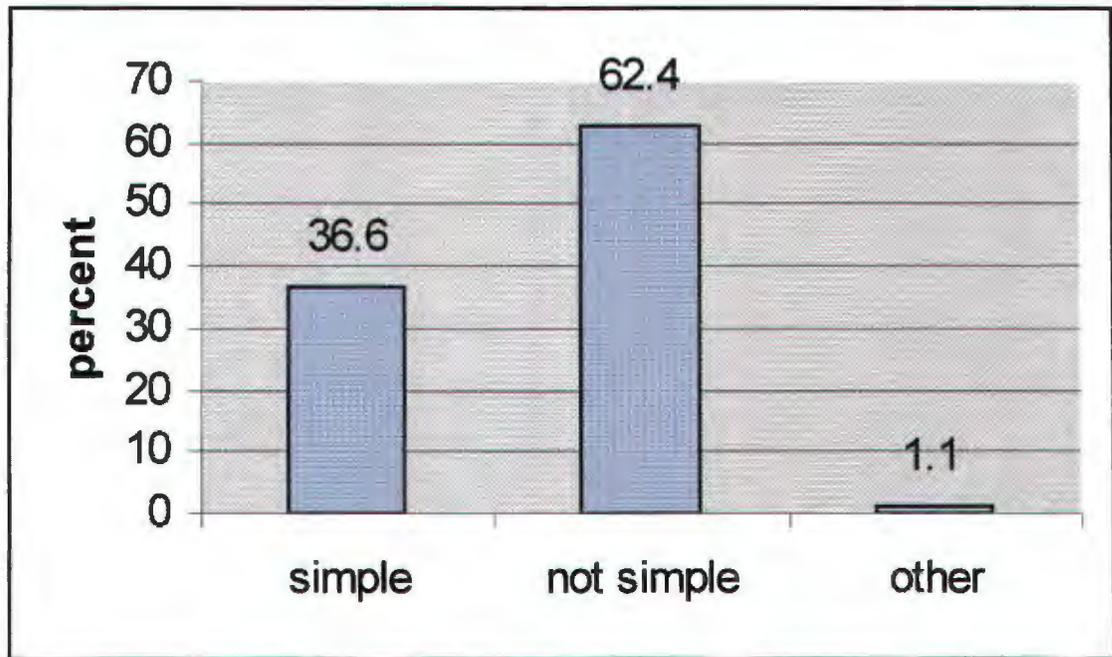


Figure 4.29

Coping abilities with studies in classroom (n=93)

Figure 4.29 shows that only thirty-four (36,6%) respondents experienced no changes, whilst fifty-eight (62,4%) had some difficult time. Only one (1,1%) respondent was not specific. These findings seems to support previous research conducted on pregnant students in Botswana that pregnancy and childbearing were often reasons for adolescents' dropping out of school. Moilwa (1993:93); Mmegi (1994:4) interviewed 106 pregnant teenagers in Botswana, who were all school children, aged seventeen – nineteen (17-19), in standard 9 and 10.

Twenty-five girls (23,5%) had abandoned school because of health problems, whilst 74 (69,8%) deteriorated in their academic progress. Seven (7,7%) respondents, who were rated amongst the brighter students, failed their final year studies.

4.8.2 Coping in the clinical situations with caring for clients/patients

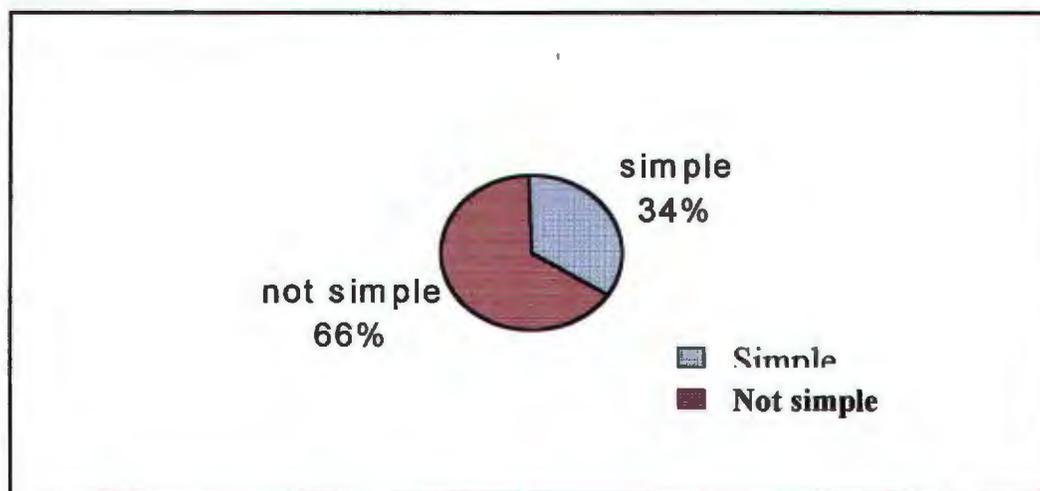


Figure 4.30

Coping in the clinical situations with caring clients/patients (n=93)

Figure 4.30 shows that only thirty-two (34,0%) respondents indicated that it was not difficult to care for the sick in the clinical area and it was not hard for them to perform clinical procedures. However, sixty-one (66,0%) of the respondents were unable to cope with the clinical settings' demands.

Future research could address ways to support pregnant students in both the classroom and clinical situations.

4.8.3 Pace of study prior to and during the pregnancies

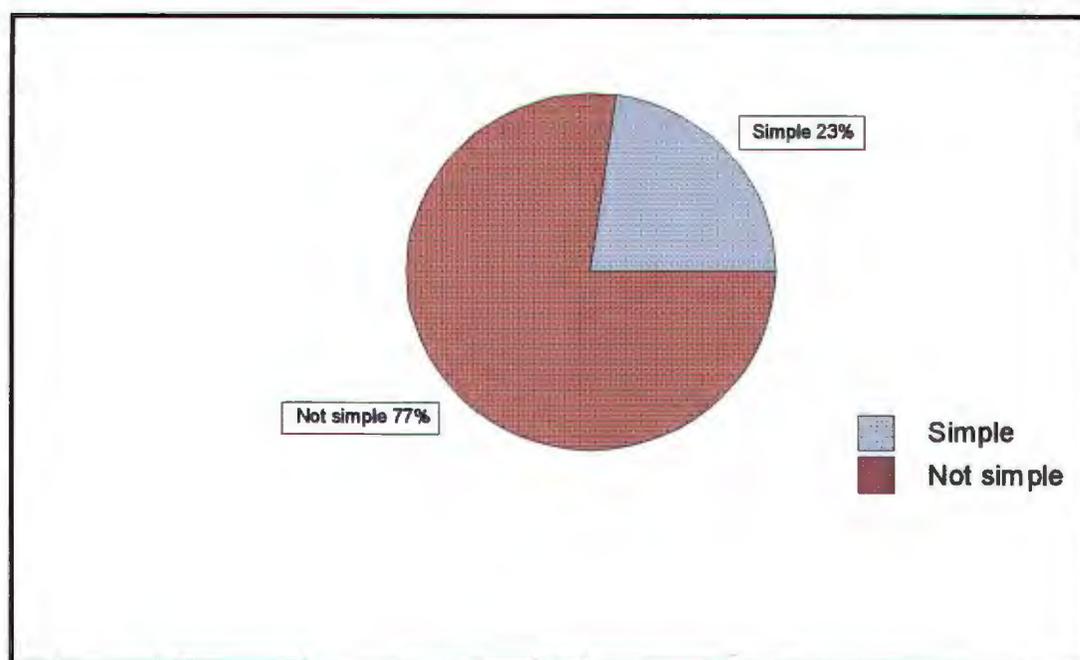


Figure 4.31

Pace of study prior to and during the pregnancies (n=93)

Figure 4.31 shows that seventy-two (77,4%) of the respondents experienced some difficulties with their studies. Only twenty-two (22,6%) of the respondents managed with their studies. This could be linked with the previous findings in section 4.8.1 and section 4.8.2, which showed that fifty-eight (62,4%) and sixty-one (66,0%) respondents had some difficulties with their studies. These findings further confirmed those of Bayona & Kandji-Murangi (1996:7) about the youth in Botswana. These authors found that dropouts and failure rates due to pregnancy were higher at secondary schools and were more common in rural schools than in urban schools. Pregnant student nurses in the NP might experience similar problems with regard to their studies.

4.8.4 Marks scored in tests prior to pregnancies

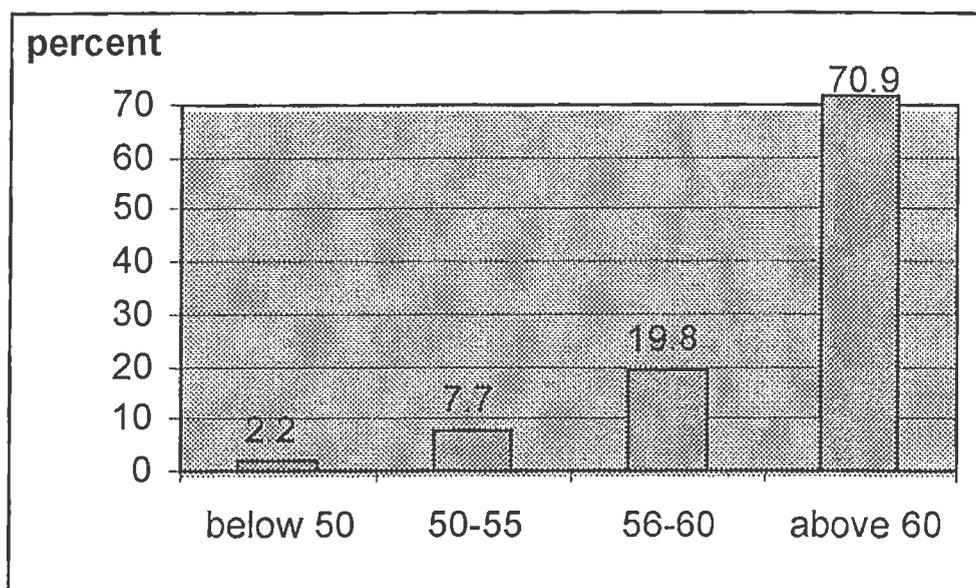


Figure 4.32

Marks scored in tests prior to pregnancies (n=93)

Figure 4.32 shows that the majority of the respondents had never experienced any difficulties with their studies as the marks scored in tests had showed sixty percent and above (70,9%). Though there were a few, two (2,2%) respondents before pregnancy obtained less than fifty percent (50%) marks, those appear to be exceptional cases. It was not justified from this study as to whether they had intellectual problems or not. Moderate categories of respondents could score between 50-55% before pregnancy (7,7% whilst eighteen (19,8%) respondents scored between fifty-six to sixty (56 to 60%).

It would appear from these findings that the majority of the respondents (70,9%) did not experienced difficulties with their studies before pregnancies.

4.8.5 Marks scored in tests during pregnancies

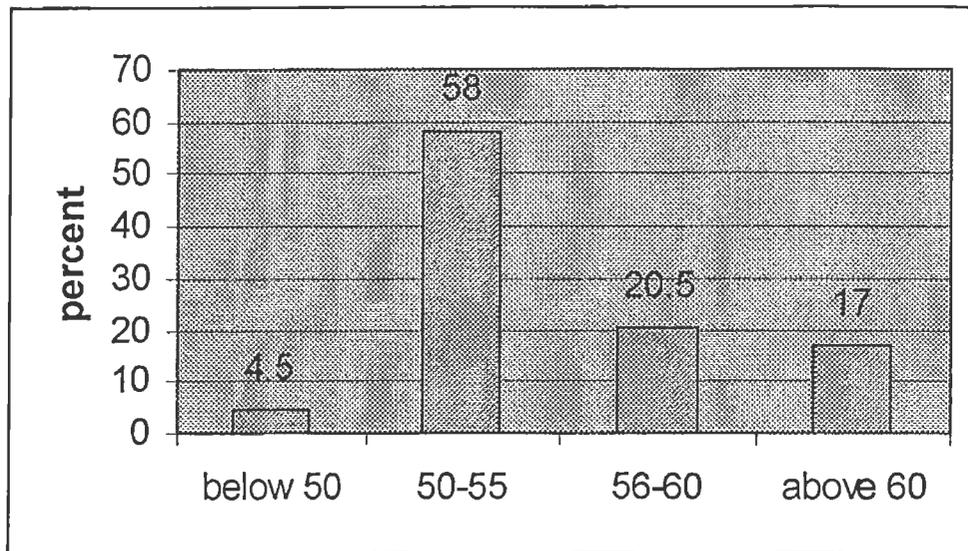


Figure 4.33

Marks scored in tests during pregnancies (n=93)

Figure 4.33 shows a marked reduction in marks scored during pregnancy. The majority of the respondents fifty-one (58,0%) scored between fifty to fifty-five (50-55%) marks. Whilst a few of the respondents fifteen (17,0%) could maintain their marks scored from sixty percent (60%) and more. Eighteen (20,5%) respondents indicated that their marks scored were between fifty-six to sixty (56-60%). The lowest percent of 4 (4,5%) respondents indicated that their marks scored were below 50%, with a marked decrease of marks scored during pregnancy as shown in figure 4.3. These findings could be linked with the previous findings in section 4.8.4 which indicated that only two (2,2) respondents scored below 50%, the number has now increased from two (2,2%) to four (4,5%) respondents who scored below fifty percent (50%).

With a marked decreased in the highest percentages of respondents (70,9%) in Section 4.8.4 who experienced no problems in obtaining higher marks of more than sixty percent (60%). As shown in Section 4.8.5, the percentages of respondents who scored sixty percent (60%) and more before pregnancies had decreased during pregnancy from (70,9%) to (17,0%) of respondents.

4.8.6 Marks scored in test after deliveries

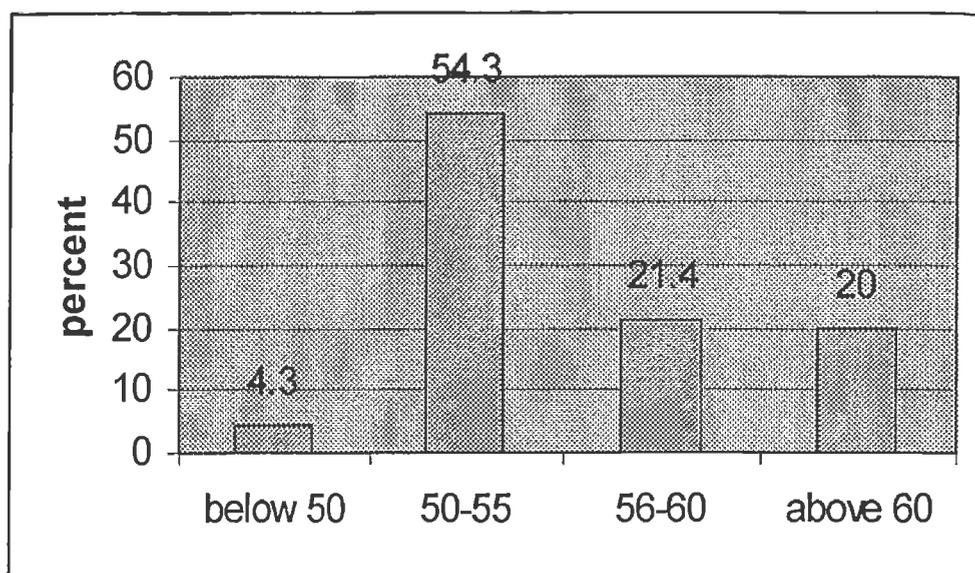


Figure 4.34

Marks scored in tests after deliveries (n=93)

There appeared to be marked decreased in scores when comparing the findings for section 4.8.4 with section 4.8.5 figure 4.34 showed that four (4,3%) respondents obtained less than 50 marks whereas fifteen (16,1%) respondents indicated that their marks ranged between fifty to sixty percent (50%-60%). Only nineteen (20,0%) of the respondents indicated that their marks were not affected during this period. The highest percentage fifty-one (54,3%) indicated that their scores were between fifty to fifty-five (50%-55%). These findings appeared to be inconsistent with the previous findings from section 4,84, which showed that the majority of the respondents sixty-six (70,9%) scored (60%) and more before pregnancy.

It would appear from these findings that student progress was marked affected as shown from section 4.8.4, 4.8.5 and 4.8.6 . These findings are evidence to be taken into consideration when planning to establish sex educational programmes for teens in the early age at primary school level.

4.9. SUMMARY

In this chapter, the results of the data collected were presented and discussed. Pregnancy amongst students nurses is a significant problem in the NP. It places young parents and their children at a great risk for HIV/AIDS as was shown in Section 4.3.16 where some of the respondents indicated their male partners were unfaithful because they are involved with other women. Pregnancy also leads to poor education for both young mothers and their children, limit life options and cause frustration due to being overwhelmed by their situations. The findings of this study showed that pregnant student nurses are high risk medically, obstetrically and socially and educationally as was evident from the following sections 4.4.1, 4.4.4a, 4.4.6, 4.5.2, 4.8.5 and 4.5.6, where it was found that the majority of pregnant student nurses suffered symptoms such as physical discomfort, oedema of lower ankles and poor appetite as well as tiredness. The majority of the respondents were lonely as was evident from figure 4.20. These findings confirmed those of Bayona & Kanji-Murangi, who found that about (70,0%) of their respondents were frustrated and lonely because their male friends were married and some were unfaithful. It was also found from the results of this study that pregnancy truncate students progress.

The findings further suggest that pregnant student nurses delay seeking ANC services or never make use of ANC services. The importance is that regular ANC services enhance the well being of mothers and babies. The previous statements made at the beginning of this study about the maternity leave were confirmed, that pregnant students might not take maternity leave, and their newborn babies are cared for by others, mostly by these babies' grand mothers.

It will remain as such as long as society refrains from not vigorously attacking the root causes that affect at risk adolescents. It would appear from the findings of this study that young people commence sexual activities at or prior to the age of 12 years.

The results further suggest that the sexual knowledge of the majority of pregnant student nurses included in this study is very limited. This is apparent, because the majority of the respondents sixty-eight percent (68,0%) reported that their pregnancies were not planned. But much of the information with regard to pregnancy

was not known. This might be due to very little attempt that is being made towards involving parents in sex education-programmes.

In the next chapter the study's limitations and conclusions are discussed and recommendations for future research are provided.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS OF THE STUDY

5.1 INTRODUCTION

The purpose of this study was to explore the problems associated with pregnancy among student nurses in the NP. The research question that guided the study was, “which problems are related to pregnancy amongst student nurses in the NP?”

The question led to other related sub-questions as follows:

- What factors cause pregnancy amongst student nurses in the NP?
- What methods can be used to prevent unplanned pregnancies amongst student nurses in the NP?
- What services do the pregnant student nurses need in the NP?
- What strategies should be employed to enhance the utilisation of reproductive health services by young people in NP?

In this chapter the set objectives will be evaluated to determine whether they have been achieved.

5.2 OBJECTIVES

5.2.1 Objective No.1

This objective was aimed at identifying factors giving rise to pregnancies among student nurses in the NP.

In this study, it was revealed that many young student nurses became parents as a result of a lack of knowledge. Respondents in this study were found to be ignorant about contraceptives and their effects and the need for consistent use.

This was shown by (51,0%) of the responses revealing that pregnancies were not planned but respondents were not on contraceptives either (See figure 4.12). Experimentation by young student nurses was revealed to be one of the factors that gave rise to pregnancies as shown by (84,9%) of the responses. Respondents were in favour of becoming pregnant as a means of making their partners responsible for them, because they feared losing them and also pregnancy was seen as an escape from loneliness. Figure 4.20 revealed that (53,0%) of the respondents were lonely and a variety of reasons for loneliness were given as unfaithful male partners. Many of these fathers were married to other women and thus had other families. It is therefore concluded that the major factor causing pregnancy among student nurses in the NP is a lack of knowledge about contraceptives.

5.2.2 Objective No. 2

This objective sought to determine whether the student nurses utilise methods of preventing pregnancies.

Respondents revealed a lack of accurate knowledge about specific birth control methods and the correct use of the contraceptives. This was shown by section 4.3.15 and figure 4.9 of the responses revealing that parents never discussed the topic of contraception with their children. It was revealed that there was an improper use of contraceptives because of a lack of knowledge (See figure 4.14). Even when provided with accurate information about birth control methods, young student nurses did not use contraceptives effectively nor continuously as shown in Figure 4.14. The respondents seemed to have a positive attitude towards contraception and contraceptive use although they failed to use these methods consistently. On the other hand (64,5%) of the study population seemed to be dissatisfied with the reproductive health services offered in hospitals and clinics in the NP because of the distances, and the mixture of students and other adolescents with their mothers, teachers, and other significant adults at family planning clinics. Campus-based health services are not offered at the nursing college campuses in the NP.

Respondents in this study had clearly expressed the need for such services at the nursing college campuses, just like those campus-based health services offered at universities. Ninety five percent (95%) of the respondents favoured campus-based health services and the inclusion of the parents to help provide sex information.

5.2.3 Objective No.3

This objective was aimed at identifying problems related to pregnancies among students nurses.

In this study it was revealed that student childbearing is associated with a variety of problems. The most important problems for students and their infants are outlined as medical, emotional and academic in nature. Findings revealed that (89,0%) of the respondents suffered from pressure symptoms and discomfort. Medically they experienced the following:

- tiredness
- dizziness
- oedema of the ankles
- low abdominal pains
- morning sickness (see figure 4.17).

It was revealed that they also experienced rejection by their male partners which lead to loneliness as shown in Figure 4.20 and Figure 4.21. Furthermore, (62,4%) agreed that it was not easy for students to cope in class and in the clinical areas caring for patients during their pregnancies.

Academic progress seemed to be grossly affected from obtaining marks of 60% or more (See figures 4.30, 4.31,4.32,4.33 and 4.34). Infants also experienced problems at early stages after birth. They remained in the care people other than their mothers (See Table 4.12). It was revealed that only one (1.1%) respondent planned to go on maternity leave. The majority of the respondents (98.5%) did not go on maternity leave at all.

The student nurses reported that they remained with their newborn infants for three or four days after delivery and then resumed classes and clinical assignments so as to continue with their peers. It is concluded that premarital pregnancies, especially amongst young people before age 22 years of age, carry too heavy penalty of problems, as proved by Brindis; Irwin & Millstein (1992:4) as well as by Sikes (1996:26) in the USA. This study confirmed similar findings in the NP of the RSA.

5.2.4 Objective No.4

This objective was directed at identifying services needed for pregnant student nurses.

It was found that pregnant student nurses needed support services from their nursing college campuses. They also needed health education to benefit from antenatal services.

In this study it was revealed that respondents expressed their plea for assistance and support from health care professionals, including nurses. Findings of this study further revealed that (98,5%) of the respondents favoured campus-based health services meant solely for students. It was revealed that some of the respondents were shy to utilise reproductive health services because of various reasons, such as meeting their parents and other elderly people at these clinics. The provision of family planning clinics solely for adolescents, including student nurses, in the NP could definitely enhance the utilisation of such services, and reduce the incidence of adolescent mothers, with concomitant decreased health expenditures on these adolescents high risk pregnancies, and the care of their infants.

5.2.5 Objective No.5

This objective sought to identify strategies that could be employed to promote the utilisation of reproductive health services by young people in the NP.

It was found that young people were likely to get information about sex, labour and delivery from their peers. It was clearly revealed in this study that the majority of the respondents could not utilise the reproductive health services because of a lack of knowledge (See figure 4.26), and also because of a lack of access because they feared

meeting significant adults at the family planning clinics. Young people were not aware of their rights to decide about the potential terminations of their pregnancies during the first twelve weeks of pregnancy. It is therefore concluded that parents should be well informed and be able to provide sexual information in their homes.

5.3 LIMITATIONS IDENTIFIED DURING THE STUDY

During the course of the study, certain limitations were identified. The most significant limitations were identified as follows:

- The period of collecting data had to be extended for a period of six months, reasons being that student nurses were not readily available at college campuses as some would be at the hospitals for their clinical experiences.
- Students nurses, known to be pregnant, but absent from the hospitals, could not be included in the survey.
- Under-reporting or over-reporting that might have occurred as a result of the sensitive nature of some of the questions on sexuality.
- Information and literature on student nurses' pregnancies are limited.
- Pregnant students nurses might sometimes have interpreted the interview to be prying into their private lives. During their pregnancies students might have been specifically sensitive and secretive.

Some of the limitations offer scope for further research and will be referred to in the recommendations.

5.4 RECOMMENDATIONS ARISING FROM THE RESEARCH PROJECT

Addressing the problem of pregnancy among student nurses is a multifaceted action that nurses or college administrators cannot manage on their own. It needs intersectoral collaboration for all role players: nurses, social workers, the community,

non-governmental organisations, politicians and the public and private sectors. These interventions should take place at provincial and national levels. Proper coordination of activities at various levels cannot be over-emphasized. On the strength of the above and based on the research project, the following recommendations are made:

Student pregnancy issues should be adequately addressed by:

- Accommodating students during their pregnancies and after child birth while trying to prevent it from occurring
- Postponing the birth of the first child until the age of twenty-two or later which would significantly reduce maternal and infant morbidity burdens, as this will mean that pregnancy could take place after training, ensuring adequate maternity leave so that care for their babies would be improved as mothers would be able to care for their own babies.
- The government, politicians, church and educators should use all available means such as broadcasting, meetings with parents, and public ceremonies to educate all sectors of the society about family life with special emphasis on the rural communities in the NP. Parents should play an active role in imparting sexual knowledge to their children. If sexual matters can be discussed at home in a warm and nurturing environment, where parents are more likely supportive and understanding, adolescents are more likely to make appropriate decisions regarding sexual behaviour.
- Recommendations to policy makers of the NP are necessary to enhance the pregnant adolescents utilisation of reproductive health services - a need indicated in the NP.
- The importance of health education about early and regular ANC attendance to enhance the wellbeing of mothers and babies should be addressed by all concerned.

- Formal programmes to teach parents to communicate with their children about human sexuality should be introduced in the NP. Special attention should be given to the more remote areas. All sexual and reproductive health issues, including unwanted pregnancies, abortions, child abuse, AIDS, substance abuse, violence and contraceptives should be introduced. It should be entrusted to teachers, parents and students themselves. The programmes should begin in primary school and continue through all levels of formal and non-formal education.
- Education should cultivate greater sensitivity to the needs of the pregnant students. Educationists should be positive towards those students who are already pregnant. Sexuality education should focus on attitudes, values and feelings as well as on factual anatomy and physiology. Adolescents should be equipped with sufficient knowledge to make informed decisions concerning their own sexual behaviour by choosing the best option available. If students should choose to engage in sexual activities and want to prevent pregnancies, contraceptives should be readily accessible. Knowledge about emergency contraceptions should be provided to all adolescents in the NP to help reduce the incidence of adolescent mothers. They should be taught that if unprotected sex took place, emergency contraceptives should be taken within seventy-two (72) hours.
- The need for student nurses to be informed about emergency contraceptives is especially important because they can inform other adolescents in the NP.
- Youth centres should be introduced, which will concentrate on student sexual problems separately from those of older people, because it appeared that crises were experienced in the practical aspects of the deliverance of such services in comprehensive health clinics in the NP. Preferably, student health services, such as those offered at universities should be established at nursing college campuses which are free and accessible, where students would not fear encountering adults.

- There is a need to institute peer-counselling programmes among student nurses in the NP.

5.5 RECOMMENDATION FOR FUTURE RESEARCH

The implications of the main findings of this study suggests that:

- Further research the impact of socio-economic conditions as a cause of student pregnancy.
- Further research be conducted about the involvement of parents with regard to the imparting sex educational information.
- Investigation of the possibility of sexual permissiveness as a means to supplement households incomes by daughters whose parents are unemployed.
- Further research is necessary especially about the non-utilisation of reproductive health services in the NP.
- Investigate the extent to which knowledge about contraceptives might prevent the occurrence of pregnancies, amongst the young persons in the RSA.
- Investigate the side effects experienced by adolescents using contraceptives in the NP.
- Evaluate the knowledge and the abilities of the grand parents in the preparation of artificial feeds and in providing care to the newborn babies left in their care.
- Investigate culture sensitive issues aimed at identifying potential cultural communication barriers and suggest ways of overcoming these to enhance the effective communication of knowledge about contraception.

- Further research be conducted about the non-utilisation of ANC services: problems could be cultural, inaccessibility, transport or long waiting periods, clinic hours during working hours of pregnant women.
- Future research should establish pregnant adolescents eating habits, including cultural dietary issues, and correlate these findings with their respective Haemoglobin (HB) levels for future health education to enhance the wellbeing of mothers and babies.
- Further research would be necessary regarding the establishment of bonding between the adolescent mothers and their babies left with caretakers three or four days after their birth.
- Further research should be undertaken to investigate whether married and older men might be responsible for many adolescents pregnancies in the NP.
- Pregnant student nurses experienced problems in communicating with the nursing college staff members. Future research should establish reasons for these receptions and recommend ways of improving this situation.
- Future research could address ways to support pregnant students in both the classroom and clinical situations.
- A serendipitous but significant finding relates to the fact that the majority of the pregnant student nurses reported that they did not practise safe sex (did not use condoms) because they were faithful to their sex partners. However, the majority also reported knowing that the fathers of their children were married and/or had sex with a number of other women. Thus health education efforts directed at preventing the spread of HIV/AIDS among adolescents should emphasise that both partners need to be faithful and that if one partner knows that the other one has other sexual partners, that safe sex (condoms) must be practised. Further research into this important issue is definitely warranted to identify whether:

- adolescents really understand that faithful implies that both partners should be each others exclusive sex partners
- condoms should be used if it is known that the partner has or had other sexual partners
- HIV/AIDS can be contracted even if the woman is faithful to one sex partner.

5.6 ASSUMPTIONS

Assumption 1

The relationship between sexual permissiveness and sexual attitudes, behaviour and the high incidence of pregnancy among student nurses in the NP.

This was found to be the case in the NP although most students did not indicate exactly how many sex partners they had, when asked about support and other sources of income in Section 4.2.9. (However, a large number of students also indicated that they were faithful to their partners, even though they knew the majority of their sexual partners were not faithful to them. This apparent discrepancy could not be accounted for by the information obtained for this survey).

Assumption 2

Premarital pregnancy affects young mothers self-esteem and academic progress.

The majority of students academic progress was markedly affected during their pregnancies and after deliveries. Self-esteem was also affected and three-quarters of the students reported feeling lonely and isolated.

Assumption 3

Dissemination of knowledge about contraceptives to young people, can prevent the occurrence of student pregnancies in the NP.

Services in this regard were reported to be ineffective, because information was disseminated mainly by health workers. Student nurses were ill-informed about contraceptives. They had no information about their right to choose to have their pregnancies terminated nor about emergency contraceptives.

Assumption 4

Pregnancies are associated with various minor ailments.

This was proved, as the majority of students experienced health problems mainly tiredness, headaches and low abdominal pains which lead to inability to provide quality care to patients in clinical settings.

Assumption 5

Low socio-economic status of the families affect sexual behaviour of student nurses.

Unemployment and poverty played a significant role in the sexual behaviour and in the attitudes of those students who engaged in prostitution to supplement their incomes.

5.7 CONCLUSION

The literature review indicated that a definite shift has occurred from the traditional beliefs regarding the preservation of virginity until after marriage, towards a more permissive attitude towards sexuality among the youth, characterised by casual sex commencing at the age of 12 and even younger. The respondents indicated that a lack of information contributed to the causal factors of student pregnancies. Whilst some students wanted to prove their fertility before marriage, this is a practice that is contrary to the traditional beliefs and practices of the Pedi, Shangaans and Vha-Venda, living in the NP of the RSA. Seabela (1990) states that illegitimacy was previously so unacceptable that the illegitimate children could be killed amongst the Pedi and Vha-Venda. However, with the gradual disappearance of the traditional practices, such as initiation ceremonies, where the main purpose was to impart knowledge on human sexuality to the youth, an alternative has to be found to perform this task. Effective health education efforts should address these issues.

Nicholas (1991) states that sexuality and contraception has rarely been a comfortable area for parent-child communication. The RSA's Department of Education should consider the promotion of a national policy supporting the introduction and emphasis of sex education which will incorporate contraceptive education at primary level in schools. It is also hoped, that the Government will promote offering of family life education before age of 10 years so as to delay the onset of sexual activity in order to improve reproductive health. Buga et al (1996) state that the implementation of sex education will place the student nurses in a better position to understand themselves and to be better informed to make decisions regarding their sexual behaviours.

The basic freedom of the world is a woman's freedom and no woman can be free until she can choose whether she will or will not be a mother. "Women enchained cannot choose but give a measure of that bondage to their sons and daughters" according to Margaret Sanger, the founding member of the International Planned Parenthood Federation (Ehlers in Heber & George 1999:86)

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ANNEXURE 1

**Letter requesting student nurses to participate
in the study**

CONSENT FORM FOR RESEARCH PARTICIPANTS

TITLE: PROBLEMS ASSOCIATED WITH PREGNANCY AMONG STUDENT NURSES IN THE NORTHERN PROVINCE.

RESEARCHER : M.L. NETSHIKWETA

PURPOSE

Pregnancy is highly common among student nurses on training in the Northern Province. There is a concern that students make up a substantial part of our population. Society and College administrators must acknowledge the student needs and concerns instead of looking down on students. Although the real causes of falling pregnant while pursuing your career is not known, but early prevention of unwanted pregnancy could save many students from minor ailments that are associated with pregnancy and poor progress academically. The purpose of this study is to investigate the measures taken to prevent pregnancy and the support system of those already pregnant. To investigate the strategies taken by college and hospital administrators with regard to student who miss out the requirements. To investigate how the student can be helped in the prevention of unwanted pregnancy.

BENEFITS

Participation in this study will help you as a student to complete your study before you encounter problems due to pregnancy, and the information you contributed could be of help to your fellow student, and some steps could be taken to assist pregnant student or to improve support systems in the future.

PROCEDURE

If you choose to participate in the study, you will be asked to complete a questionnaire. The questionnaire will take about 15 minutes to complete.

CONFIDENTIALITY

Participation in this project is completely voluntary. You will not be paid for your involvement. Anonymity will be ensured. No name will be mentioned. Your questionnaire will be marked with a number. Only the researcher and the assistants will have access to the questionnaires. The information will be destroyed when the study is completed. The study will not endanger the lives of participants, so no life will be at stake.



SIGNATURE OF RESEARCHER

20/04/99
DATE

Participant's statement

The study described above has been explained to me and I voluntarily consent to participate in this study. I have had an opportunity to ask questions.

.....
SIGNATURE OF PARTICIPANT

.....
DATE

ANNEXURE 2

Structured interview schedule

SECTION A

DEMOGRAPHIC DETAILS OF THE STUDENT

HOUSE NO.	
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	1 - 3
<input type="checkbox"/> <input type="checkbox"/>	4 - 5
<input type="checkbox"/> <input type="checkbox"/>	6 - 7
<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	8 - 9
<input type="checkbox"/>	10
<input type="checkbox"/>	11
<input type="checkbox"/>	12
<input type="checkbox"/>	13
<input type="checkbox"/>	14
<input type="checkbox"/>	15

1. How old are you?

- 16 - 20
- 21 - 25
- 26 - 30
- 31 - 35
- Other

2. In which year of training are you now?

- 1st
- 2nd
- 3rd
- 4th

3. How many children do you have?

- None
- One
- Two
- More than two

4. If you have a child, with whom does your child live?

- Your mother
- Your granny
- Others

5. Where do you live?

- Home with your parents
- With your granny
- Nurses home
- Other, specify

6. Marital status.

- Never married
- Married
- Divorced
- Separated
- Widowed

7. Is your father working?

- Yes
- No

8. Is your mother working?

- Yes
- No

9. What is your family's total income per month?

- R100 - R200
- R300 - R500
- R600 - R900
- Above R1000

10. If no one is working in your family, who else provides household income?

- Husband
- Relatives
- Friends
- Boyfriend
- None

11. Are you the sole breadwinner?

- Yes
- No

OFFICE USE ONLY	
<input type="checkbox"/>	16
<input type="checkbox"/>	17

SECTION B

SEX AND PREGNANCY

12. How old were you when you had sexual intercourse for the first time?

- Younger than 13
- 13 years
- 14 years
- 15 years
- 16 years
- 17 years
- 18 years

13. How old was your first partner (your first boyfriend)

- Younger than 13
- 14 years
- 15 - 20 years
- 21 - 25 years
- 26 - 30 years
- Older than 30 years

14. When you and your boyfriend had sex the first time, did you know that pregnancy could take place?

- Yes
- No

15. Did you have any information about family planning (contraceptives) before you became pregnant?

- Yes
- No

16. If the answer to question 15 is yes, from whom did you get the information about family planning.

- Your parents
- Grannies
- Friends
- Sisters
- Boyfriend
- Nurses
- Other, specify

OFFICE USE ONLY	
<input type="checkbox"/> <input type="checkbox"/>	18 - 19
<input type="checkbox"/> <input type="checkbox"/>	20 - 21
<input type="checkbox"/>	22
<input type="checkbox"/>	23
<input type="checkbox"/>	24

17. Are you pregnant now (at the time of completing this questionnaire)?

- Yes
- No

25

18. Is this your

- 1st pregnancy?
- 2nd pregnancy?
- More?

26

19. Did you plan to fall pregnant, or it just happened?

- Yes
- No

27

20. Were you on family planning before you fell pregnant?

- Yes
- No

28

21. If you were on Pill, how often did you take them?

- Daily
- Sometimes
- When partner (boyfriend) comes
- Not taken

29

22. Did you know about the side effects of contraceptives?

- Yes
- No

30

23. If the answer to question 22 is yes, which side effect did you know about?

- Nausea and vomiting
- Dizziness
- Headache
- Weight gain
- Other, specify.....

31

24. Can you get family planning Pills, Injection at the College, Hospital or Clinic?

- | | | |
|------------------------------|-----------------------------|----------------|
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | College |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Hospital |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Clinic |
| <input type="checkbox"/> Yes | <input type="checkbox"/> No | Private clinic |

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

32

33

34

35

25. If the answer is "no" to question 24, indicate the problem by making a tick on the blocks provided.

- Culturally
- Not readily available
- Other, specify.....

36 - 37

26. How many sex partners do you have at present?

- One
- Two
- More than two

38

27. What was your most important reason for falling pregnant?

.....

.....

.....

.....

39

28. Do you have any information regarding pregnancy?

- Yes
- No

40

29. Did you have any information regarding delivery or child birth?

- Yes
- No

41

30. If the answer to question 29 and 30 is yes, where did you get the information?

- Mother
- Friends
- Nurses
- Other, specify

42 - 43

31. At how many weeks did you start attending Ante-Natal Clinic?

- 12 weeks
- 20 weeks
- 28 weeks
- 30 weeks
- 36 weeks
- Other, specify

44

32. If the answer to question 31 is 30 weeks or later, what was the reason?

- Poor relationship of ANC Staff.
- Did not want to report
- Fear of colleagues
- Other, specify

45 - 46

33. Are Ante-Natal health education talks of any help to you?

- Yes
- No

47

34. What suggestions can you make with regard to the establishment of school-based health services?

.....

.....

.....

.....

SECTION C

PHYSICAL RELATION DURING PREGNANCY

35. Do you experience any physical discomfort?

- Yes
- No

36. If the answer is yes to question 35, what are the physical discomfort among those listed?

- Dizziness and Headache
- Tiredness
- Morning sickness
- Backache
- Other, specify.....

37. Do you have a good appetite?

- Yes
- No

38. Do you enjoy foetal movement?

- Yes
- No

39. If the answer is no to question 39, what's the problem?

- Didn't want pregnancy
- Boyfriend deny responsibility
- I'm always sick
- Other, specify.....

40. At how many weeks would you go for maternity leave?

- 36 weeks
- 40 weeks
- Didn't take leave
- Other, specify.....

41. What problems did you experience at the last trimester of your pregnancy?

- Never had problems
- Oedema of lower limbs
- Lower abdominal pains
- Tiredness when working
- Other, specify.....

OFFICER USE ONLY	
<input type="checkbox"/>	48
<input type="checkbox"/>	49
<input type="checkbox"/>	50
<input type="checkbox"/>	51
<input type="checkbox"/>	52
<input type="checkbox"/>	53
<input type="checkbox"/>	54
<input type="checkbox"/>	55
<input type="checkbox"/> <input type="checkbox"/>	56 - 57
<input type="checkbox"/>	58
<input type="checkbox"/> <input type="checkbox"/>	59 - 60

SECTION D

EMOTIONAL REACTION DUE TO PREGNANCY

42. Indicate how you felt when you discovered that you were pregnant under each of the following:

Extremely	Moderately	Slightly	Not at all	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Happy
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Proud
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Guilty
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Angry
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Frustrated
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Depressed
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Disappointed

43. Do you feel lonely since the birth of your baby?

Yes
 No

44. If the answer is yes to question 44, what is the problem?

Poor relation with parents
 Rejected by boyfriend
 Boyfriend is married
 Poor support from college staff
 Other, specify

SPACE USE ONLY	
<input type="checkbox"/>	61
<input type="checkbox"/>	62
<input type="checkbox"/>	63
<input type="checkbox"/>	64
<input type="checkbox"/>	65
<input type="checkbox"/>	66
<input type="checkbox"/>	67
<input type="checkbox"/>	68
<input type="checkbox"/>	69

SECTION E

SOCIAL REACTION DURING PREGNANCY

45. Who is the first person you told that you are pregnant?

Aunt
 Boyfriend
 Mother
 Father
 Other, specify

46. How did your parents react to your pregnancy?

Very happy
 Angry
 Disappointed
 Took me to boyfriend
 Other, specify

47. Do you experience any support from your family members?

Yes
 No

SPACE USE ONLY	
<input type="checkbox"/>	70
<input type="checkbox"/>	71
<input type="checkbox"/>	72

OPTIONAL USE ONLY	
<input type="checkbox"/>	73
<input type="checkbox"/>	74
<input type="checkbox"/>	75
<input type="checkbox"/>	76
<input type="checkbox"/> <input type="checkbox"/>	77 - 78
<input type="checkbox"/>	79
<input type="checkbox"/>	80
<input type="checkbox"/>	81
<input type="checkbox"/>	82

48. What was your boyfriend's reaction when you told him that you were pregnant?

Very happy
 Happy
 Angry
 Disappointed
 Suggested abortion
 Other, specify.....

49. From your point of view, do you think pregnancy brought you closer to your boyfriend?

Yes
 No

50. If the answer is no to the above question, please tick in the appropriate box what was his problem.

He's married
 Still very young
 Has other girlfriend
 Other, specify.....

51. Do you ever think of discussing your pregnancy with members of the staff at college?

Yes
 No

52. If the answer is no, what is the problem? Tick the relationship in the appropriate box.

They aren't friendly
 Not supportive
 Talk bad about you
 Other, specify.....

53. Do you experience acceptance and support from clinical tutors?

Yes
 No

54. Do you experience acceptance at Ante-Natal clinic?

Yes
 No

55. When are you planning to come back after delivery?

Within 9 days
 After a week
 One month
 Two months
 Other, specify.....

56. Who will look after the baby when you come back to work?

Self
 Mother
 Granny
 In laws
 Other, specify.....

57. What advice will you give to the health personnel regarding their attitude towards a pregnant student?

- Friendly and approachable
- Willing to give advice and support
- Not to look down on student
- Other, specify

OFFICE USE ONLY	
<input type="checkbox"/>	83

SECTION F

VIEW OF THE MOTHER

58. Did you know about the emergency contraceptives after you had an unsafe sexual intercourse?

- Yes
- No

59. Did you think of abortion after you discovered that you were pregnant?

- Yes
- No

60. Do you know that every person has the right to choose, whether to keep the pregnancy or to abort.

- Yes
- No

OFFICE USE ONLY	
<input type="checkbox"/>	84
<input type="checkbox"/>	85
<input type="checkbox"/>	86

SECTION G

ACADEMIC RECORD

61. How did you cope with your studies in the classroom?

- Simple
- Not simple
- Other, specify

62. How did you cope with caring for clients in the ward during clinical exposure?

- Simple
- Not simple
- Other, specify

63. From your point of view, is your pace of studying the same as before becoming pregnant?

- Yes
- No

64. What were your mark score of tests before pregnancy?

- Below 50
- 50 - 55
- 56 - 60
- Above 60

OFFICE USE ONLY	
<input type="checkbox"/>	87
<input type="checkbox"/>	88
<input type="checkbox"/>	89
<input type="checkbox"/>	90

65. What are your mark score of tests now being pregnant?

- Below 50
- 50 - 55
- 56 - 60
- Above 60

66. What were your mark score of tests after delivery?

- Below 50
- 50 - 55
- 56 - 60
- Above 60

67. Do you find it difficult when you attend a procedure in the clinical areas?

- Yes
- No

68. If the answer is yes to question 69, what is the problem? Indicate in the appropriate blocks provided.

- Tiredness
- Feel sick
- Lack of interest
- Other, specify

OFFICE USE ONLY	
<input type="checkbox"/>	91
<input type="checkbox"/>	92
<input type="checkbox"/>	93
<input type="checkbox"/>	94

THANK YOU FOR YOUR PARTICIPATION.

ANNEXURE 3

**Letter requesting permission from the
Superintendent General, Northern Province
Department of Health to conduct study.**



September 10, 1994

Northern Province

DEPARTMENT OF HEALTH & WELFARE

TEL: (0152) 291 2637
(0152) 295 2851/2
(0152) 295 2987/8
FAX: (0152) 291 5961
(0152) 291 5146

PRIVATE BAG X9302
PIETERSBURG
0700

Sincerely,

Enquiries : Sinah Mahlangu.

Reference : Research and
Quality Improvement

SUPERINTENDENT GENERAL
DEPARTMENT OF HEALTH AND WELFARE
NORTHERN PROVINCE

22 February 1999

University of Venda

Private Bag x 5050

THOHOYANDOU

0950

Dear: Ms Netshikweta

**PROBLEMS ASSOCIATED WITH PREGNANCY AMONG STUDENT NURSES IN
THE NORTHERN PROVINCE HOSPITALS AND COLLEGE CAMPUSES.**

1. Permission is hereby granted to conduct a study on the above topic in the Northern Province hospitals,
2. The Department of Health & Welfare needs a copy of the research findings for its own resource centre.
3. The researcher should be prepared to assist in interpretation and implementation of the recommendations where possible.
4. **Implications:** Permission should be requested from regional and institutional management to do research .

Sincerely,

SUPERINTENDENT _ GENERAL
DEPARTMENT OF HEALTH & WELFARE
NORTHERN PROVINCE

DR JAN MOOLMAN BUILDING
34 HANS VAN RENSBURG STREET
PIETERSBURG 0700

ANNEXURE 4

Letter from the Department of Health, Northern Province, granting permission the conduct the study.



Northern Province

DEPARTMENT OF HEALTH & WELFARE

TEL: (0152) 291 2637
(0152) 295 2851/2
(0152) 295 2987/8
FAX: (0152) 291 5961
(0152) 291 5146

PRIVATE BAG X9302
PIETERSBURG
0700

Enquiries : Sinah
Mahlangu.

Reference : Research and
Quality Improvement

19 February 1999

University of Venda

Private Bag x 5050

THOHOYANDOU

0950

Dear: Ms Netshikweta

**PROBLEMS ASSOCIATED WITH PREGNANCY AMONG STUDENT NURSES IN
THE NORTHERN PROVINCE HOSPITALS AND COLLEGE CAMPUSES.**

1. Permission is hereby granted to conduct a study on the above topic in the Northern Province hospitals,
2. The Department of Health & Welfare needs a copy of the research findings for its own resource centre.
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4. **Implications:** Permission should be requested from regional and institutional management to do research .

Sincerely,

pp NS Mahlangu
SUPERINTENDENT - GENERAL

DEPARTMENT OF HEALTH & WELFARE
NORTHERN PROVINCE

DR JAN MOOLMAN BUILDING
34 HANS VAN RENSBURG STREET
PIETERSBURG 0700

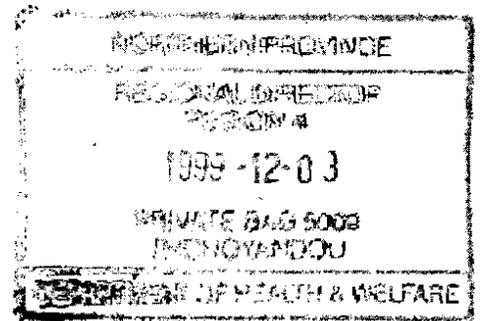
ANNEXURE 5

Letter from the Regional Director granting permission to conduct study.

Ref : S/5/2

Enq : Sikhitha R.M.

Date : 08.12.99

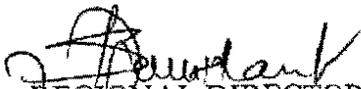


To : Superintendents/Principal
-Tshilidzini Hospital
-Siloam Hospital
-Donald Fraser Hospital
-Elim Hospital
-Thohoyandou Nursing Campus

**RESEARCH PROJECT : THE PROBLEMS ASSOCIATED WITH PREGNANCY
AMONGST STUDENT NURSES IN THE NORTHERN PROVINCE : MRS M.L.
NETSHIKWETA**

1. The above mentioned officer has been granted permission by the Provincial Department of Health and Welfare to conduct the research project in the Nursing College and Hospitals in the Northern Region.
2. You are hereby kindly requested to assist the officer accordingly.

Thank you.


REGIONAL DIRECTOR : HEALTH AND WELFARE : NORTHERN REGION
mdr/an 59

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