

**THE CONTRIBUTORY FACTORS TO HIGH TEENAGE PREGNANCY RATE AT
EHLANZENI DISTRICT IN THE MPUMALANGA PROVINCE**

by

SIBONGILE GERTRUDE MKHANTSWA

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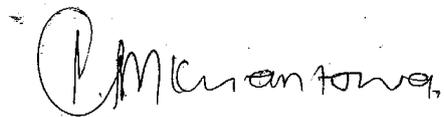
SUPERVISOR: MS JE TJALLINKS
CO-SUPERVISOR: PROF SP HATTINGH

NOVEMBER 2014

Student number: 3071515-6

DECLARATION

I declare that **THE CONTRIBUTORY FACTORS TO HIGH TEENAGE PREGNANCY RATE AT EHLANZENI DISTRICT IN THE MPUMALANGA PROVINCE** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institution.



Sibongile Gertrude Mkhantswa (MS)

16 January 2014

Date

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STUDENT NUMBER: 3071515-6
STUDENT: SIBONGILE GERTRUDE MKHANTSWA
DEGREE: MASTER OF ARTS
DEPARTMENT: HEALTH STUDIES, UNIVERSITY OF SOUTH AFRICA
SUPERVISOR: MRS JE TJALLINKS
CO-SUPERVISOR: PROF SP HATTINGH

ABSTRACT

The purpose of this study was to explore and describe the contributory factors to the high teenage pregnancy rate within a district hospital in the Ehlanzeni district of the Mpumalanga Province, South Africa. Quantitative, non-experimental, descriptive and exploratory research was conducted to explore the contributory factors to the high teenage pregnancy rate. Data collection was done using a self-designed structured interview schedule.

The findings of the study supported the assumptions that there are factors related to biography, individual perceptions, knowledge and awareness of; and practices, perceptions regarding the use of contraception. Perceived seriousness and barriers to the use of safeguards that could have prevented pregnancy contribute to the high teenage pregnancy rate thus emphasise the need to develop strategies to prevent teenage pregnancies.

KEY CONCEPTS

Teenage pregnancy; adolescent; teenage mother; contraceptives; emergency contraception; termination of pregnancy.

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Dedication

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List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
DoH	Department of Health
HBM	Health Belief Model
HIV	Human Immunodeficiency Virus
HPM	Health Promotion Model
HSREC	Health Studies Research and Ethics Committee
IUCD	Intra uterine contraceptive device
Km	Kilometre
SPSS	Statistical Package for Social Sciences
STIs	Sexual transmitted infections
TOP	Termination of pregnancy
PCC	Parent Child Center
UK	United Kingdom
UN	United Nations
UNICEF	United Nation Children Emergency Fund
UNISA	University of South Africa
USA	United States of America
WHO	World Health Organization

List of annexures

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CHAPTER 1

ORIENTATION TO THE RESEARCH STUDY

1.1 INTRODUCTION

According to Grobler, Botma, Jacobs and Nel (2007:32), heightened sexual awareness forms a normal part of adolescent development, yet it is often characterised by experimentation, which has the potential of placing adolescents at risk of unprotected sexual intercourse and unplanned pregnancy. The authors further explain that statistics indicate escalating rates of teenage pregnancy as well as sexual activity at ages as young as thirteen years. The United Nations Children Fund (UNICEF) (in Kirchengast 2009:1), reports that worldwide every fifth child is born to an adolescent mother.

Oberlander, Houston, Agostini and Black (2010:31) found that approximately 41.9 per 1000 teenagers between the ages of 15 and 19 give birth every year. The authors further state that the birth rates for African-American teenagers remain above the national average at 63, 7 per 1000.

Pregnancy is a natural phenomenon that is embraced with joy if well-planned, yet, even under ideal conditions, it is a potential stressor. Pregnancy among teenagers is even more stressful as the teenager is not mature enough to take full responsibility for another life because of the physical, mental and financial demands placed on her (Yako 2007:16). According to Yako (2007:16), it is not only the teenager who is burdened by pregnancy; but the whole family is burdened by being responsible for supporting the probably unemployed teenager and the baby. It is further stated that in some cases parents of the pregnant teenager may be angry with her and refuse to give her the support she needs. This may be a reason why parents of all cultures are concerned when their children become highly fertile and they want information about how to ensure the health and well-being of their teenagers to prevent pregnancy, since one of the major roles of the family is to protect the health and well-being of its members (Stiffler, Sims & Stern 2007:638).

1.2 BACKGROUND TO THE RESEARCH PROBLEM

1.2.1 Reproductive health

Reproductive health implies that people are able to experience responsible, satisfying and safe sexual activity, and that they have the capacity to reproduce and the freedom to decide if, when and how often to do so (Department of Health (DoH) 2003:102).

All 192 United Nations (UN) member states have agreed to achieve Eight Millennium Development Goals and 21 targets by the year 2015 (Setswe, Naudé & Zungu 2011:16). The aim of the Millennium Development Goals is to encourage development by improving social and economic conditions in the world's poorest countries. Millennium Development Goal No 5 strives to improve maternal health, and target (5a) of this goal is to take steps to realise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, including sexual and reproductive health (Setswe et al 2011:16). Target (5b) addresses reproductive, maternal and the child-health provision of family planning (Setswe et al 2011:16). Teenagers globally seem not to enjoy reproductive health due to an increase in teenage pregnancy. According to Minnick and Shandler (2011:241) the United States of America (USA) continues to have the highest rates of teenage pregnancy.

The World Health Organization (WHO) (2007:1) indicates that teenagers engage in unsafe sexual practices and are frequently victims of coercion. Furthermore, only a few of them use contraceptives. The study further explains that in Kenya young people engage in risky sexual behaviour in spite of being aware of the risks of contracting sexual transmitted infections (STIs), the risk of teenage pregnancy and the consequences of unsafe abortions.

According to the WHO (2007:2), teenagers often lack accurate information on sexual health, skills to negotiate sexual relationships and access to reproductive health services. This leads to both married and unmarried teenagers having unplanned and unwanted pregnancies and facing possible complications during the birth of their babies (WHO 2007:15). The DoH (2003:9) of South Africa indicates that the majority of teenagers do not have access to sexual and reproductive health information and

services. This results in poor knowledge of reproductive matters, which in turn leads to poor contraceptive use and to reproductive health problems (DoH 2003:9).

The researcher in this study aims to explore and describe factors that contribute to the high teenage pregnancy rate in the hospital under study despite free reproductive services offered by the hospital.

1.2.2 Teenage pregnancies in developed countries

According to Gaudie, Mitrou, Lawrence, Stanley, Silburn and Zubrick (2010:1), many western nations continue to have high rates of teenage pregnancies and births, which have adverse effects for both mother and child.

Mahavarkar, Madhu and Mule (2008:604) state that teenage pregnancies are a global problem. In India, for example, the rates of teenage pregnancies vary from 8% to 14%. Kirchengast (2009:1) further explains that 13 million births each year are to girls younger than 20 years. The same analysis states that each year approximately 1.25 million girls aged between 15 and 19 become pregnant and that 760 000 girls give birth in the countries under review each year. The teenage birth rate in the USA is 52.1% (521 per 1000 births), which is the highest in the developed world and is four times that of the European Union average (Kirchengast 2009:2). This statement is confirmed by Minnick and Shandler (2011:241) who confirm that the USA continues to have the highest rates of teenage pregnancy and birth among developed countries.

The study by Kirchengast (2009:2) further states that within the European Union the United Kingdom (UK) exhibits the highest teenage birth rate with 30.8%. A study conducted by Goncalves, Souza, Tavares, Cruz and Behague (2011:201) confirms that in Brazil, as in many countries, teenage pregnancy has come to be widely recognised as a public health problem of epidemic proportions. Thompson, Bender, Lewis and Watkins (2008:125) state that despite fluctuations, the USA has the highest rate of teenage pregnancies and births in the western industrialised world and further indicate that teenage pregnancies pose serious public health challenges.

Figure 1.1 depicts the comparisons of teenage pregnancies in developed countries.

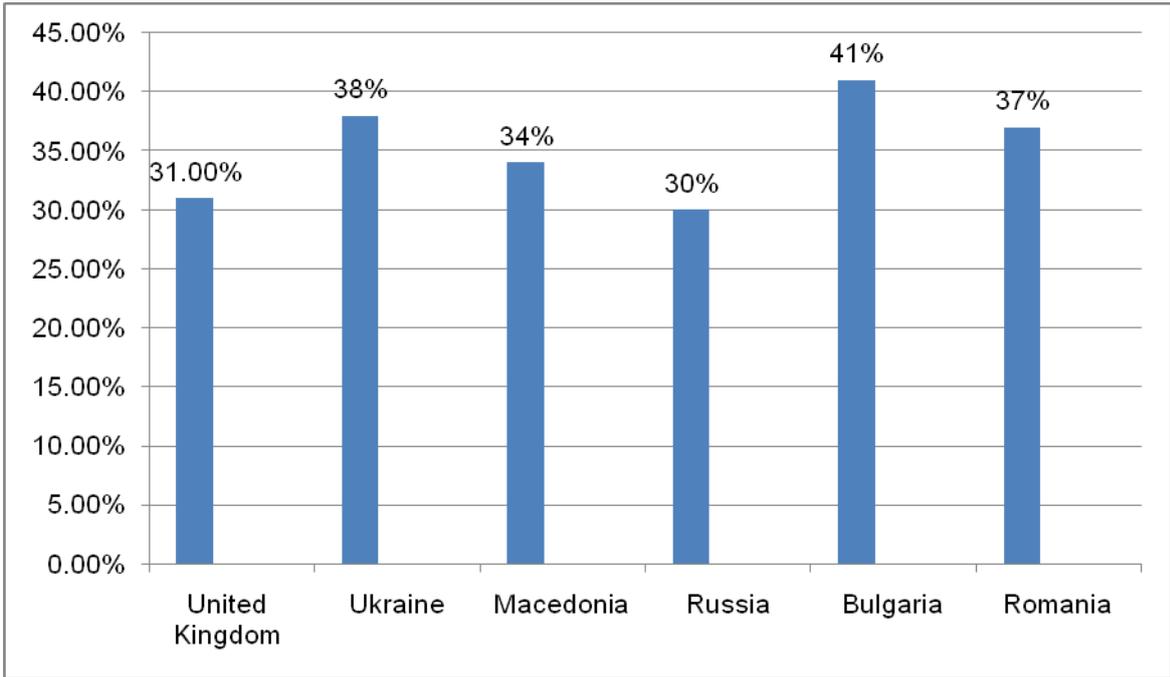


Figure 1.1 Comparisons of teenage pregnancies in developed countries
 (Source: Kirchengast 2009:2)

Table 1.1 Teenage pregnancy rate in developed countries

Country	Birth rate %
United Kingdom	30,8
Ukraine	38
Bulgaria	41
Macedonia	34
Russia	30

(Source: Kirchengast 2009:2)

In their studies, Amy and Loeber (2007:300) indicate the teenage birth rates of some European countries as follows (see figure 1.2).

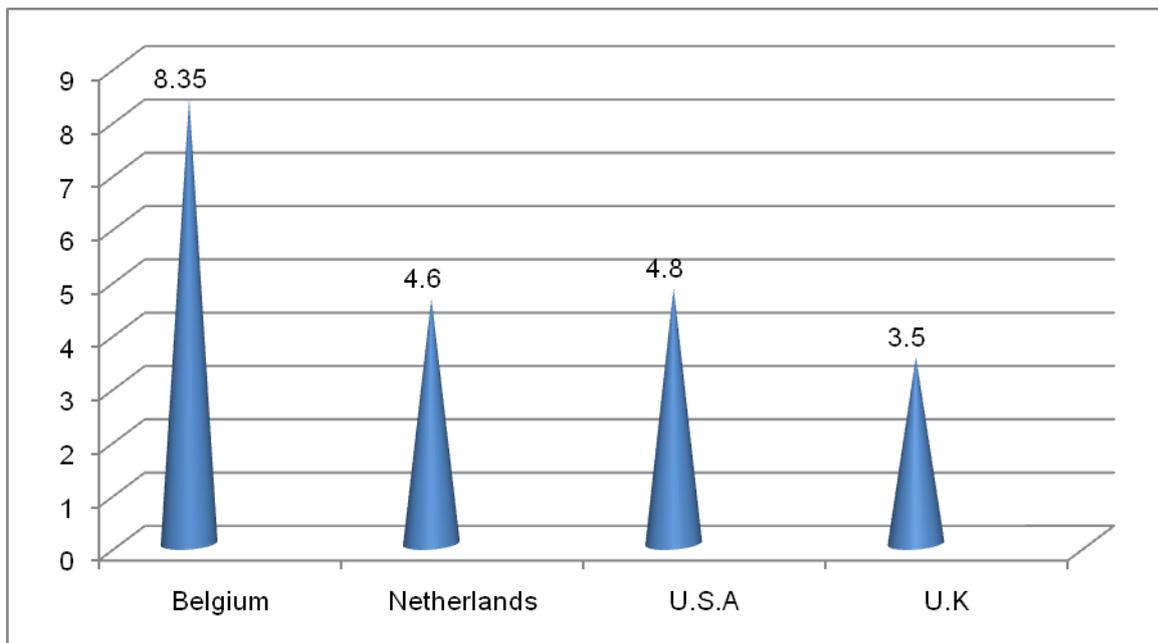


Figure 1.2 Comparison of the teenage birth rate in developed countries
 (Source: Amy & Loeber 2007:300)

Table 1.2 Teenage birth rate in developed countries

Country	Birth rate per 1000 of population
Belgium	8.35
The Netherlands	4.6
USA	48
UK	35

(Source: Amy & Loeber 2007:300)

Borkowski, Farris, Whitman, Carothers, Weed and Keogh (2007:1) state that despite the dramatic decline in the rate of teenage childbearing in the USA since 1990, teenage parenting continues to be a significant social phenomenon. In their study, they indicate that more than 750 000 teenagers become pregnant each year with more than half of the pregnancies resulting in live births.

1.2.3 Teenage pregnancies in Sub-Saharan Africa region

According to UNICEF (in Kirchengast 2009:1), more than one-third of women from developing countries give birth before the age of 20. It is indicated in the same analysis that the teenage birth rate ranges from 8% in East Asia to 55% in Sub-Saharan Africa.

The study further states that the review yielded the highest levels of teenage childbearing (15-19 years) in the countries of Sub-Saharan Africa, a situation that has not changed up to the present. According to Kirchengast (2009:1), the ten highest-risk countries for teenage motherhood are Niger, Liberia, Mali Chad, Afghanistan, Uganda, Malawi, Guinea, Mozambique and the Central African Republic. The WHO (2007:1) reports that more than 50% of the women in Sub-Saharan Africa are exposed to teenage pregnancy and parenting.

The WHO (2007:1) estimates that 14 million women aged 15 to 19 years gave birth each year in the years 1995 to 2000, with 12,8 million births occurring among teenagers in developing countries. In addition, the WHO (2007:1) confirms that more than (50%) of women in Sub-Saharan Africa, including South Africa, face challenges related to teenage pregnancy and teenage parenting.

According to the WHO (2007:9-10), the countries in Sub-Saharan Africa such as Namibia, Nigeria, Mali and South Africa, have the highest rate of teenage pregnancy in Africa, compared to other developing countries such as Kenya and Senegal. One-fifth of all births in Namibia are to women under the age of 20 years (WHO 2007:7).

Table 1.3 illustrates the teenage birth rates and the age of the mothers in some Sub-Saharan countries as indicated by the Kirchengast (2009:2).

Table 1.3 Teenage birth rates in some Sub-Saharan African countries

Country	Birth rate/1000 births	Age
Ethiopia	168	15-19
Kenya	101	15-19
Uganda	179	15-19
Zambia	132	15-19

(Source: Kirchengast 2009:2)

1.2.4 Teenage pregnancies in South Africa

Although South Africa's total fertility rate is the lowest in Sub-Saharan Africa, high rates of teenage pregnancy and early childbearing remain a concern (Mkhwanazi 2010:347). The author further explains that the majority of teenage pregnancies in the black and coloured communities are unplanned and unwanted. South Africa, like any other developing countries in Sub-Saharan Africa, also experience a high teenage pregnancy rate – close to 17 million girls under the age of 20 years give birth each year (Maja 2007a:32).

Despite the South African government's effort to ensure the right to access to health care services for all, including reproductive health care services, teenagers' access to these services or knowledge of how to use it correctly is hindered by a number of issues, for example fear that their parents will find out that they are using the services (Mkhwanazi 2010:352). According to Setswe et al (2011:14), a National Health Care System came into being between 2004 and 2009 to unify the service delivery into one National Health Insurance System, aiming to ensure the delivery of free health care services to all, including accessibility to reproductive health care.

In South Africa, the average onset of sexual activity ranges from 13 to 18 years (DoH 2003:9). This explains why South Africa is experiencing an escalation in the number of teenage pregnancies as teenagers are sexually active at an early stage (DoH 2003:9). South Africa is committed to improving the reproductive health of all people by providing services such as free contraceptive services to redress disparities and inequities in accessing health care services (Setswe et al 2011:14). Reproductive rights and the right of access to reproductive health care are enshrined in the South African Constitution's Bill of Rights (Republic of South Africa 1996).

The Republic of South Africa has a population of 47,9 million and teenagers represent about one-fifth of the total population (DoH 2003:9). A study conducted by Maja (2007b:40) indicates that a South African health survey showed that 35% of teenagers fall pregnant before the age of 20.

1.2.5 Teenage pregnancies in the provinces of South Africa

In the Free State Province the statistics indicate escalating rates of teenage pregnancy as well as sexual activity at ages as young as 13. The study further indicates that the rate of teenage pregnancy among black teenage females has increased by 33% despite a slight decrease of 1, 4% in the national rate over the same period of 2004-2008, (Grobler et al 2007:33).

In a study conducted by Ratlabala, Makofane and Jali (2007:27) in the Limpopo Province, it was revealed that 600 deliveries occurred in young girls between 14 and 20 years within a year. Ireland (2009:42) explains that the indicator data from the Health Systems Trust show an upswing in teenage pregnancies in South Africa from 14,6% in 1991 to a staggering 39% in 2006. The Sunday Times (May 2007) in Ireland (2009:42) showed the following teenage pregnancy statistics in the different provinces during the year 2006.

Table 1.4 Number of teenage pregnancies in some of the provinces of South Africa

Provinces	Teenage pregnancy statistics
KwaZulu-Natal	5,868
Gauteng	2,336
Free State	1,748
Eastern Cape	5,015
TOTAL	14,968

(Source: Ireland 2009:42)

1.2.6 Teenage pregnancies at the hospital under study

The researcher could not find any studies about teenage pregnancy within a district hospital under study in the Ehlanzeni district of the Mpumalanga Province where this study was conducted.

The teenage pregnancies statistics at the hospital under study are summarised in table 1.5. It is evident that although there was a decline in the pregnancy rate generally, there

was an increase in the number of teenage pregnancies recorded at this hospital between 2009 to 2011.

Table 1.5 Teenage pregnancy statistics in the hospital under study

Year	Teenage pregnancies
2009	31
2010	602
2011	614

(Source: District Health Information System 2011:20)

1.3 DEMOGRAPHIC AND GEOGRAPHICAL INFORMATION ABOUT THE AREA UNDER STUDY

The study was conducted in a level 1 district hospital situated in the Ehlanzeni district, one of three districts of the Mpumalanga Province of South Africa.

To obtain a more informative view of the area and hospital under study, the area is described in greater detail below.

1.3.1 Mpumalanga Province

The Mpumalanga Province is situated in the eastern part of South Africa. It is surrounded by four of the nine provinces: namely Limpopo, Gauteng, Free State and KwaZulu-Natal. It shares international borders with Mozambique and Swaziland. The province is made up of three district municipalities, namely Ehlanzeni, Nkangala and Gert Sibande (Pattinson 2003-2005:134). The Mpumalanga province has an estimated population of 3,5 million (7,4% of the country's population). The population of the province is relatively young, with 35% being less than 15 years of age. The province is mostly rural: 66% of the population live in rural areas. The largest rural population is at Ehlanzeni district, due to the incorporation of the Bushbuckridge local municipality into Mpumalanga. The provincial unemployment rate is 26.9% and the total dependency ratio is 64% (Pattinson 2003-2005:134).

The Ehlanzeni district is bordered by the Maruleng local municipality and the Mopani district in the north, by the Fetakgomo local municipality in the west and by the Thaba Chweu and Mbombela local municipality in the south. The unemployment rate is at 85% in the municipal area and even higher in the rural areas, with less than 15% of the total population being employed. This contributes to a high level of poverty, which is increasing due to the rise of living costs and low income per household, which is below subsistence income levels (Morema 2007-2008:9).

Bushbuckridge local municipality is regarded as a presidential nodal point located in the north-eastern part of the Mpumalanga province. It is one of the five local municipalities of the Ehlanzeni district, and is bordered by the Kruger National Park in the east and the Mbombela Local Municipality in the south. It forms part of the Kruger-to-Canyon biosphere (Morema 2007-2008:9).

1.3.2 District health facilities

There are eleven hospitals at Ehlanzeni District. Of these, three are level II hospitals and eight are level I hospitals. There is no level III hospital in the district (Pattinson 2003-2005:135).

1.3.3 Levels of care

There are three levels of care as described by the National Department of Health, that is, level I hospital care, level II hospital care and level III hospital care (DoH 2007:15).

1.3.3.1 Level I hospital

A level I hospital as defined by DoH (2007:15) is a district hospital. It will normally be the base hospital for a health district providing health care to rural areas.

1.3.3.2 Level II hospital

A level II hospital is called a regional hospital, and is the base hospital for a health region, which will include a number of districts. Level II hospitals frequently include level

I hospital functions and may be the base hospitals for nearby clinics and community health centres (DoH 2007:16).

1.3.3.3 Level III hospital

A level III hospital is called a central or tertiary hospital. A level III hospital has all the functions of level I and level II and also provides supervision and support for level I and level II hospitals (DoH 2007:16).

The hospital in which the study was conducted is a level I hospital. For the purpose of this research, the hospital will be referred to as the “hospital under study”. It is a rural hospital at Ehlanzeni district in the Mpumalanga province. It has 14 feeder clinics within a radius of eight kilometres (km) to 60 km (District Health Information System 2011:55).

1.3.4 Hospital under study

The hospital under study offers the following reproductive health care services:

- Choice of termination of pregnancy
- Sex education
- Contraceptive
- Emergency contraceptives
- Sexually transmitted infections awareness
- Outreach reproductive health care at the local schools
- Antenatal care
- Delivery
- Voluntary counselling and testing

1.4 STATEMENT OF THE PROBLEM

According to Polit and Beck (2008:92), a problem statement is defined as an expression of the dilemma or disturbing situation that needs investigation for the purpose of providing understanding and direction.

Despite the South African government's effort to ensure that all people of South Africa enjoy the right to access health care services, including free reproductive health care services, teenagers' access to these free services are hindered by other factors such as the fear that nurses will inform their parents (Mkhwanazi 2010:352). This could result in ever-rising numbers of teenage pregnancies.

The researcher in this study is interested in studying the factors that contribute to the high teenage pregnancy rate in the hospital under study at Ehlanzeni district in the Mpumalanga province. The increasing number of teenagers who are attending the antenatal clinic and delivering their babies at the hospital under study stimulated the researcher to undertake a study on the contributory factors leading to the high teenage pregnancies despite free reproductive health care services offered at the hospital and primary health care services offered in the area.

1.5 AIM AND PURPOSE OF THE STUDY

The aim of the study is to propose strategies to prevent the high teenage pregnancies rate within a district hospital under study in the Ehlanzeni district of the Mpumalanga province.

The purpose of the study is to explore and describe the contributory factors to the high teenage pregnancy rate within a district hospital in the Ehlanzeni district of the Mpumalanga province where the study will be conducted.

1.6 RESEARCH OBJECTIVES

According to Polit and Beck (2008:81), research objectives are specific aims that a researcher hopes to accomplish by conducting a study. The objectives of this study are to

- describe the contributory factors to the high teenage pregnancy rate within a district hospital in the Ehlanzeni district of the Mpumalanga province
- propose strategies, based on the findings of the study, for the promotion of reproductive health services to prevent teenage pregnancy

1.7 ASSUMPTIONS

Burns and Grove (2011:37) define assumptions as statements that are taken for granted or are considered true, even though they have not been scientifically tested. Assumptions are the basic principles that we accept on faith, take for granted, or assume to be true without proof or verification (Brink, Van der Walt & Van Rensburg 2012:27). Assumptions are often embedded in our thinking and behaviour and require introspection and a strong knowledge base in research in the research area to be uncovered. According to Dennill, King and Swanepoel (1999:156), the Health Belief Model asserts that the motivation for people to take action to promote health or to prevent disease is based on how strongly they believe that:

- A negative phenomenon such as teenage pregnancy can be avoided.
- A positive expectation engendered by taking recommended action will enable the person to avoid a negative health condition (for example abstaining from sexual intercourse until physically mature and ready).
- The person can successfully take the recommended health action.
- Health intervention is of value in the prevention of teenage pregnancy.
- Teenagers acknowledge the value associated with actions aimed at reducing teenage pregnancy.
- The effectiveness of the treatment is worth the cost and barriers they must confront.

The assumptions for this study are that there are other reasons that are not yet known that contribute to teenage pregnancies.

1.8 SIGNIFICANCE OF THE STUDY

This study is significant as it will provide information to health care practitioners regarding the factors which contribute to the high teenage pregnancy rate within a district hospital under study in the Ehlanzeni district of the Mpumalanga province. The study will further assist the health care practitioners in developing strategies to promote sexual reproductive health and to prevent teenage pregnancies. Findings will also benefit the community by mobilising the stakeholders to establish recreational facilities

for the skills development of teenagers in various respects, including empowering youth to act responsibly to prevent teenage pregnancies. Health care workers can use the information obtained to render client-centred care and provide counselling with particular attention to life-skills training.

A decrease in the teenage pregnancy rate would improve the quality of life of the teenager and help to eradicate poverty in the family and in the community of a hospital under study in the Ehlanzeni district of the Mpumalanga province. It would also bring about an improvement in the socio-economic status of the members of the community as well as leading to an improvement in resources.

1.9 THEORETICAL FRAMEWORK

A model is a symbolic depiction of reality and uses diagrams and symbols to represent ideas (Brink et al 2012:26). The model helps to structure the way the researcher can view a situation, event or group of people (Brink et al 2012:26).

In this study a model of health-related action was used to guide the study to analyse how people view and react to health-related events. The following models are outlined by Bowling (2009:37) as models of health behaviour and will be discussed fully in chapter 2.

1.9.1 Bowling's outline of models of health behaviour

The following sections provide a brief outline of models of health behaviour as indicated by Bowling (2009:37).

1.9.1.1 *Healthy lifestyle*

A healthy lifestyle can be defined as voluntary health behaviour based on making choices from alternatives that are available in individual situations (Bowling 2009:37).

1.9.1.2 *Healthy behaviour*

Healthy behaviour is defined as an action taken by a person who believes him- or herself to be healthy for the purpose of preventing disease or detecting it at an asymptomatic stage.

1.9.1.3 *Attribution theory*

The theory states that people try to view the social world as predictable and controllable. The criteria of the attribution theory are debated to determine whether the cause of the phenomenon is internal or external.

1.9.1.4 *Locus of control*

According to this model, control may be internal, that is, based on information, ability or desire, and is influenced by the person's expectations of the outcome. This means that the teenager should have information on the dangers of teenage pregnancy in order to avoid becoming pregnant. When the locus of control is internal it may be influenced by the availability of information about the dangers of teenage pregnancy, the person's innate understanding of or his/her drive or determination regarding the dangers of teenage pregnancy.

1.9.1.5 *Protection motivation theory*

This theory postulates that the motivation or intention to engage in health-protecting behaviour depends on the multiplicative concepts of the perceived severity of the ill-health and the likelihood that the protective behaviour will prevent ill-health (Bowling 2009:41).

1.9.1.6 *Theory of reasoned action*

According to this theory, the intention to adhere to the behaviour is determined by the person's attitude towards it, which in turn is determined by his or her beliefs about the consequences of the behaviour and by subjective norms (Bowling 2009:41).

1.9.1.7 Theory of planned behaviour

This is an extension of the theory of reasoned action; it includes perceived control over behaviour as well as attitude towards the behaviour (Bowling 2009:37).

1.9.1.8 Health Action Process Model

The model includes self-efficacy (confidence in one's ability to carry out the behaviour) as a determinant of intended and actual behaviour. It includes both a motivational stage and an action stage (Bowling 2009:37).

1.9.1.9 Health Promotion Model (HPM)

According to Polit and Beck (2008:148), Nola Pender's Health Promotion Model (HPM) focuses on explaining health-promoting behaviour using a wellness orientation. It is a competence- or approach-orientated model and, unlike the HBM, does not rely on personal threat as a motivating factor (Nies & McEwen 2007:108).

1.9.1.10 Health Belief Model (HBM)

The Health Belief Model (HBM) is one of the most widely-used conceptual frameworks for understanding health behaviour and is believed to lay the foundation of this study, as it focuses on patient compliance and preventive health care practices and it enables the researcher to discover what is known or not known about the topic under discussion in order to conduct research that adds to the body of knowledge in nursing (Polit & Beck 2008:150). The HBM is defined by Bowling (2009:40) as a model that postulates that people's behaviour in relation to health is related to their perception of the severity of an illness, their susceptibility to it and the cost and benefits of certain behaviour.

The HBM has been thoroughly evaluated, has received much empirical support and is considered to be one of the most influential models in health promotion. Since its inception the HBM has been regarded as a useful tool for health care professionals such as medical doctors, nurses, nutritional practitioners, psychologists, mental health professionals and researchers in the health care field, to help clients to manage their

illness prevention or address health problems. It has been used by nurses in different practice areas (Roden 2004:1).

1.9.2 The origin and development of the HBM

The HBM was first postulated in the early 1950s by a team of social psychologists including Godfrey Hochbaum, Irwin Rosenstock and Stephen Kegels at the United States Public Health Service in an effort to explain people's widespread failure to participate in programmes and screening for diseases designed to promote preventive health behaviour (Edelman & Mandle 1995:228). The HBM, as a psychological model, attempted to explain and predict health behaviour, including the attitudes and beliefs of individuals and groups (Bowling 2009:40). It was later modified to include the individual's attention and behaviour related to diagnosed illness and compliance with medical regimens that were designed to improve the overall health condition (Rosenstock 1974:328).

Stanhope and Lancaster (1996:252) state that the HBM was inspired by a study dealing with the reason why people do not participate in free health-screening programmes. The HBM attempted to explain and predict health-related behaviour from certain patterns of beliefs about the recommended health behaviour that was intended to prevent or control TB (Nies & McEwen 2007:108). Specifically, it was the effectiveness of a tuberculosis screening programme conducted by the United States Public Health Service in the 1950s (which offered tuberculosis screenings in mobile x-ray units, in various neighbourhoods, at no charge to the recipients) which prompted the development of the HBM.

The model soon changed shape when applied to another set of problems, namely those related to immunisation and more broadly to (the variety of) people's different responses to public health measures and their use of health services. It was found that young people were more likely to adhere to their medical regime when perceived benefits outweighed costs, when high levels of social support were present, when levels of the internal locus of control were high, when the quality of life score was high and where there were high levels of empowerment and perceived good metabolic control.

1.9.3 The components of the HBM

The HBM is a framework motivating people to take health actions that are based on the desire to avoid a negative health consequence as their prime motivation (Polit & Beck 2008:150). The authors further state that the HBM postulates that health-seeking behaviour is influenced by the person's perceptions of a threat posed by a health problem and the value associated with actions aimed at reducing the threat. The HBM will be used to investigate the contributory factors to teenage pregnancy in the hospital under study at Ehlanzeni district in the Mpumalanga Province. In this study teenage pregnancies will be used as the negative health problem that could to be addressed.

1.9.4 The major components of the HBM

The major components of the HBM include

- individual perceptions
- modifying factors
- variables affecting the likelihood of taking action (Polit & Beck 2008:150)

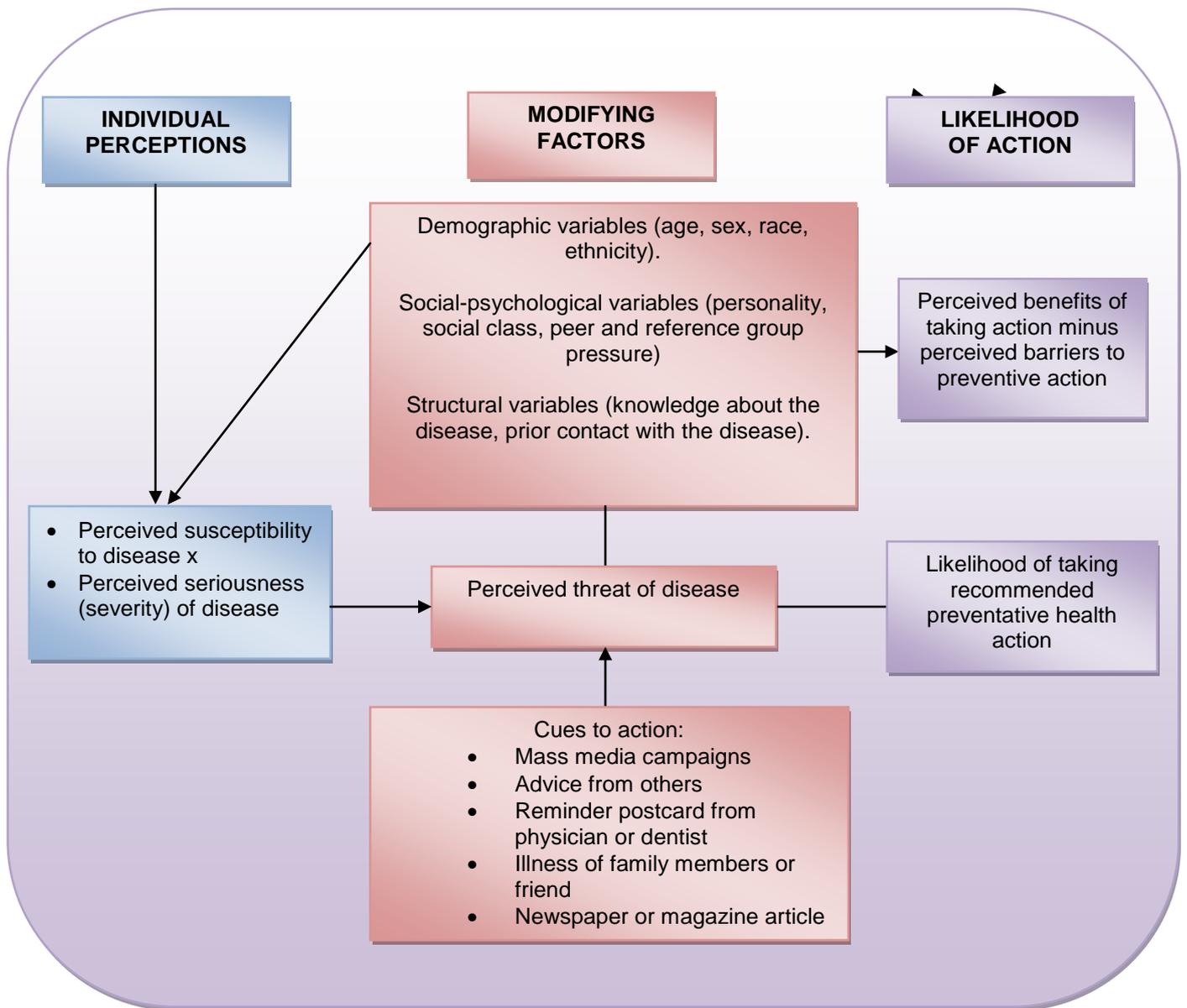


Figure 1.3 Schematic presentation of the Health Belief Model

(Source: Dennill et al 1999:157)

1.9.4.1 Individual perceptions

According to the HBM, health-related behaviour is influenced by a person's perception of a threat posed by a health problem as well as by the value associated with actions aimed at reducing the threat (Polit & Beck 2008:150). The individual perceptions are the individual's beliefs, attitudes, and actions which facilitate or hinder the motivation for certain behaviour (Dennill et al 1999:156). Individual perceptions will be discussed under the following headings:

- **Perceived susceptibility**

Polit and Beck (2008:150) describe perceived susceptibility as a person's perception that a health problem is personally relevant or that a diagnosis is accurate. According to this perception, the individual should take action if there is a threat to her health.

In this study, individual perceptions relate to the teenager's beliefs about her susceptibility to an unplanned teenage pregnancy.

- **Perceived seriousness (severity)**

Daddario (2007:364) defines perceived severity as a person's perception of the personal impact (clinically or socially) of contracting a disease. The primary motivation to change one's lifestyle or approach to health is the level of perceived threat of a disease or the risk of a specific condition. Polit and Beck (2008:150) state that action will be taken against the threat only when the individual perceives the severity to be high enough to have serious organic or social implications.

In this study the impact on the contributory factors which may result in increase teenage pregnancies may include unplanned teenage pregnancies, socially, economically, physical and emotionally. These will be assessed where the perceived seriousness of the consequences is not sufficient to enable the teenager to prevent teenage pregnancy.

- **Perceived benefits versus barriers to behavioural change**

Perceived benefits are described as a person's perception of the good things that could happen from the change in behaviour, especially with regard to reducing the threat of the disease (Daddario 2007:364). According to Polit and Beck (2008:150), perceived benefits are the patient's beliefs that a given treatment will cure the illness or help prevent it. It is within the parameters of this study to establish how far teenagers will go to prevent unplanned pregnancies through utilising the available reproductive health services (Daddario 2007:364).

In this study perceived benefits will mean all benefits that the teenager may obtain by following the available steps that could prevent teenage pregnancy, namely an education, a secure job, an affordable lifestyle and a planned pregnancy.

- **Perceived costs**

According to Polit and Beck (2008:150), perceived costs relate to the complexity, duration and accessibility of the treatment. According to this perception, cost, duration and accessibility can influence the individual positively or negatively as far as the treatment for preventing teenage pregnancy is concerned.

In this study, cost will mean affordability, accessibility, availability, and the effectiveness of contraceptives in preventing unplanned teenage pregnancy. According to Polit and Beck (2008:150), the individual should weigh up the expected action against the belief that the action might be expensive, dangerous or unpleasant on the one hand and the risks of teenage pregnancy, namely pre-eclampsia, premature labour, dropping out of school, having an illegitimate child and Human Immuno Deficiency Virus on the other.

- **Perceived barriers**

Perceived barriers are the person's perception of both the difficulties attendant on adherence to certain behaviour and the negative results that could ensue from such behaviour (Polit & Beck 2008:150).

In this study it was found that the following may be seen as barriers: the distance to reproductive clinics, lack of information about contraceptives, unfriendly health care workers and a lack of easily accessible contraceptives.

- Self efficacy is described as a person's belief or confidence that he or she can adhere to specific behaviour to prevent a specific result (Bowling 2009:44). A person with a greater level of confidence will be more likely to engage in specific behaviour to improve her health.
- Cues to action to address the high teenage pregnancy rate. Teenagers should receive reminder cues in the form of newspapers, magazines, health education and even seeing another teenager suffering complications, such as pre-eclampsia, which are common in primigravidas, in order to motivate them to take action to prevent pregnancy.

1.9.4.2 *Modifying factors*

According to Roden (2004:2), modifying factors are described as demographic, socio-psychological and structural variables that may directly or indirectly influence the individual perceptions.

- Demographic factors include age, gender, race and ethnicity, and may influence the individual perception of the severity of the condition. Applied to this study, this means that teenagers may fail to perceive the seriousness of teenage pregnancy owing to their youth.
- Socio-psychological factors such as personality, social class, and peer group pressure may have an influence on the teenager as regards her understanding of the perceived benefits of using contraceptives and the dangers of teenage pregnancy.
- Structural variables such as knowledge about or prior contact with pregnancy will be investigated as they may have a negative influence on the teenager's willingness to change her behaviour. Teenagers may take action to prevent an unwanted pregnancy only if they have sufficient knowledge of contraceptives (Roden 2004:2).

1.9.4.3 *Variables affecting the likelihood that action will be initiated*

According to Roden (2004:2), the likelihood of action is determined by the perceived benefits of preventive action minus the perceived barriers to preventive action, which equals the likelihood of taking recommended preventive action.

In this study, the perceived benefits of action will mean the teenager's belief that taking the advice given will reduce the risk of teenage pregnancy. Furthermore, the seriousness of the impact means that teenage pregnancy will cost the teenager the chance to accomplish her future dreams in time, resulting in her not finding employment and consequently being exposed to poverty.

In the current study among others the following perceived barriers to taking the appropriate action will be examined: the attitudes of health providers, the distance to the

family planning services, the pain of an injection and peer group pressure as described by Roden (2004:2).

1.9.4.4 Application of the HBM to the investigation into the contributory factors to the high teenage pregnancy rate within a district hospital under study in the Ehlanzeni district of the Mpumalanga Province

The main components of the HBM as described by Daddario (2007:364) will be used to underlie the literature review, findings of the study, conclusions and recommendations identifying individual perceptions, modifying factors and the variables affecting the likelihood of initiating and maintaining actions to prevent unwanted teenage pregnancies in the hospital under study at the Ehlanzeni district in the Mpumalanga Province .

1.10 RESEARCH DESIGN AND METHODOLOGY

According to De Vos, Strydom, Fouché and Delport (2011:142), a research design is a process of focusing on the perspective for the purposes of the end product, formulating a research problem as a point of departure and focusing on the logic of research. Burns and Grove (2009:218) define a research design as a blueprint for conducting a study. Babbie and Mouton (2007:74) define a research design as a plan or blueprint for conducting research while Polit and Beck (2008:66) define a research design as the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process. The purpose of such a design is to provide an explicit description of the phenomenon explored so that it can be addressed.

In this study the focus is on the contributory factors for the high pregnancy rate of teenage pregnancy.

A quantitative design which is of an exploratory and descriptive nature will guide this research.

Research may be defined as a diligent, systematic inquiry or investigation aimed at validating and refining existing knowledge and generating new knowledge (Burns & Grove 2009:2). Research methodology is the “application of all steps, strategies and

procedures for gathering and analysing data in a research investigation in a logical and systematic way” (Burns & Grove 2011:26). The selection of a research methodology or strategy is the core of a research design and must include the research design, definition and selection of the section of the population of interest, variables (characteristics of the individuals in this population group), their status and relationships to one another, the instruments for data collection and the procedure for data analysis of the information collected (Brink et al 2012:199). Research methodology refers to the way in which the study has been conducted or what the researcher did to solve the research problem or answer the research question (and how it was done) (Brink et al 2012:199).

1.11 QUANTITATIVE DESIGN

A quantitative research design is a formal, objective, rigorous and systematic process for generating information about the world (Polit & Beck 2008:24). Quantitative research is conducted to describe new situations, events or concepts in the world. In this study quantitative research was conducted to explore and describe the contributory factors to the high teenage pregnancy rates.

1.11.1 Exploratory

Exploratory research investigates the full nature of the phenomenon, the manner in which it manifests and the other factors to which it is related (Burns & Grove 2009:359). In this study exploratory research explores the factors that contribute to the high teenage pregnancy rate in the district hospital under study at Ehlanzeni district in the Mpumalanga province.

1.11.2 Descriptive

Descriptive designs are used in studies where more information is required in a particular field, by providing a picture of the phenomenon as it occurs naturally (Burns & Grove 2011:24). Descriptive designs describe the variables in order to answer the research question (Brink et al 2012:112).

In this study a descriptive design was used to describe the factors that lead to the high teenage pregnancy rate in the hospital under study at Ehlanzeni district in the Mpumalanga Province.

1.12 POPULATION

A population in a study includes all the elements, which could be objects or people, which meet the criteria in a given situation (Burns & Grove 2009:42). Polit and Beck (2008:337) define a population as the entire aggregation of cases that meet specified criteria. Babbie and Mouton (2007:173) define a population as the theoretically specified aggregation of study elements. According to Brink et al (2012:131), a population is the entire group of persons or objects that is of interest to the researcher, in other words, that meets the criteria that the researcher is interested in studying. De Vos et al (2011:223) refer to individuals in the universe who possess specific characteristics. Population is a term that sets boundaries on the study units.

In this study, the population comprised all pregnant women 19 years and younger who reported at the antenatal clinic and those who were admitted in the antenatal ward at the district hospital under study from 1 November to 31 December 2011.

1.13 SAMPLE AND SAMPLING

A sample is a part or fraction of a whole or a subset of a larger set, selected by the researcher to participate in the study (Polit & Beck 2008:765). De Vos et al (2011:223) define a sample as comprising elements or a subset of the population considered for actual inclusion in the study. It may also be viewed as a subset of measurements drawn from a population in which we are interested. It is stated in Brink et al (2012:132) that a sample consists of a selected group of elements or units of analysis from a defined population.

For the purpose of this study a sample comprised all pregnant teenagers aged 19 years and younger who attended the antenatal care of the hospital under study or were admitted to the antenatal ward from 1 November to 31 December 2011.

Sampling refers to the researcher's process of selecting a portion of the population to represent the entire population (Brink et al 2012:132). Babbie and Mouton (2007:100) indicate that it is virtually impossible either to study all the members of the population that interest us or to make every possible observation of them. In every case, a sample will be selected from the population concerned. This process of selection is called sampling.

1.14 DATA COLLECTION

Burns and Grove (2011:430) define data collection as the process of selecting subjects and gathering data from subjects. De Vos et al (2011:171) indicate that quantitative data collection methods often employ measuring instruments. In the social and human sciences this refers to instruments such as structured observation, structured interview schedules, questionnaires, checklists, indices and scales.

In this study the researcher collected data using a self designed structured interview schedule conveniently taken from pregnant teenagers who were attending antenatal care and from those admitted to the antenatal ward during the period from 1 November to 31 December 2011 (see annexure F). Bias was prevented by selecting only teenagers who met the selection criteria.

1.15 DATA ANALYSIS

Data analysis entails categorising, ordering, manipulating and summarising the data and describing them in meaningful terms (Brink et al 2012:177). De Vos et al (2011:249) state that quantitative data analysis can be described as the techniques by which researchers convert data to a numerical form and subject them to statistical analysis. According to De Vos et al (2011:249), the purpose of analysis is thus to reduce data to an intelligible and interpretable form so that the relations of research problems can be tested and conclusions drawn. It is further explained that data analysis itself does not provide the answers to research questions; answers are found via the interpretation of the data and the results. De Vos et al (2011:249) view statistical analysis as procedures for assembling, classifying, tabulating and summarising numerical data to obtain meaning or information.

In this study, the researcher used descriptive statistics to provide answers to the research questions.

1.16 VALIDITY AND RELIABILITY OF THE DATA COLLECTION INSTRUMENT

1.16.1 Validity

Validity refers to the extent to which an empirical measure accurately reflects the concept it is intended to measure (Babbie & Mouton 2007:172). Validity refers to the degree to which the instrument measures up to that which it is supposed to be measuring.

The researcher focused on content validity, which is concerned with how accurately the questions elicited the information sought.

The face validity of the structured interview schedule was checked by an obstetrician as well as colleagues who are experts in reproductive health care and experienced midwives with clinical experience in obstetrics and who work in the obstetric unit, the antenatal care and reproductive health care.

In this research, the research instrument was administered to experienced staff working in the reproductive health care and obstetric unit as well as to the obstetrician and persons with research knowledge and experience to validate the content and provide inputs.

1.16.2 Reliability

The reliability of a measurement procedure relates to the precision and accuracy of the instrument used and refers to the consistency of the measurement. This means that if the same variable is measured under the same conditions, a reliable measurement procedure will produce identical (or nearly identical) measurements (De Vos et al 2011:177). The authors further state that reliability occurs when an instrument measures the same thing more than once and the same outcomes are obtained. In other words, reliability refers to measuring an instrument's ability to yield consistent

numerical results each time it is applied. If used on a similar group of respondents in a similar context; an instrument should yield similar results.

Reliability in this research was achieved by accurate and careful phrasing of each question to avoid ambiguity and leading respondents to particular answers. This ensured the reliability of the interview schedule.

1.17 DEFINITIONS OF KEY TERMS

In this section, the key concepts as related to this study are defined, described and applied to the current topic.

1.17.1 Teenager/adolescent

Teenager means a person aged between 13 and 19 years (Paperback Oxford English Dictionary 2006:779). According to the WHO (2004:5), the term “teenager” is used synonymously with adolescent, so teenage pregnancy means pregnancy to a person who was 19 years or younger. For the purpose of this study the term teenager/adolescent will be used interchangeably and referred to a person who was 19 years and younger.

The (DoH 2003:71) defines a teenager/adolescent as a person aged between 10 and 19 years, and a youth or young person as one aged between 15 and 24.

1.17.2 Teenage/adolescent

Adolescent means in the process of developing from a child into an adult. (Paperback Oxford English Dictionary 2006:10).

In this study a teenager mean a person who was pregnant at the age of 19 years or younger.

1.17.3 Accessibility

Access is defined as a means or opportunity to approach or enter a place. It also refers to the right or opportunity to use something or see someone (Paperback Oxford English Dictionary 2006:4).

Maja (2007a:36) defines accessibility to health care to imply that regular health care should be provided at all health care facilities, at all times.

In this study accessibility refers to the teenager's ability to access reproductive health care services at all times and at a convenient time, and to obtain information regarding reproductive health care.

1.17.4 Contraception

Contraception means the use of devices or drugs to prevent pregnancy (Paperback Oxford English Dictionary 2006:158).

Contraception is defined as the prevention of pregnancy through temporary or permanent means (DoH 2003:100).

In this study contraception will refer to the application of any method of birth control to prevent an unplanned pregnancy.

1.17.5 Emergency contraception

Emergency is defined as a serious or unexpected situation requiring immediate action (Paperback Oxford English Dictionary 2006:242).

The DoH (2003:71) defines emergency contraception as the use of a contraceptive method in the first few days following an episode of unprotected sexual intercourse in order to prevent or reduce the risk of an unwanted pregnancy.

In this study emergency contraception will refer to a woman's ability to seek a method to prevent pregnancy by making the endometrium to be unfavourable for implantation within 72 hours after unprotected sexual intercourse.

1.17.6 Choice regarding termination of pregnancy

Terminate means to "bring to an end" (Paperback Oxford English Dictionary 2006:784).

Choice regarding termination of pregnancy refers to the promotion of reproductive rights and extends freedom of choice by affording every woman the right to choose whether to have an early, safe and legal termination of pregnancy in accordance with her individual beliefs (DoH 2003:100). In this study, termination of pregnancy will mean therapeutic discontinuation of the progress of pregnancy before 12 weeks gestation.

1.17.7 Reproductive health services

According to Paperback Oxford English Dictionary (2006:639), reproduction means the "action of reproducing".

Reproductive health services refer to the constellation of services aimed at fostering sexual and reproductive health (DoH 2003:102). In this study reproductive health care means the care afforded to a pregnant teenager during pregnancy, ante-natal and post-natal care, information about reproduction, contraceptives (including emergency contraceptives) and counselling.

1.17.8 Sexual health

The term "sexual" relate to two sexes of reproduction, involving the fusion of male and female cells (Paperback Oxford English Dictionary 2006:690).

Health means a state of being free from illness or injury (Paperback Oxford English Dictionary 2006:348).

The DoH (2003:102) defines sexual health as an integration of the somatic, emotional, intellectual and social aspects of sexual being in ways that are positively enriching and that enhance personality, communication and love.

In this study sexual health will mean a positive approach to sexual intercourse with a single partner who is protected to prevent sexually transmitted infections.

Sexuality refers to a person's capacity for sexual feelings or a person's sexual preference (Paperback Oxford English Dictionary 2006:690).

Research into sexuality will mean finding out about teenagers' sexual activities and the strategies that can change or shape their attitudes regarding their sexual life to prevent risks such as teenage pregnancy.

1.17.9 Safer sex

Safe

Safe is defined as protected from danger or risk (Paperback Oxford English Dictionary 2006:663).

Sex

Sex means the fact of being male or female (Paperback Oxford English Dictionary 2006:690). Sex denotes the biological distinction between male and female (DoH 2003:103).

Safe sex

Safe sex is defined by DoH (2003:103) as sex with no or minimal risk of negative consequences. According to Paperback Oxford English Dictionary (2006:644), safe sex is defined as sexual activity in which people protect themselves against sexually transmitted diseases.

In this study, safe sex will mean sexual intercourse during which both partners are protected by using condoms or other means of preventing teenage pregnancy.

1.18 SCOPE OF THE STUDY

The study was limited to one level I hospital in the province. Only pregnant teenagers who booked into the hospital under study and those that were admitted to the antenatal ward were used as participants in this study.

1.19 LIMITATIONS OF THE STUDY

The study was restricted to one antenatal clinic and one antenatal ward within a selected level I district hospital in the Ehlanzeni district of the Mpumalanga Province during the study period.

The findings therefore cannot be generalised to other hospitals in South Africa.

1.20 ETHICAL CONSIDERATIONS

Ethics are defined in Burkhardt and Nathaniel (2008:29) as norms which are concerned with the study of social morality and philosophical reflection on society's norms and practices. It is the practical application of moral philosophy. Houser (2008:53) defines ethics as the study of right and wrong.

Ethical considerations in the conduct of the research were followed to prevent ethical dilemmas.

For the purpose of this study, to ensure ethical conduct, permission to conduct the study was sought from the University of South Africa, Health Studies Research and Ethics Committee (HSREC) (see annexure A), the Research and Ethics Committee of the Mpumalanga Province (see annexure C), the hospital management, the supervisor of the maternity unit at the hospital under study (see annexure E) and the pregnant teenagers (see annexure G) themselves.

The ethical principles adhered to in the study include the following:

- Respect for persons as autonomous individuals
- Confidentiality and anonymity
- Avoiding harm, promoting justice and the principle of informed consent
- The principle of beneficence
- Respect for human dignity

These principles will be discussed in detail in chapter 3.

1.21 OUTLINE OF THE STUDY

In this chapter, the researcher discussed the following:

- Introduction of the study
- Described the background to the study
- Explained the theoretical framework
- Stated the purpose, objectives and significance of the study
- Defined the terms used, such as the concepts of population and sample, data collection, data analysis, reliability and validity
- Explained the research methodology
- Outlined the ethical considerations underlying the study
- Provided a list of sources

Chapter 2 discusses the conceptual framework and applied literature review for the study.

Chapter 3 describes the research design and methodology.

Chapter 4 discloses the results of the study.

Chapter 5 concludes the study, presents conclusions and makes recommendations for further research.

1.22 CONCLUSION

This chapter explained the background to the research problem, introduced the theoretical framework, explained the purpose of the study, research objectives, significance of the study, research methodology, defined the key terms and outlined the ethical considerations.

Chapter 2 will discuss the literature review.

CHAPTER 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

This chapter deals with the conceptual framework and applied literature review for the study. The 'literature' refers to the sources that are effective in providing the in-depth knowledge that the researcher needs to study the selected problem (Brink et al 2012:70). A literature review is defined as all the written sources relevant to the topic of interest (Brink et al 2012:71). The authors further explain that a literature review involves findings, reading, understanding and forming conclusions about the published research and theory as well as presenting these in an organised manner. A literature review is an organised written presentation of what has been published on a topic by scholars (Brink et al 2012:70). The purpose of the review is to convey to the reader what is currently known regarding the topic of interest (Brink et al 2012:70).

Polit and Beck (2008:757) define a literature review as a critical summary of research on a topic of interest. Such a summary is often prepared to put a research problem in context. According to De Vos et al (2011:133), a literature review contributes to a clear understanding of the nature and meaning of the problem that has been identified.

The purpose of the literature in this study was to obtain information on the following:

- Contributory factors to the high teenage pregnancy rate within a district hospital under study in the Ehlanzeni district of the Mpumalanga Province.

The literature review in this study will be discussed with reference to the three components of the HBM, namely: individual perceptions, modifying factors and variables affecting the likelihood of initiating action.

Literature findings on the above components of the HBM will assist the researcher to identify some gaps in previous studies that need to be addressed by the current study.

The findings will also familiarise the researcher with what is known, what remains to be done in the field of study and which findings should be compared and contrasted with the proposed study.

Brink et al (2012:26) state that in relation to health sciences research, a model may help researchers to define and guide specific research tasks or provide an organised framework. In this chapter, Bowling's models of health behaviour will be discussed in order to understand how people view, perceive and react to health related matters.

2.2 MODELS OF HEALTH BEHAVIOUR

Bowling (2009:37) outlines a number of models pertaining to health behaviour which will supplement the HBM on which this study is based.

2.2.1 Healthy lifestyle

A healthy lifestyle is defined as voluntary healthy behaviour based on making choices from alternatives that are available in individual situations i.e. a decision about diet, alcohol intake, using a condom and other disease-preventing and health-promoting activities in accordance with prevailing scientific paradigms (Bowling 2009:37). The author further explains that people aim for good health in order to use it, for example, so that they can live a long life, be sexually attractive, function optimally and achieve a good quality of life.

In this study, a healthy (sexual) lifestyle means using any alternative available such as abstinence, the use of condoms and various contraceptives to prevent teenage pregnancy, so that she can finish her studies, obtain a better job and build a better future in which pregnancies are planned (Bowling 2009:37).

2.2.2 Healthy behaviour

Health behaviour is defined as an activity undertaken by a person who believes herself or himself to be healthy, for the purpose of preventing disease or detecting it at an asymptomatic stage (Bowling 2009:37). The author further explains that other conceptualisations of health behaviour incorporate actions undertaken regardless of health status to prevent disease, namely actions undertaken to promote health. These

may be either medically approved or lay actions regardless of their effectiveness. Health-protective behaviour is defined as any behaviour adhered to by a person in order to protect, promote or maintain his or her health, regardless of his or her perceived health status and regardless of whether the behaviour is effective (Bowling 2009:37). The author further states that other models include self-care within the meaning of the concept and distinguishes between behaviour intended to reduce the risk of disease and behaviour intended to promote health.

In this study, health behaviour will relate to the situation where teenagers who believe that they are vulnerable to teenage pregnancy will take action to prevent it by practising safe sex, abstaining from sexual activity to eliminate the risk of pregnancy, preventing contracting sexually transmitted diseases (STIs), and suffering the consequences of teenage pregnancy such as dropping out of school and finding themselves unemployed until they are mature enough to cope with pregnancy (Bowling 2009:37).

2.2.3 Models of health-related actions

According to Bowling (2009:39), various models of behaviour are used by psychologists to analyse how people react to health-related events and are described as follows:

2.2.3.1 Attribution theory

Attribution theory as applied to health behaviour holds that people try to view the social world as predictable and controllable (Bowling 2009:40). The theory is based on the argument that attributions about the causes of a phenomenon, in this research a teenage pregnancy, are made by individuals in relation to how specific the cause of the phenomenon is to the person, the extent to which the attribution is shared by others, the consistency of the attribution over time and in different settings where individuals find themselves.

For the purpose of this study, attribution theory will mean the ability of the teenager to perceive the cause of teenage pregnancy to be within her control or that there is an external source of control that enables her to take action to prevent her becoming pregnant.

In this study, attribution theory will be used to determine whether the teenager believes that engaging in unprotected sexual intercourse could lead to her contracting diseases or becoming pregnant or that she believes that someone other than herself may be affected by her conduct (Bowling 2009:40).

2.2.3.2 Locus of control

According to Bowling (2009:40), control can be categorised as internal (e.g. information, ability or desire) or external (e.g. opportunity, dependence on others) to the person and is influenced by the person's expectation of the outcome. According to this theory, a person's locus of control has the greatest explanatory power regarding the issue of whether he or she will engage in preventive health behaviour.

In this research the approach taken will be that for the teenager to engage in the action of preventing pregnancy, internal control manifests itself for the first time when the teenager internalises the danger of teenage pregnancy and takes action to prevent it taking place.

In this study, it will be shown that the locus of control will have the greatest influence in determining whether a person will engage in preventive health behaviour i.e. whether she will take precautions to avoid a teenage pregnancy by using contraceptives or by abstaining from sex (Bowling 2009:40).

2.2.3.3 Protection motivation theory

Protective behaviour depends on the multiplicative concepts of perceived severity of ill-health, the perceived probability that ill-health will ensue and the likelihood that the protective behaviour will prevent ill-health (Bowling 2009:41). The author further explains that the motivation to protect health stems from the linear function of the severity of the threat, personal vulnerability, the ability to carry out the behaviour, and the effectiveness of the behaviour in reducing the threat of ill-health. The model further indicates that motivation will be influenced by the costs of the protective behaviour and the rewards associated with not undertaking it (Bowling 2009:41).

For the purpose of this research, it is argued that the teenager should consider the vulnerability, the dangers, the seriousness and the consequences of falling pregnant in order to take action to protect her health by using any available action to prevent pregnancy. The costs of protective behaviour, according to this research, will be the time taken by the teenager to attend health talks about teenage pregnancy and the costs of contraceptives to be used in preventing teenage pregnancy, for example, in this study, by using a condom to protect against teenage pregnancy or sexual transmitted infections (Bowling 2009:40).

2.2.3.4 Theory of reasoned action

The theory of reasoned action is a general psychological theory of behaviour which assumes that the intention to undertake behaviour is determined by the person's attitude towards it, which in turn is determined by his or her beliefs about the consequences of the behaviour, and by subjective norms (Bowling 2009:41).

In this study, the teenager's utilisation of the available options to prevent pregnancy will depend on her attitude towards the different methods of contraception. Teenagers will often take action to prevent teenage pregnancy only if the consequences are seen as a threat to her. Social norms and expectations in society can also influence the teenagers positively if they support the notion that teenagers who are sexually active can be given a choice, such as using a condom, or negatively if they are not permitted to use contraception.

This will mean that the teenager should be able to perceive that she is vulnerable to teenage pregnancy and its consequences as well as peer pressure and pressure on the part of society. She should therefore think carefully before engaging in behaviour that could lead to risks like teenage pregnancy.

2.2.3.5 Theory of planned behaviour

The theory of planned behaviour is an extension of the theory of reasoned action, which is derived from social cognition theory. It includes perceived control over one's behaviour as well as one's attitude towards behaviour and subjective norms (i.e. social norms and social pressure to adhere to certain behaviour).

Complete control over their actions, owing to external influences such as their financial position. An example would be the case where teenager needs transport in order to collect contraceptives and she does not have money for this. According to this theory, it is not the circumstances of individuals that determine what they do, but their attitude towards these. Intention is the most important antecedent of behaviour, and is influenced by subjective norms (i.e. the influence of family and peers), attitudes, expectations of future health and ability, self-efficacy and perceived control over the situation (Bowling 2009:41).

The theory of planned behaviour will mean that the teenager's attitude towards teenage pregnancy can have both a positive and a negative influence. The teenager's intention to take action to prevent becoming pregnant will depend on both external and internal influences, such as her attitude towards teenage pregnancy and the social norms exerting pressure on her. According to this theory, the action that teenagers are likely to take, depends on whether they think the action will be successful. This means that teenagers need to be given information about the disadvantages of teenage pregnancy so that they can know what the consequences will be for their future if they become pregnant.

In this study, planned behaviour means the attitude towards the prevention of teenage pregnancy which will determine the action to be taken to prevent becoming pregnant. This decision will be influenced by subjective norms like the attitudes of family and peers and future expectations relating to health and ability (Bowling 2009:41).

2.2.3.6 Health Action Process Model

The health action process model recognises the need for a temporal element in understanding health beliefs and behaviour (Bowling 2009:41). The model also includes self-efficacy as a determinant of intended and actual behaviour, in addition to criteria from previous models. The model also incorporates a decision-making stage (motivational stage) and an action stage (plans to initiate and maintain the behaviour). The motivational stage includes self-efficacy (e.g. confidence in one's ability to carry out the behaviour and to make an appraisal of the threat (e.g. beliefs about the severity of an illness and personal vulnerability). The action stage comprises cognitive (volitional),

situational and behavioural factors which determine the initiation and maintenance of the behaviour (Bowling 2009:41).

This means that teenagers should be motivated from within to take action to avoid teenage pregnancy, to be aware of the seriousness of becoming pregnant and that they are vulnerable and not immune to becoming pregnant as long as they are not taking any precautions. The teenager should show confidence in her ability to carry out any action aimed at preventing teenage pregnancy. The action plan that the teenager can make is to start using contraceptives if she is sexually active or to abstain until she is physically, financially and psychologically ready for a relationship.

2.2.3.7 Health Promotion Model

According to Polit and Beck (2008:148), Nola Pender's Health Promotion Model (HPM) focuses on explaining health promoting behaviour using a wellness orientation. It is a competence or approach-orientated model and unlike the HBM does not rely on a threat to one's person as a motivating factor (Nies & McEwen 2007:108) The authors further explain that health promotion entails activities directed towards developing resources that maintain or enhance a person's well-being.

According to Nies and McEwen (2007:110), the HPM can assist community health nurses to examine an individual's health choices and decisions that influence health-related behaviour e.g. prevention of teenage pregnancy.

Even though certain adolescent girls were reproductively mature, they did not reproduce because they had a sufficient knowledge of sexuality and reproduction to ensure that they would enjoy greater reproductive success later. The HPM was found to be successful in preventing teenage pregnancy and HIV in the USA by promoting abstinence from sexual intercourse. This is consistent with the HBM as this indicates that teenagers understood the value of abstinence and practised it to avoid becoming pregnant in their teens.

Table 2.1 illustrates the components and outputs of the HPM.

Table 2.1 Components and outputs of the HPM

Cognitive factors	Perceptual explanation
Importance of health	Perceived value of health to functioning and life.
Perceived control of health	Perceived ability to control health (external or internal control)
Perceived self efficacy	Perceived ability to perform the necessary actions to achieve the desired outcome.
Definition of health	Views of what health means for the individual may vary from absence of illness to self-actualisation.
Perceived health status	Perception of how the individual views health may range from wellness to illness
Perceived benefits of health promoting behaviour	Perception of positive outcomes that can ensure a result of health promoting behaviour (e.g. feel fit)
Perceived barriers to health-promoting behaviour	Perception of things that obstruct health-promoting behaviour e.g. money and transport.

(Source: Nies & McEwen 2007:110)

For the purposes of this study, the HPM is presented by providing health education about measures for preventing teenage pregnancy, advising teenagers about the use of contraception and the value of abstinence and telling them about the benefits of not falling pregnant: for example, they will be able to finish school and to obtain a secure job, have a family and a baby that is well cared for if they wait until they are ready.

2.2.3.8 Health Belief Model

According to Polit and Beck (2008:150), the HBM has become a popular conceptual framework in nursing studies focused on patient compliance and preventive health practices. The model postulates that health-seeking behaviour is influenced by a person's perception of a threat posed by a health problem and the value associated with actions aimed at reducing the threat.

Bowling (2009:39) indicates that the HBM postulates that people's behaviour in relation to their health is related to their perceptions of the severity of an illness, their susceptibility to it and the costs and benefits incurred in following a particular course of

action. He further explains that a model is used to understand people's use of preventive health measures and services, as well as their response to symptoms and adherence to prescribed therapy. The model holds that socio-demographic, social and psychological factors are likely to modify health belief (Bowling 2009:39).

The HBM is a model of individual behaviour that explains preventive behaviour determinants (Nies & McEwen 2007:108). According to Nies and McEwen (2007:108), the model's focus on compliance is something that many nurses could relate to in their own clinical practice and that will provide answers to problems that many nurses encounter in their everyday clinical practice.

For the purposes of this study, the HBM will be used as a conceptual framework that guides the study. The model in this study will be used to understand the teenagers' perceptions of teenage pregnancy as a threat to their health and to their use of preventive health measures and services, as well as their response to symptoms and adherence to prescribed therapy.

2.3 BACKGROUND TO THE HBM

According to Eisen, Zellman and McAlister (1992:1), the HBM is defined as a psychological model that attempts to explain and predict health behaviour. The HBM was developed in 1950s by social psychologists Hochbaum, Rosenstock and Kegels while working in the United State Public Health Service (Eisen et al 1992:1).

According to Roden (2004:2), the HBM originated in the 1950s to explain why people would not participate in programmes to prevent or detect disease. The HBM has been thoroughly evaluated, has received much empirical support and is considered to be one of the most influential models in the promotion of health (Roden 2004:2). The HBM assumes that the major determinant of preventive health behaviour is disease avoidance (Nies & McEwen 2007:41). The authors further explain that the HBM is a value expectancy theory that addresses factors that promote health enhancing behaviour.

Lewis's work in Nies and McEwen (2007:41) lends itself to the HBM core dimensions by proposing that behaviour is based on the current dynamics confronting the individual

rather than prior experience. According to Nies and McEwen (2007:110), the HBM can assist community health nurses in examining an individual's health choices and decisions for influencing health-related behaviour. They further state that the HBM focuses on individual strategies for achieving optimal health and well-being.

The initial purpose of the HBM was to explain why people did not participate in health education programmes to prevent or detect a disease in particular (Nies & McEwen 2007:108). However Lin, Simoni and Zemon (2005:471) indicate that the HBM is useful for predicting health-related behaviour such as fertility control. In this study, preventing a disease will be taken to mean preventing teenage pregnancy. The HBM as a psychological model attempted to explain and predict health behaviour, including the attitudes and beliefs of individuals and groups (Bowling 2009:37).

The HBM was used in this study as a framework guiding the researcher to identify the contributory factors to the high teenage pregnancy rate. According to the HBM, individuals must place value on avoiding a particular illness or a negative outcome. A negative outcome in this study will be a teenage pregnancy, and teenagers will be motivated to avoid risky sexual behaviour when they believe that they are susceptible to an unplanned pregnancy.

As the HBM is useful in organising information about clients' views of their state of health and the factors that would influence them to change their behaviour, the HBM in this study will be discussed under three major headings:

- individual perceptions
- modifying factors
- variables affecting the likelihood of initiating action (Dennill et al1999:156).

2.4 SCOPE AND APPLICATION OF THE HBM

Janz and Becker (1984:36) state that the HBM has been applied to a broad range of health behaviour and subject populations. The three broad areas are identified as:

- Preventive health behaviour, which includes health-promoting behaviour (e.g. diet, exercise) and avoiding health-risk behaviour (e.g. smoking drugs that can

make the teenager vulnerable to unprotected sexual intercourse and thus to pregnancy) as well as vaccination and contraceptive practices.

- Sick role behaviour, which refers to compliance with recommended medical regimens, usually following on professional diagnosis of an illness.
- Clinic attendance, which includes visits to a physician for a variety of reasons.

2.5 COMPONENTS OF THE HBM

The HBM according to Rosenstock (1974:328) proposes that in order for an individual to take action to avoid a disease, he or she needs to believe that:

- he or she is susceptible to the disease (perceived susceptibility)
- the disease could have at least a moderately severe impact on some aspect of his or her life (perceived severity)
- certain behaviour could be beneficial in reducing his or her perceived susceptibility or the severity of a possible disease (perceived benefits)
- this behaviour would not be impeded by factors such as cost, pain and embarrassment (perceived barriers) (Lin et al 2005:471)

Rosenstock (1974:329) acknowledges additional variables such as cues to action (which instigate preventive health activity), where levels of susceptibility and severity provide the stimulus to act and the perception of barriers offers a preferred mode of action. According to Lin et al (2005:471), in an attempt to improve its predictive ability, researchers expanded the HBM to include the concept of self-efficacy. Bandura in Lin et al (2005:471) define self-efficacy as a person's belief in his or her ability to adhere to certain behaviour. It is further stated in the study by Roden (2004:2) that Rosenstock (1974:329) defines modifying factors as demographic, socio-psychological and structural factors that serve to condition an individual's perceptions about the perceived benefits of preventive health actions. According to Hazavehei, Taghdisi and Saidi (2007:3), some knowledge of all these factors is believed to be vital to the planning process for successful educational interventions. Each of these components will be discussed below and their application to this study illustrated.

2.5.1 Individual perceptions

According to Polit and Beck (2008:150), individual perceptions postulate that health-seeking behaviour is influenced by a person's perception of a threat posed by a health problem. According to the HBM, individuals must place a value on avoiding a particular illness or a negative outcome. Edelman and Mandle (1995:228) state that the individual's intentions to participate in preventive health behaviour are determined by the following factors, namely:

- Perceived susceptibility, perceived seriousness or severity, perceived benefits, perceived barriers. These terms are discussed below (see 2.5.2).

Table 2.2 Individual perceptions

Component	Explanation
• Perceived susceptibility to teenage pregnancy	• Belief that a disease state is present or likely to occur.
• Perceived seriousness or severity of teenage pregnancy	• Perception that a disease state or condition is harmful and has serious consequences.
• Perceived benefits of prevention of teenage pregnancy.	• Belief that health action is of value and has efficacy.
• Perceived barriers to prevention of pregnancy and motherhood	• Belief that health action would be associated with hindrances e.g. cost
• Self-efficacy to prevent teenage pregnancy rate	• Belief that actions can be performed to achieve the desired outcome (one's confidence)
-	• Factors encouraging the individual to prepare for action (reminder cues, newspapers)

(Source: Nies & McEwen 2007:109)

2.5.2 Perceived risk of (susceptibility) to teenage pregnancy

According to Nies and McEwen (2007:108), perceived susceptibility refers to one's belief that a disease state is present or likely to occur. According to Bowling (2009:21), people are influenced by personal context and personal choice, namely: beliefs, attitudes, expectations and values, and that people interact between different contexts, namely the physical and the social context. The primary motivation to change is the

level of perceived threat or risk of a specific condition, that if people believe that they are at risk of a disease, they are more likely to act responsibly to prevent a disease (Daddario 2007:364) If people believe that they are not at risk or that the risk of susceptibility is low, they are more likely to engage in unhealthy behaviour. Teenagers will only take action to prevent teenage pregnancy if they believe that they are at risk of falling pregnant and if they perceive the threat as serious.

According to Amy and Loeber (2007:300), the feeling of invulnerability after repeated episodes of unprotected sexual intercourse that did not result in pregnancy causes teenagers to think they cannot fall pregnant. A study by Herrman (2007:92) yielded similar findings, namely that the subjects had knowledge about reproductive health but did nothing. This is accompanied by a lack of understanding of the physiology of reproduction, which leads to improper use of family planning methods. Goicolea, Wulff, Ohman and Sebastian (2009:222) indicate that early pregnancy is perceived by other teenagers as a rite of passage, a pathway to adulthood that might bring positive consequences.

According to Burns and Porter (2007:217), many teenagers perceive the risks that accompany abstinence, such as the loss of a relationship, insecurity and loneliness, as greater than the potential risks of pregnancy. Burns and Porter (2007:225) in their study reveal that some teenagers did not think sex could lead to an unintended pregnancy but rather that it would bring them security and fill an empty space inside them due to alienation from family members. Teenagers also perceive involvement in sexual intercourse as a way to feel connected, that having sex was going to bond the teenager to her boyfriend for life and sought comfort in confiding fears about growing up.

According to the HBM, even when a person recognises susceptibility, action will not take place unless the individual perceives the severity of the risk to be high enough to have serious organic or social implications. This is confirmed in what has been described as a gateway from fantasy to reality. Burns and Porter (2007:217) state that where teenagers fail to recognise the potentially serious consequences of sexual intercourse but only think of intimate benefits like thinking that 'having sex was their way to make life', or 'sex was like the thing you did to make it all happen', they become sexually active.

It is indicated that 49, 5% of coital events are still unprotected among those who reported agreeing to being committed not to become sexually involved become pregnant. This indicates a lack of knowledge about sex and the risks of sexual intercourse (Bowling 2009:41).

The teenager's attitude towards sex and teenage pregnancy is influenced by how she perceives teenage pregnancy and that of specific individuals or groups with whom he/she stands in relationships. This is consistent with the findings of Gomes and Speizer (2010:363) that 65% of the adolescents reported that their partners wanted the pregnancy before conception took place. Grobler et al (2007:37) found that 64% of adolescents believe that sex transforms a person from childhood to adulthood. This is consistent with the theory of reasoned action put forward by Bowling (2009:41) according to which the intention to adhere to certain behaviour is determined by the person's attitude towards it.

According to Grobler et al (2007:37), most adolescents reported that they had sexual intercourse because they were afraid of what their friends would say if they didn't have sex and that it is "cool" to have many sexual partners (Bowling 2009:41). This is consistent with the perceived susceptibility notion contained in the HBM as the teenagers did not consider the consequences of teenage pregnancy but wanted to please friends and maintain their relationships. According to Lall (2007:234), teenagers reported that they had received inadequate sex education at school, resulting to unintended teenage pregnancy.

This is consistent with the approach to health behaviour in Bowling (2009:38) who states that health behaviour is an activity undertaken by a person who believes him-or herself to be healthy for the purpose of preventing disease or detecting it at an asymptomatic stage. This means that, if they had known about the danger of teenage pregnancy they would have made a wise decision to avoid it. This is confirmed in a study by Lall (2007:234) who reports that some teenagers did not think that an unplanned pregnancy could happen to them when they started having sex.

According to a study done by Minnick and Shandler (2011:242), 39% of the teenagers knew that they were susceptible to teenage pregnancy but did not take any action to prevent it because they wanted to have a baby to love, their partner wanted a baby and

they thought that a baby would bring the partners together. These findings (Bowling 2009:41) differ from those in a study done by Goncalves et al (2011:205), who reported that contraceptives were used inconsistently in order to reduce their side-effects. Ryan, Franzetta and Manlove (2007:186) state that teenagers who were ambivalent towards or in favour of teenage pregnancy are less likely to use contraception.

2.5.3 Perceived seriousness/severity

Perceived severity is defined in Polit and Beck (2008:150) as one's opinion of how serious a condition and its consequences are. This is supported by Edelman and Mandle 1995:228) who define perceived seriousness/severity as an individual's belief about the seriousness or severity of a disease. According to Daddario (2007:364), perceived severity is described as a person's perception of the personal impact of contracting a disease, in this study an unplanned teenage pregnancy. Amy and Loeber (2007:300) state that teenagers fail to use condoms effectively because they interfere with the spontaneity of the act, thus attaching greater importance to pleasure than to the consequences of the act in to the context of teenage pregnancy. Bowling (2009:41), in the theory of reasoned action, states that the intention to adhere to certain behaviour is determined by the person's attitudes towards it, which in turn is determined by her beliefs about the consequences of the behaviour (in this case a teenage pregnancy) and by the subjective norms applicable. According to Maja (2007a:33), the implications of teenage pregnancy are that it may result in:

- high morbidity and mortality during pregnancy or labour, which includes hypertensive disorders during pregnancy and labour
- poorer neonatal outcomes, such as premature birth, respiratory distress syndrome, congenital abnormalities and feeding problems with the baby
- psychological, social and maternal health problems

Ireland (2009:42) outlines some medical risks of teenage pregnancy as:

- pre-eclampsia, eclampsia and hypertension
- increased risk of perinatal mortality
- increased risk of infections – including sexually transmitted diseases

- iron deficiency anaemia

Gomes and Speizer (2010:360) found that teenagers who live in societies with limited socio-demographic status tend to marry at an early age as marriage provides societal recognition and this is perceived as a strategy that raises their societal value but leaves them with low self esteem, depression and having to leave school. This is consistent with the HBM, which holds that socio-demographic, social and psychological factors are likely to modify health beliefs.

A study by Minnick and Shandler (2011:242) indicate that teenagers who have the intention to become pregnant were more likely to conceive and not to remain in school, which results in their children achieving poorly at school. It is revealed in their study that some teenagers think that giving birth will be simple as they are young and healthy, and that the severity of the risks attached to giving birth, such as post- traumatic stress and postpartum depression were not considered by them.

A study by Goncalves et al (2011:204) found that teenagers did not intend to become pregnant but feared that the side effects produced by the use of contraceptives could impair their fertility in future. According to the HBM, perceived severity means that a person will take an action only if he realises the severity is high enough to have serious organic or social implications. This is in contrast to the study conducted by Goncalves et al (2011:204) where it was found that teenagers disregarded the lifelong effects of teenage pregnancy that would affect them and their children for life for fear of the temporary side effects of contraceptives such as weight gain which needed them to monitor what they eat. This shows an insufficient knowledge of reproductive anatomy and physiology.

According to Ireland (2009:42), when teenagers are forced into premature parenthood, they can become emotionally, psycho-socially and economically stunted.

According to Lall (2007:219), teenage pregnancy may lead to poor future employment and life prospects as a result of the individuals missing out on the crucial experience of education.

Magill and Wilcox (2007:1310) state that teenage pregnancy is associated with an increase in maternal complications during pregnancy, delivery problems such as preterm labour, low birth weight, cephalo-pelvic disproportion, as well as increased risk to the foetus and the neonate such as foetal morbidity and mortality. Thomson et al (2008:130) cited in Magill and Wilcox (2007:1310), found that teenage pregnancy is more common in girls from lower socio economic backgrounds and from single parent families and that this situation may be aggravated by teenage pregnancy. In their study Amy and Loeber (2007:299) indicate that the following risks accompany teenage pregnancy:

- preterm delivery
- gestational hypertension
- anaemia
- poor nutritional status
- maternal and neonatal mortality

Herrman (2007:93) found that some teenagers believed that their boyfriends may be faithful with them if they had a baby. Thus even though they did not want a baby, they did nothing to prevent themselves becoming pregnant. However, Herrman (2007:94) also established that those teenagers often engage in sexual activities without any consideration of becoming pregnant (Herrman 2007:94).

2.5.4 Perceived barriers

Daddario (2007:364) describes perceived barriers as a person's perception of both the difficulties in adhering to certain behaviour and the negative consequences of such behaviour. Studies by Goncalves et al (2011:206) indicate that teenagers perceived the use of contraceptives as a cause of future infertility; as a result, they did not use contraception; the result was an unplanned pregnancy. The study further indicates that according to the teenagers, perceived barriers to the use of contraceptives were changes in mood, changes in their sleeping pattern, weight gain, and the possibility of infertility in the future.

Maja (2007b:43) states that poor communication between parents and their children about sexuality issues, the inaccessibility of contraception and unfriendly services to teenagers are major stumbling blocks which could lead to unplanned pregnancies. In the same study, teenagers reported that they were harassed by nurses who were rude, short-tempered and arrogant towards them when they tried to obtain contraceptives from state clinics. This also contributed to the high incidence of pregnancies. These findings contrast with those of Goncalves et al (2011:205), who indicate that access to contraceptives through the primary health care network is good as compared to that provided by most pharmacists who will sell the pill without a prescription, which leads to young women using combination oral contraceptives.

Mkhwanazi (2010:351) confirms that insufficient reproductive health information regarding the use of contraceptives contributes to teenage pregnancy, as some teenagers felt that going to the clinic to collect contraceptives will create the perception that they are sexually active and feared that this could become public knowledge. Other barriers found in the study by Mkhwanazi (2010:351) are:

- lack of confidentiality on the part of nurses who could inform their parents
- attitude of nurses who accused them of having loose morals
- fear that their grandmothers may find their clinic card
- friends who frighten the teenager by telling her that an injection will cause a bruise on her buttock

Ratlabala et al (2007:30) report that most teenagers are unable to confide in their parents owing to the distant relationship that exists between adolescents and their parents especially in rural areas where culture plays a role, unlike the situation in urban areas where women feel they can discuss sexual matters with their daughters.

Ratlabala et al (2007:30) further state that teenagers expressed strong views about the harsh treatment they received from some of the health providers and that this result in poor utilisation of the services aimed at preventing teenage pregnancy.

2.5.5 Perceived benefits of preventing high teenage pregnancy rate

Perceived benefits are defined as a person's perception of the good things that could happen as a result of adhering to certain behaviour, especially with regard to reducing the threats posed by the disease (Daddario 2007:364). Perceived benefits are the patient's beliefs that a given treatment will cure the illness or help prevent it, in this study a teenage pregnancy.

Klein and the committee on adolescence (Klein 2008:282) indicate that beside the prevention of teenage pregnancy, sexually transmitted infections which accompany pregnancy i.e. HIV will be prevented as well. Chauke (2007:10) states that identifying factors associated with unplanned teenage pregnancy and making use of available preventive measures will reduce the rate of unsafe abortions, which could lead to maternal deaths due to sepsis.

Goncalves et al (2011:206) report that teenagers are concerned about the effect of the contraceptive pill on their health; however, as they became more mature, they were content to use new prescriptions and appeared to be reassured when told that the effects on the body can be reversed with time and proper medical attention. As a result these women were likely to use the pill in a continuous and uninterrupted fashion during their teenage years.

The benefits of preventing an unplanned pregnancy will be that dropping out of school will be averted and the person's career path improved; HIV/AIDS will be prevented, and the socio economic status of the persons concerned will improve.

Perceived costs are described by Polit and Beck (2008:150) as the complexity, duration and accessibility of the treatment. The teenager should weigh up the costs such as the distance to the clinic; the pain of the injection and the interference of the condom with the natural sensation against the consequences of unplanned pregnancies.

2.5.6 Cues to action to prevent a high teenage pregnancy rate

Nies and McEwen (2007:42) define cues to action as events or things that move people to change their behaviour. Reminder cues could be sent to teenagers to motivate them to take action to prevent unplanned pregnancies. Certain cues would stimulate the person's threat of the disease by influencing perceived seriousness, susceptibility or both (Daddario 2007:364). Nies and McEwen (2007:42) explain that giving information about childhood illnesses and showing pictures that graphically demonstrate the sequelae of diphtheria, polio and pertussis eventually persuaded parents who failed to immunise their child against childhood diseases to take him to an immunisation clinic. According to the study by Nies and McEwen (2007:42), the family failed to immunise the child because the parents did not understand susceptibility to and the seriousness of childhood illnesses. Teenagers can be motivated to prevent teenage pregnancy if they realise their susceptibility and the seriousness of the consequences of teenage pregnancy, such as exposure to HIV/AIDS, poor education, lack of a secure job. Encouraging teenagers to read newspapers or magazines may assist them to take action to prevent unplanned pregnancies.

According to Sullivan, Pasch, Cornelius and Cirigliano (2004:191), preventionists sometimes engage in scare tactics to motivate people to adopt sound health behaviour. Such tactics include memorable television, magazine and billboard advertisements warning of the dangers of teenage pregnancy which, if not checked, will leave the future of this country in the hands of teenage mothers. Sullivan et al (2004:191) further state that it seems likely that strategies based on heightened perceptions of susceptibility to and the severity of distress and divorce, such as emphasising the current high rates of divorce or the negative consequences of distress and divorce, will be of limited usefulness in motivating teenagers about premarital prevention programmes, including those dealing with teenage pregnancy.

2.5.7 Self-efficacy as a means of lowering the high teenage pregnancy rate

Self-efficacy refers to confidence in one's ability to perform an action (Bowling 2009:42). Polit and Beck (2008:148), in their study on the HBM, state that greater perceived self-efficacy is also viewed as leading to fewer perceived barriers to specific health behaviour. This is confirmed by Klein (2008:282), who states that teenagers who

attended discussions about their own behaviour, who were given the messages about sex, condom or contraceptive use have been found to engage in more consistent condom and contraception use without increasing sexual activity. The significance of not increasing sexual activity was that teenage pregnancy would be reduced and teenagers will only have children once they are mature. This is consistent with what was found in Bowling (2009:42), namely that motivation to engage in health-protecting behaviour depends on the ability to carry out the behaviour and the effectiveness of the behaviour in reducing the threat of ill-health. It is also consistent with Bandura's Social Cognitive Theory in Polit and Beck (2008:149): that offers an explanation of human behaviour using the concept of self-efficacy, namely expectations which focus on people's belief in their own capacity to carry out particular behaviour e.g. preventing teenage pregnancy. The authors further explain that self-efficacy expectations, which are context specific, determine the behaviour people choose to adhere to, their degree of perseverance and the quality of the performance.

Polit and Beck (2008:149) indicate that Bandura identified four factors that influence people's cognitive appraisal of self-efficacy as:

- their own mastery experience
- verbal persuasion
- vicarious experience
- physiological and affective cues such as labour pains and sleepless nights spent comforting the baby

2.6 SUMMARY OF INDIVIDUAL PERCEPTIONS OF THE HBM

Table 2.3 depicts a summary of individual perceptions.

Table 2.3 Summary of individual perceptions of the HBM

Concept	Definition	Application
Perceived susceptibility	One's opinion of chances of contracting disease e.g. teenage pregnancy	Define populations at risk, risk levels e.g. personalise risk based on a person's features or behaviour; heighten perceived susceptibility if too low. Show statistics and consequences of teenage pregnancy
Perceived severity/ Seriousness	One's opinion of how serious a condition and its consequences are	Specify consequences of the risk and the condition
Perceived benefits	One's belief in the efficacy of the advised action to reduce risk or seriousness impact	Define action to take; how, where, when; clarify the positive effects to be expected.
Perceived barriers	One's opinion of the tangible and psychological costs of the advised action	Identify and reduce barriers through, reassurance, incentives, assistance.
Cues to action	Strategies to readiness'	Provide how-to information, promote awareness, reminders
Self-efficacy	Confidence in one's ability to take action	Provide guidance and training in performing action.

(Source: Glanz, Rimer & Lewis 2002:52)

2.7 MODIFYING FACTORS

According to the HBM, demographic variables (age, sex, race, ethnicity), socio-psychological variables (personality, social class, peer and reference-group pressure, structural variables knowledge about the disease , prior contact with the disease) are modifying factors in the perceived threat posed by a disease (Dennill et al 1999:157).

2.7.1 Demographic variables

Demographic variables were also taken into account because they have been shown to influence prevention behaviour according to the health literature, Sullivan et al (2004:190). The following demographic factors are described in relation to the HBM.

2.7.1.1 Age

According to Grobler et al (2007:36), in many Black African cultures children were historically not allowed to discuss sexual activities openly and this contributed to lack of information regarding sexuality and sexual intercourse. According to the WHO (2008:7) teenagers perceive premarital sex as acceptable as long as the partners like each other and are happy together; however, they expressed concern about the social consequences of an unwanted pregnancy. One teenager in the same study said that becoming pregnant was thought to be purely unfortunate after contraception was used occasionally for two years.

During the study most parents suggested that the appropriate age to start with comprehensive sex education should be 18 years, just a year before the average age at which teenagers become sexually active in China (WHO 2008:8). This is in contrast to the findings by Goicolea et al (2009:222) who found that early sexual initiation and poor knowledge of reproductive health were found to be associated with pregnancy before the age of 16. The study further indicates that having sexual intercourse before 15 years and not using contraception during the first sexual encounter increases the risk of a teenage pregnancy.

2.7.1.2 Gender

According to the WHO (2008:4), boys perceive sexual activity as part of their initiation into manhood. According to this study, many boys were sexually active and had multiple partners, and failure to have sex was seen as carrying the risk that they will lose face among their peers. It is also stated that the sexual coercion of teenagers was described as a carefully planned act committed in a familiar setting usually by someone well-known to the victim. This can also lead to an unplanned pregnancy.

Maja (2007a:35) states that, in a relationship where the female partner is very young and has no say in the matter, safer sex practices, especially the use of condoms, may not be easy every time. A study by Ryan et al (2007:193) report gender differences between males and females regarding knowledge of condom use. The study reported that males were more likely than females to have higher levels of perceived condom use knowledge (50% and 36% respectively). In contrast, compared to females, males

reported lower levels of self-efficacy to use birth control (4.3% and 3.9%) and lower levels of motivation to use birth control.

According to Bowling (2009:40), the theory is that the individual's motivation to engage in health-protecting behaviour depends on the perceived seriousness of the health problem and on the perceived probability that the health problem will ensue. In this study it was found that the concept of self-efficacy and perceptions are enough to motivate the use of condoms by both teenage girls and boys to prevent pregnancy. He further explains that the locus of control over preventive health behaviour (in this case, to prevent teenage pregnancy) may be either internal or external.

Goicolea et al (2009:222) indicate in their study that the fact that 36.3% of the pregnant teenagers reported leaving school because of marriage, highlights the issue of gender discrimination and inequity within relationships, and underscores the need to determine whether the problem lies with premature pregnancies or premature formal unions.

According to Maja (2007a:35), it is found that in families where a man's opinion is the dominant one, women cannot discuss contraceptive issues with men: this could result in teenage pregnancy.

2.7.1.3 Educational status

During a study conducted by Goicolea et al (2009:222) 43% of illiterate adolescents were found to be pregnant, compared to 11% with secondary education. The HBM incorporates a decision-making stage and an action stage, when the behaviour is put into practice. This model was developed to explain the importance of health beliefs, and its validity is confirmed by the findings of Goicolea et al (2009:222) that illiterate teenagers are at a greater risk of becoming pregnant as they have less understanding of the consequences than those who are educated, who would have a better understanding of the probable risk of unprotected sexual intercourse.

It was found in this study that teenagers will take a decision to protect themselves from teenage pregnancy only if they have an understanding of the perceived seriousness of a teenage pregnancy and the perceived benefits of the prevention of pregnancy. This can be acquired only through a formal education. Goicolea et al (2009:222) state that a

national plan to prevent teenage pregnancy should include measures to empower teenagers to control their sexuality by giving information to the most vulnerable and neglected groups, the youngest teenagers, rural and indigenous groups, those living in isolated areas of the country, migrants, the displaced and refugees. The study reports that 41.3% of the teenagers stated that they left school because they were pregnant and 36.3% attributed their dropout status to marriage. These findings are similar to those of Thompson et al (2008:130), namely that teenagers who reported that they were pregnant were more than twice as likely to drop out of school.

2.7.1.4 Race

Race is defined by the Paperback Oxford English Dictionary (2006:616) as each of the major divisions of humankind, based on particular physical characteristics; racial origin or the qualities associated with this; a group of people sharing the same culture and language. Thompson et al (2008:130) indicate that another risk factor attached to teenage pregnancy is that of membership of an ethnic minority group which significantly predicts pregnancy among minority females. The study further explains that pregnancy rates for Black and Hispanic teenagers were at least twice the rate for white teenagers in the USA.

2.7.1.5 Socio-psychological variables

Socio-psychological variables such as personality, social class, and peer pressure have an influence on an individual perception of a health problem and the likelihood that action will be taken to prevent it.

The study by Goicolea et al (2009:222) reveal that parental separation, poor communication with parents, a low level of family education, a lack of authority-sharing between parents and low levels of cohesion and connectedness were found to be associated with teenage pregnancy. Thompson et al (2008:127) reported that fewer pregnant teenagers lived in a two-parent household (22%) than non-pregnant teenagers (32.5%) and that fewer pregnant teenagers were living in the parental household when they became pregnant.

It is also reported in the same study that non-pregnant teenagers were subjected to more physical abuse by their mothers (20,3%) and their fathers (19,4%) than pregnant teenagers (15,4%). Goicolea et al (2009:222) contend that if the need for contraception during the first sexual intercourse as a protective factor is to be met, there must be an improvement in local educational and health service for teenagers. Strengthening the accessibility, availability, acceptability and quality of family planning services for teenagers would increase their capacity to use contraception and prevent unwanted teenage pregnancies. This will improve the perceived susceptibility and perceived severity of teenage pregnancies as outlined in the HBM by Polit and Beck (2008:150).

In contrast to the theory of perceived susceptibility in the HBM, it is reported in a study by Herrman (2007:92) that the spontaneous nature of sexual activity which lacked planning, or any consideration of the consequences of unprotected sexual activity, is powerful enough to alter behaviour and thus to lead to an unplanned teenage pregnancy.

This is in contrast to the theory of reasoned action which assumes that the intention to adhere to certain behaviour is determined by the person's attitude towards it, which in turn is determined by his or her beliefs about the consequences of the behaviour and by the norms to which he or she is subject and the theory of planned behaviour. This is consistent with the principles of the HBM; this recognises the ability to change one's behaviour.

If the teenager perceives that he or she is susceptible to the risks of an unplanned pregnancy, this will ensure an improvement in Polit and Beck (2008:148), namely that good health will be promoted if a wellness orientation is used. Santelli, Lindberg, Finer and Singh (2007:155) indicate that socially disadvantaged teenagers and their community may increasingly see teenage pregnancy as a barrier to an improvement in the circumstances of their lives. The study further states that teenagers who are also mothers become less socially acceptable.

2.7.1.6 Cultural values

According to the WHO (2008:8), views about whether contraception and abortion services should be provided to unmarried teenagers differed widely. The study further

indicates that the concern about the relaxation of traditional norms and the need to prevent unwanted pregnancies, abortions and sexually transmitted infections was evident in all focus group discussions; however, three distinct views were expressed in all the discussions. One view expressed disapproval of services for the unmarried as some parents viewed this as immoral, contrary to traditional values and likely to encourage pre-marital sexual intercourse.

In their study Hazavehei et al (2007:9) found that cultural beliefs can be changed by a health education programme in health promotion based on the HBM.

Goicolea et al (2009:226) recommend that programmes and policies for the prevention of teenage pregnancy should also address the political, social and cultural factors that influence how teenagers are perceived and treated.

Some cultural groups have restrictive laws and traditions that impact on the effectiveness use of contraceptives (Maja 2007a:35).The study further explains that in Swaziland, the minority status of women has been identified as a contributory factor to the high rate of unplanned teenage pregnancies as a result of the failure to take action to prevent such pregnancies. As Kirchengast (2009:5) explains, in many traditional societies there is strong cultural and family pressure to reproduce after marriage regardless of the age of the person concerned.

2.7.1.7 Socio-economic status

According to the WHO (2008:7), the most common reasons given for living with a man were to have company, to be able to save money, to enjoy emotional security and being too young to marry legally. Goicolea et al (2009:222) support these findings, saying that this reflects the way in which social, political and economic factors influence issues as intimate as the sexuality and reproductive health of the teenager. These findings are also consistent with the study by Grobler et al (2007:36) who found that children are forced into prostitution because it is an easy and fast way of making money for them as well as their parents.

A study done by Goicolea et al (2009:222) state that family disruption, poor communication within the family and low socio-economic status are also shown to

increase the risk of teenage pregnancy. The study further indicates that in Ecuador, 28% of the poorest teenagers become pregnant, compared to only 11% of the wealthiest group. These findings tally with those of Thompson et al (2008:130), namely that pregnant teenagers tend to come from lower socio-economic backgrounds and from single-parent families. In the study it is recommended that further study is needed which will reveal additional stressors associated with ethnicity that increase the risk of pregnancy among homeless minority teenagers.

2.7.1.8 Structural variables

According to Dennill et al (1999:157) people's perceptions and the likelihood of them taking action can be influenced by structural variables such as knowledge about and previous contact with a particular disease. Poor knowledge of sexually transmitted infections (STIs) contributes to the neglect of such diseases. The WHO (2008:4) found that boys are inclined to have multiple partners and tend to view fathering a child as a sign of masculinity even though they are aware that pregnancy could ruin a girl's reputation and future (WHO 2008:4).

Poor knowledge of contraception was found in one study: an estimated 25 to 50% of conceptions occurred despite reported use of contraceptives (Imamura, Tucker, Hannaford, Da Silva, Astin, Wyness, Bloemenkamp, Jahn, Karro, Olsen and Temmerman 2007:634). Goicolea et al (2009:222) agree with Imamura et al that poor knowledge of reproductive health, and family disruption were found to be associated with teenage pregnancy. Similar findings were reported in a study by Ryan et al (2007:182) that knowledge of contraceptives, as well as perceptions and motivation, play a role, since behaviour change is influenced by self-motivation, the intentionality of action and perceived self-efficacy in shaping outcomes.

According to Bowling (2009:42), self-efficacy refers to confidence in one's ability to perform an action. According to Maja (2007a:33), this means that teenagers can take action to change their behaviour or take action to avoid a threat if they are literate enough and able to understand the severity of the threat. (In this study this means the risk of a teenage pregnancy.)

2.8 SOURCES OF INFORMATION FOR TEENAGERS

These sources mentioned in these sections are a few found by the researcher during the literature review, but is by no means exhausted.

2.8.1 Parents

According to Imamura et al (2007:634), parents are the main source of information about sex and the means of preventing teenage pregnancy. This is consistent with Maja (2007a:34) who suggests that parents should be challenged to take the initiative in imparting information about sexuality issues, the developmental stages of their children and the prevention of risky sexual behaviour.

According to the WHO (2008:8), it is clear that parents are torn between adhering to the traditional cultural norm of not communicating with their children about sexuality issues or protecting the health and well-being of their unmarried children by ensuring that they have the information they need regarding prevention of teenage pregnancy. Parents also discovered their limitations in communicating with their unmarried children about sex, safe sex and contraception. Some parents take the view that giving teenagers' information about teenage pregnancy may encourage the teenager to be involved in sexual activity (WHO 2008:8).

2.8.2 Magazines and newspapers

Reading material such as magazines and newspapers can be used to communicate information about teenage pregnancy and its implications.

2.8.3 Schools

According to Hoggart (2003:158), secondary schools, in consultation with parents should teach teenagers communication skills and help them to understand the arguments for delaying sexual activity as well as the reasons for having protected sex to prevent teenage pregnancy. The study further explains that secondary schools should also offer information about contraception and how it is accessed. Schools, churches

and youth organisations could play additional roles in promoting reproductive health and educating youth about sexual issues (Maja 2007b:44).

According to Lall (2007:225), where schools introduce more innovative educational methods e.g. peer education, the moral issue of encouragement is raised by some parents, governors or board members. The study further explains that the schools used for their study admitted that they placed pressure on pregnant teenagers to leave school for health and safety reasons, claiming that they cannot take responsibility if the teenager were to have an accident. Schools in South Africa are forbidden to use this as an excuse. Schools may not now legally discriminate against or exclude students because of pregnancy, but many continue to do so informally and they are unlikely to face any challenge to such action (Lall 2007:225).

2.8.4 Health care institutions

According to Maja (2007a:36), contraceptives should be accessible geographically and functionally to minimise distance as a barrier to the use of contraception. The study further explains that teenagers can still have unintended pregnancies if contraceptives are not readily available when needed for use. Goodman, Klerman, Johnson, Chang and Marth (2007:148) found no significant relationship between the geographical accessibility of a family-planning facility and greater distances on the one hand and the risk of unintended pregnancies on the other.

According to Polit and Beck (2008:150), the perceived costs are the complexity, duration and accessibility of the treatment. The study reveals that rigid and relatively short clinic hours for client consultations reduce service availability and can result in many hours of waiting which may be unacceptable to the client. The authors state that a number of studies reported that contraceptives were inaccessible to clients during weekends.

2.9 RISK BEHAVIOUR IN REGARD TO PREGNANCY

Burns and Porter (2007:217) report that many teenagers view risks that could accompany abstinence, e.g. loss of a relationship, insecurity and being alone, as greater than the potential risks of sexually transmitted diseases such as HIV/AIDS. Risky sexual behaviour, alcohol, drug or tobacco uses were also shown to have some association with teenage pregnancy. Imamura et al (2007:634) cited in Burns and Porter (2007:217) emphasise that becoming pregnant requires unprotected sex meaning exposure to HIV and other sexual transmitted disease.

2.10 LIMITATIONS OF THE HBM

Nies and McEwen (2007:42) describe the limitations of the HBM as follows:

- The HBM places the burden of action exclusively on the client and it assumes that only those clients who have distorted or negative perceptions of the specified disease or recommended health action will fail to act.
- The HBM focuses the nurse's energies on interventions designed to modify the client's distorted perceptions.
- The HBM may effectively promote behaviour change by altering patients' perspectives, but it does not acknowledge the health professional's responsibility to reduce health-care barriers.

2.11 CONCLUSION

This chapter discussed the literature review undertaken on the contributory factors to the high teenage pregnancy rate reported by various studies in South Africa at Ehlanzeni district in the Mpumalanga province. The literature review was based on the HBM.

Chapter 3 deals with the research methodology used to determine the contributory factors to the high teenage pregnancy rate.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter describes the research design and methodology used in the study. The purpose of the study, research objectives, setting in which the research was conducted, population, data collection and analysis, measures to ensure validity and reliability as well as ethical considerations are discussed.

The purpose of the study is to explore the factors contributing to teenage pregnancy at the hospital under study in an attempt to prevent the occurrence of teenage pregnancy.

According to Polit and Beck (2008:81), research objectives are specific accomplishments a researcher hopes to achieve by conducting a study.

The objectives of this study were to

- describe the contributory factors to the high teenage pregnancy rate within a district hospital in the Ehlanzeni district of the Mpumalanga Province
- propose strategies, based on the findings of the study, for the promotion of reproductive health services to prevent teenage pregnancy

3.2 RESEARCH DESIGN

A research design is defined as a plan or blueprint of how a researcher intends conducting the research (Babbie & Mouton 2007:74). It is defined as the overall approach to or an outline of the study that details all the major components of the research (Houser 2008:183). A research design determines how the respondents are to be selected from a target population who have an interest in participating in the study. Shi (2008:247) states that a research design is concerned with the planning of research

and specifies the hypotheses or questions to be studied, the data to be collected, the methods of data collection and the types of analysis to be used.

Brink et al (2012:217) define a research design as an overall plan for gathering data in a research study. Polit and Beck (2008:765) define a research design as an overall plan for addressing a research question, including specifications for enhancing the study's integrity. De Vos et al (2011:142) state that a research design involves a set of decisions regarding which topic is to be studied among which population with which research methods and for which purpose. The author further explains that the research design is a process of focusing the researcher's perspective for the purpose of a particular study.

In this study, the researcher used a quantitative, non-experimental approach, exploratory and descriptive design in order to explore and describe factors contributing to the high teenage pregnancy rate.

3.2.1 Quantitative research approach

Quantitative research is a formal, objective, systematic process in which numerical data are used to obtain information about the world (Burns & Grove 2011:17, 24). The authors further explain that quantitative researchers hold the position that the truth is absolute and that a single reality can be defined.

Quantitative researchers gather empirical-evidence that is rooted in objective reality and gathered directly or indirectly through sight, hearing, taste, touch and smell (Polit & Beck 2008:16). Brink et al (2012:11) identify the following characteristics of quantitative research as applied to this study:

- Quantitative research focuses on a relatively small number of concepts (concise and narrow). For the purpose of this study only the following are included: teenagers younger than 19 years, who are admitted to the ante-natal ward and who attend ante-natal care at the clinic which is situated in the district hospital under study.

- It uses structured procedures and formal instruments to collect information. In this study a self-designed structured interview schedule was used to obtain information regarding the contributory factors to high teenage pregnancy rate in a district hospital at Ehlanzeni district in the Mpumalanga Province.
- It emphasises objectivity in the collection and analysis of information. This means that the values, feelings and perceptions of the researcher will not form part of the study.
- Analysis of numerical information is done through statistical procedures to assist the researcher to reduce, summarise, organise, manipulate, evaluate, interpret and communicate quantitative data (Brink et al 2012:11).
- It incorporates logistic, deductive reasoning. The study incorporated deductive reasoning as it reduced specific observations of the factors contributing to high teenage pregnancy rate within a district hospital under study to a general principle in the Ehlanzeni district of the Mpumalanga Province.
- It collects information under conditions of control. For the present research a quantitative study was done to quantify those factors identified as contributing to high teenage pregnancy rate.

The researcher used a quantitative approach. As in Brink et al (2012:11), the researcher used a self-designed structured interview schedule to collect data. The data collected were analysed and presented in a numerical and statistical form. Quantitative research designs may be classified into experimental and non- experimental designs (De Vos et al 2011:155).

Experimental designs are those where researchers manipulate an independent variable or administer an intervention to one of the groups, namely the experiment group (De Vos et al 2011:155). In non-experimental designs there is no manipulation of variables that takes place and it does not include an experimental or a control group (De Vos et al 2011:156).

3.2.2 Non-experimental approach

According to Brink et al (2012:9), the non-experimental approach covers other kinds of research, in which manipulation of independent variable is impossible. Brink et al (2012:102) explain that in non- experimental research, the researcher collects data

without introducing treatment or making changes and is therefore a bystander. Polit and Beck (2008:63) state that in non- experimental research, researchers are bystanders – they collect data without introducing treatment or making changes. De Vos et al (2011:156) explain that the most widely used non-experimental designs in social sciences research are surveys, because surveys may be used for all types of study – exploratory, descriptive, explanatory and evaluative.

Exploratory and descriptive designs were chosen for this study.

3.2.2.1 Exploratory design

An exploratory design is conducted to gain insight into a situation, phenomenon, community or individual (De Vos et al 2011:95). Polit and Beck (2008:20) explain that an exploratory design begins with a phenomenon of interest and investigates the full nature of the phenomenon, the manner in which it is manifested and other factors to which it is related. The researcher aims to become conversant with basic facts and to create a general picture of conditions.

The researcher in this study chose to use an exploratory design to explore the factors contributing to the high teenage pregnancy rate occurring at the hospital under study at Ehlanzeni district in the Mpumalanga Province. Exploratory design in this study will attempt to answer the question of what causes the high rate of teenage pregnancies in the hospital under study.

3.2.2.2 Descriptive design

According to Brink et al (2012:211), descriptive designs are studies in which relationships between variables are examined, and no attempt is made to determine the cause-effect relationship. The authors further explain that descriptive designs are used in studies where more information is required in a particular field through the provision of a picture of the phenomenon as it occurs naturally. According to De Vos et al (2011:96), descriptive designs present a picture of the specific details of a situation, social setting or relationship and focuses on ‘how’ and ‘why’ questions. Burns and Grove (2011:24) define a descriptive design as the exploration and description of

phenomena in real-life situations, where it provides an accurate account about the characteristics of particular individuals, situations or groups.

The research lent itself to a descriptive design to describe the factors that contributed to the high teenage pregnancy rate in the hospital under study at Ehlanzeni district in the Mpumalanga Province. Descriptive designs in this study will attempt to answer questions such as the following: “how” do teenage pregnancies occur? and “why” do they occur?

3.3 POPULATION

Brink et al (2012:216) define a population as a complete set of persons or objects that possess some common characteristic of interest to the researcher. According to Polit and Beck (2008:337), a population is the entire aggregation of cases in which a researcher is interested. Babbie and Mouton (2007:100) define a population as that group of people about whom researchers wish to draw conclusions.

The population in this study comprised all pregnant teenagers attending the ante-natal clinic and pregnant teenagers who were admitted to the ante-natal ward at a hospital under study at Ehlanzeni district in the Mpumalanga Province.

3.4 SAMPLE AND SAMPLING

According to Brink et al (2012:124), a sample is a part or fraction of a whole or a subset of a larger set, selected by the researcher to participate in the research study. Polit and Beck (2008:339) define a sample as a subset of population elements. A sample consists of a selected group of the elements or units of analysis from a defined population.

For the purpose of this study, a sample comprises all pregnant teenagers attending the ante-natal care and those admitted to the ante-natal ward of the hospital under study from 1 of November 2011 to 30 December 2011.

3.4.1 Eligibility criteria

Eligibility criteria define who is included in the population (Polit & Beck 2008:338). They further explain that a population is sometimes defined in terms of characteristics that people must not possess i.e. the exclusion criteria are stipulated. Eligibility criteria include a list of characteristics essential for eligibility for membership in the target population (Burns & Grove 2011:242).

In this study, the eligibility criteria comprise the following: a pregnant teenager who is younger than 19 years regardless of parity and gestational age, who is booked into or admitted to the ante-natal ward of the hospital under study and who is not in labour during the data collection period.

3.4.2 Sample size

Polit and Beck (2008:348) indicate that researchers should use the largest sample possible as the larger the sample, the more representative of the population it is likely to be. The authors further indicate that smaller samples tend to produce less accurate estimates than larger ones. This statement is supported by De Vos et al (2011:224) who state that larger samples enable researchers to draw more representative conclusions and make more accurate predictions than smaller samples.

The researcher in this study used all the elements of the population of 100 as this is too small for drawing a sample.

3.4.3 Sampling

Sampling is defined as the process of selecting a portion of the population to represent the entire population so that inferences about the population can be drawn (Polit & Beck 2008:338). Brink et al (2012:32) support the idea that sampling is a process the researcher uses to select the sample from a population in order to obtain information regarding a phenomenon in a way that represents the population of interests. De Vos et al (2011:223) defines sampling as taking a portion or a smaller number of units of a population as representative or using particular characteristics of the total population.

In this study, sampling for the factors contributing to high teenage pregnancies rate in the hospital under study at Ehlanzeni district in the Mpumalanga province was done via non-probability sampling.

3.4.3.1 Sampling frame

A sampling frame is defined as a comprehensive list of the sampling elements in the target population where the sample for the study is drawn i.e. lists of populations such as clinic or hospital registers (Brink et al 2012:132). According to the same authors, an adequate sampling frame should therefore include all elements of the population under study. Shi (2008:269) states that the sampling frame is a list of sampling units from which a sample is actually selected and determines the scope of the study.

The researcher in this study used the total population of pregnant teenagers who met the inclusion criteria.

3.4.3.2 Non-probability sampling

According to Polit and Beck (2008:341), non-probability sampling is less likely than probability sampling to produce accurate and representative samples. This is supported by Brink et al (2012:39) who are of the opinion that non-probability sampling may not accurately represent the population, but is more economical and more convenient.

In this study, non-probability sampling with a convenient sampling technique was used.

3.4.3.3 Sampling technique

In non-probability sampling, the sampling elements are chosen from a population by non-random methods (Brink et al 2012:140).

The researcher in this study used a convenient sampling technique.

3.4.3.3.1 Convenient sampling

Brink et al (2012:140) define convenient sampling as accidental or availability sampling. It involves the choice of readily available participants or objects for the study. The authors further explain that elements are included in the sample because they happen to be in the right place at the right time. Brink et al (2012:341) and Polit and Beck (2008:341) add that convenience sampling uses the most accessible available people as study participants. The authors further explain that convenient samples do not necessarily comprise individuals known to researchers.

In this study, the researcher used convenience sampling by requesting all teenagers 19 years and younger who happened to attend the ante-natal clinic and those who were admitted in the ante-natal ward from 1 November 2011 to 31 December 2011 to participate in the study.

3.5 DATA COLLECTION

According to Polit and Beck (2008:751), data are defined as pieces of information obtained in the course of a study. Brink et al (2012:211) define data as pieces of information or facts collected during a research study. Brink et al (2012:211) indicate that data may be collected through observation, self report and physiological methods.

In this study, a structured data-collection tool was used to collect data from respondents. A self-designed structured interview schedule was used to obtain data that are relevant to the study objectives (see annexure F).

3.5.1 Characteristics of structured data collection tool

Brink et al (2012:158) explain that structured interviews are formalised so that all respondents hear the same questions in the same order and in the same manner. The interviewer reads questions to the respondent as they appear on the structured interview schedule.

The self-designed structured data collection tool used for this study was based on the Health Belief Model developed from the literature reviewed.

According to LoBiondo-Wood and Haber (2006:316) data collection employed by the researcher needs to be:

- *Objective:* Data should not be influenced by anyone collecting the information.
- *Systematic:* The data must be collected in the same way by everyone who is involved in the collection of data.
- *Consistent:* The self-designed interview schedule should be presented to each respondent in exactly the same way to minimise bias that may be introduced when more than one person collects the data.

3.5.2 Data collection instrument

The researcher in this study used a self-designed structured interview schedule to collect data from respondents. The following section explains how the instrument was formulated so that it was objective and systematic.

3.5.2.1 Development of self-designed structured interview schedule

The data collection instrument was developed based on the literature search. The instrument was developed in accordance with the HBM including individual perceptions, modifying factors and variables affecting the likelihood of taking action that will prevent teenage pregnancy. The data collection instrument was evaluated for external validity, internal validity, content and face validity by colleagues who are experts in the field of obstetrics, including an obstetrician, advanced midwives and experienced reproductive health clinic (family planning) midwives.

The researcher used the data collection instrument based on the components of the HBM to collect data in a hospital under study on the factors contributing to high teenage pregnancy rate in the Ehlanzeni district from the respondents in the Mpumalanga Province. The self-designed structured interview schedule included the following sections:

Section A: Biographical and demographic data of the client

Section B: Individual perception, knowledge, awareness and individual practices regarding sex, and pregnancy

- Section C: Perceptions regarding the use of contraception
- Section D: Perceptions regarding severity
- Section E: Perceived barriers
- Section F: Cues to action

The self-designed structured interview schedule consisted of closed-ended questions. These questions attempted to determine factors contributing to the high teenage pregnancy rate in the hospital under study at Ehlanzeni district in the Mpumalanga Province (see annexure F).

3.5.2.2 Rationale for using a self-designed structured interview schedule

A self-designed structured interview schedule was used to collect data. According to Brink et al (2012:157) the interviewer obtains responses on a face-to-face basis. The study is exploratory and descriptive, so interviews are frequently used in exploratory and descriptive research and are the most direct method of obtaining facts from respondents. A self-designed structured interview schedule may be used with respondents with low literacy levels, because the interviewer reads the questions and records the responses (De Vos et al 2011:186).

3.5.2.3 Pre-testing the self-designed structured interview schedule

Brink et al (2012: 75) indicate that a pre-test should be done to check for possible flaws in the instruments, such as ambiguous instructions or wording or inadequate time limits and to check whether variables defined by operational definitions are actually observable and measurable. This is necessary to determine whether respondents understand what is required of them in terms of instructions, or whether any items are ambiguous, insensitive or embarrassing.

The data collection tool was pre-tested on ten pregnant teenagers who did not form part of the study. Pre- testing of the self-designed structured interview schedule was done after it was reviewed and after the supervisor approved the final edition. Teenagers who met the inclusion criteria were identified and the researcher gave an explanation about the purpose and objectives of the research. The respondents were asked to give written consent (see annexure G), which indicate that they were not forced to participate in the

research, but they understood and voluntarily took part in it. Respondents were interviewed using the self-designed interview schedule to assess its validity and reliability.

3.5.3 Data collection process

The researcher obtained permission to collect data from the University of South Africa, Health Studies Research and Ethics Committee (HSREC) (see annexure A), the Research and Ethics Committee of the Mpumalanga province (see annexure C), the hospital management of the hospital under study, the supervisor of the ante-natal clinic and ante-natal ward (see annexure E)

3.5.3.1 Research setting

The research setting refers to the place or places where data are collected, for example a home, hospital, school or ward (Brink et al 2012:59). Burns and Grove (2011:352) define the concept “setting” as a location for conducting research which may be natural, partially controlled or highly controlled. According to Polit and Beck (2008:732), a setting is the physical location and conditions in which data collection takes place in a study.

The research setting in this study was the ante-natal clinic and ante-natal ward in the hospital under study. All teenagers who meet the inclusion criteria were given information about the purpose and the objectives of the study was given by the researcher, respondents were told that participation is not compulsory and if they understand and accept to participate, they were requested to sign a consent form to ensure that they have been informed about the study. After signing the consent, an interview was conducted in a private room in the antenatal clinic by the researcher. The researcher could speak the languages spoken by the respondents, so there was no need for an interpreter.

The researcher interviewed the respondents and entered data on the computer herself under the guidance of the statistician using the Excel computer programme and data was verified to be entered correctly by the statistician.

3.6 DATA ANALYSIS

Data analysis is the systematic organisation and synthesis of research findings in quantitative studies (Polit & Beck 2008:751).

The researcher used descriptive statistics to provide answers to the research questions. Descriptive statistics allow the researcher to organise the data in ways that give meaning and facilitate insight and to examine the phenomenon from a variety of angles. De Vos et al (2011:251) indicate that the aim of descriptive statistics is to produce a scope of the characteristics of such distribution through frequency distributions, measures of central tendency and measures of dispersion and standardised scores. The authors further explain that descriptive statistics are procedures that describe numerical data in that they assist in organising, summarising and interpreting sample data to give them meaning for the readers.

In this study the researcher used a professional statistician to analyse and summarise the data who used the statistical package for social sciences (SPSS) version 19.

3.7 VALIDITY AND RELIABILITY

The following section deals with the validity and reliability of this research.

3.7.1 Validity

Validity is the degree to which an instrument measures what it is supposed to measure (Polit & Beck 2008:458).

3.7.1.1 External validity

External validity is defined as the extent to which the study findings can be generalised beyond the sample used in the study Brink et al (2012:212). Polit and Beck (2008:753) state that external validity refers to the generalisability of the research findings to other settings or samples.

It is not possible to guarantee the external validity of this study, since probability sampling cannot be generalised to another setting. Sampling was conducted in such a way that each element in the population had a chance to participate in the study. Although this study could not be generalised to the whole province and district, it could be generalised in the hospital under study and the surrounding areas.

3.7.1.2 Internal validity

Internal validity is defined as the degree to which changes in the dependent variable (effect) may be attributed to the independent or experimental variable (cause).

The self-designed structured interview schedule was pre-tested to ensure that it measured what it is supposed to measure.

3.7.1.3 Content validity

Content validity is achieved when the instrument represents all the components of the variable to be measured (Brink et al 2012:160). Babbie and Mouton (2007:146) refer to content validity as the extent to which a measure covers the range of meanings included within the concept.

In this study content validity was ensured in the development of a structured interview schedule based on the literature review and it was presented to experts in the ante-natal clinic and the ante-natal ward for evaluation.

3.7.1.4 Face validity

Face validity is defined by Brink et al (2012:166) as the instrument that appears to measure what it is supposed to measure. Polit and Beck (2008:753) define face validity as the extent to which a measuring instrument looks as though it is measuring what it purports to measure. Face validity is based on intuitive judgement made by experts in the field (Brink et al 2012:166).

For the purpose of this study, face validity was determined by the experts, professional nurses, advance midwives, obstetricians in the ante-natal clinic, ante-natal ward and the reproductive health clinic of the hospital under study.

3.7.2 Reliability

According to Brink et al (2012:169), reliability is defined as the degree to which the instrument may be depended upon to yield consistent results if used repeatedly over time on the same person or if used by two researchers. Polit and Beck (2008:764) define reliability as the degree of consistency or dependability with which an instrument measures the attribute it is designed to measure. The reliability of the instrument is indicated by a correlation measure which varies between 0 and 1. Polit and Beck (2008:764) define reliability as the accuracy and consistency of information obtained.

The reliability of the research instrument in this research was achieved by ensuring that the same structured interview schedule was presented in the same way to all respondents, and it was checked by professional nurses, advance midwives and obstetricians working in the ante-natal clinic, in the ante-natal ward and experienced midwives in the reproductive clinic to ensure reliability. This was done before the major project in order to identify any problems with the self-designed interview schedule and to correct them before the main interview.

3.8 ETHICAL CONSIDERATIONS

The Paperback Oxford English Dictionary (2006:254) defines ethics as the moral principles that govern a person's behaviour or how an activity is conducted. According to Houser (2008:53), define ethics as the study of right and wrong. The Belmont Report primary articulated three primary ethical principles on which standards of ethical conduct are based: beneficence, respect for human dignity and justice (Polit & Beck 2008:171). According to Burns and Grove (2011:18) ethics means participants are informed of their right to voluntary participation and the right to withdraw from the study at any time without incurring a penalty, which protects their right to self determination (see annexure G).

In health sciences research, human beings are usually the subjects of the study. The researcher has the responsibility of considering whether the study at hand will be ethical, and no study should ever be done at the expense of human beings. In this research, ethical considerations were considered according to: (Leedy & Jeann 2013:104, Brink et al 2012:34, Burkhardt & Nathaniel 2008:68 & Polit & Beck 2008:171)

3.8.1 Beneficence

The principle of beneficence imposes a duty on researchers to minimise harm and to maximise benefit. Harm can be emotional, social and physical. Ethical researchers must use strategies to minimise all forms of harm and discomfort.

In this study, the researcher used a non-experimental design and the respondents participated voluntarily, were not pressured and were assured that they could withdraw from the study without being penalised if they felt that this right had been violated.

3.8.2 Respect for human dignity

Respect for human dignity is the second ethical principle articulated in the Belmont report. This principle includes the right to self-determination and the right to full disclosure. The right to self determination means that prospective participants have the right to decide voluntarily whether to participate in a study, without risking any penalty or prejudicial treatment. They have the right to make informed, voluntary decisions to participate, which requires full disclosure. It also means that people have a chance to ask questions, to refuse to give information or to withdraw from the study. A person's right to self determination includes freedom from coercion of any type.

The principles of beneficence and respect for human dignity were observed during data collection: the researcher ensured privacy by using numbers on the interview schedule, and the interview was conducted in a private cubicle where only the respondent and the researcher were present and the information was kept confidential.

3.8.3 Justice

The third broad principle articulated in the Belmont Report concerns justice, which includes participants' right to fair treatment and to privacy. Justice connotes fairness and equity; thus one aspect of the justice principle concerns the equitable distribution of benefits and burdens of research.

Justice was maintained by the researcher during the study by treating all respondents equally without any neglect of or discrimination against any of the respondents. Questions were structured in a way that did not intrude upon the private life of the respondents.

The right to privacy was maintained by keeping all information safe and not divulged unnecessarily.

3.8.4 Confidentiality

The principle of confidentiality demands non-disclosure of private or secret information about another person with which one is entrusted. That is, confidentiality requires that one must uphold and respect the privacy of another. The researcher should always keep all the information gathered confidential unless disclosure has been approved by the patient. A breach of confidentiality occurs when the researcher allows an unauthorised person to gain access to the data or when the respondent's identity is revealed when reporting or publishing the findings. Data should not be collected without the knowledge of respondents through cameras or tape recorders as this would invade the privacy of the respondents.

In this study, privacy and confidentiality were maintained by ensuring that interviews were held in a private venue and that all information was kept confidential between the researcher and the respondent.

3.9 LIMITATIONS OF THE STUDY

The study was restricted to one ante-natal clinic and ante-natal ward in a district Level 1 hospital at Ehlanzeni district in the Mpumalanga Province. The findings are therefore not to be generalised to other institutions.

3.10 CONCLUSION

This chapter dealt with the research design and methodology in detail. The researcher collected the data in person and the ethical principles were adhered to.

The results of the research will be discussed in Chapter 4.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The data analysis and findings of the study are discussed in this chapter. The data collection tool used in this study was analysed to ensure that data gathered were presented clearly with the aid of graphs, tables and percentages.

The purpose of the study was to explore the contributory factors to the high teenage pregnancies rate in a hospital under study at Ehlanzeni district in the Mpumalanga Province.

The researcher used a self-designed interview schedule to collect data from respondents within the hospital under study. The interview schedule included the following six sections:

Where respondents were asked to name “other” options, the researcher analysed the data per hand.

Section A comprises items on the assessment of the biographical profile of the respondents; section B relates to the assessment of individual perceptions, including those relating to knowledge, awareness and practices relating to sex and pregnancy; section C contains items on the assessment of perceptions regarding the use of contraceptives; section D comprises items on the assessment of the perceived severity of pregnancy; and section E deals with barriers that may have prevented the occurrence of pregnancy, and section F with cues to action.

The following symbols in this study will bear the meanings in the interpretation of the findings:

N = Total number of respondents

n = Total of subsections

F = Frequency

4.2 DATA COLLECTION

Parahoo (2006:467) defines data as the information collected by researchers during the course of a study. Burns and Grove (2011:430) define data collection as the process of selecting subjects and gathering data from subjects. In this study, data were collected by means of structured interviews.

4.3 DATA ANALYSIS

Polit and Beck (2008:751) define data analysis as the systematic organisation and synthesis of research data and, in quantitative studies, the testing of hypotheses using those data. The data obtained through the interview schedule were subject to computer analysis with the aid of a professional statistician and converted into percentages. The data are presented in the form of tables, graphs and figures to enable the presentation of data to have meaning.

4.3.1 Section A: Biographical data

Section A of the self-designed structured interview schedule was developed to enable the biographical data of the respondents to be assessed with regard to age, marital status, religion, racial group, culture, school information, communication between the participants and their teachers, relationships, habits, family relations and socio-economic status.

4.3.1.1 Teenage pregnancy in relation to age

Figure 4.1 depicts teenage pregnancy in relation to age.

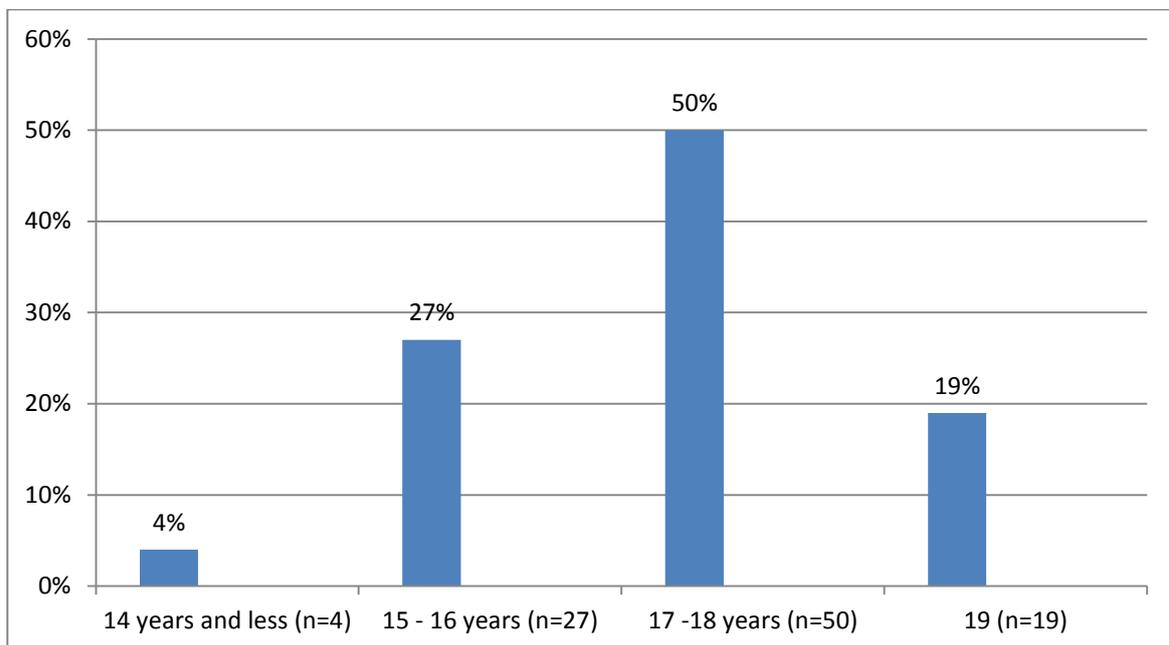


Figure 4.1
Teenage pregnancy in relation to age (N=100)

The respondents were younger than 19 years. Of the respondents 4% (n=4) were 14 years of age and younger, 27% (n=27) between 15 and 16 years old, 50% (n=50) between 17 and 18 years old and 19% (n=19) were 19 years old. Goicolea et al (2009:225) state that having sexual intercourse before the age of 15 years and not using contraception with the first sexual encounter increases the risk of pregnancy during adolescence. These findings correspond to the findings by Grobler et al (2007:32) who indicate that teenage pregnancy and sexual activity were found in teenagers as young as 13 years. This means that teenage pregnancy was not perceived as a threat by teenagers and so they did not take any action to prevent it.

According to these findings, girls of 14 years and younger are sexually active, as is evident from the fact that 4% (n=4) of girls of this age were already pregnant during the study. The majority of pregnant girls 50% (n=50) were between 17 and 18 years old. The researcher's findings in this study are consistent with the findings of Krishnamoorthy, Simpson, Townend, Helms and McLay (2008:99) in a retrospective study on hormonal contraceptives in a primary health-care study which indicate that

there was an increase in the use of prescribed contraceptives by girls aged 12 and older, which suggests that girls in this age group are sexually active.

4.3.1.2 Respondents' marital status

Figure 4.2 shows the respondents' marital status.

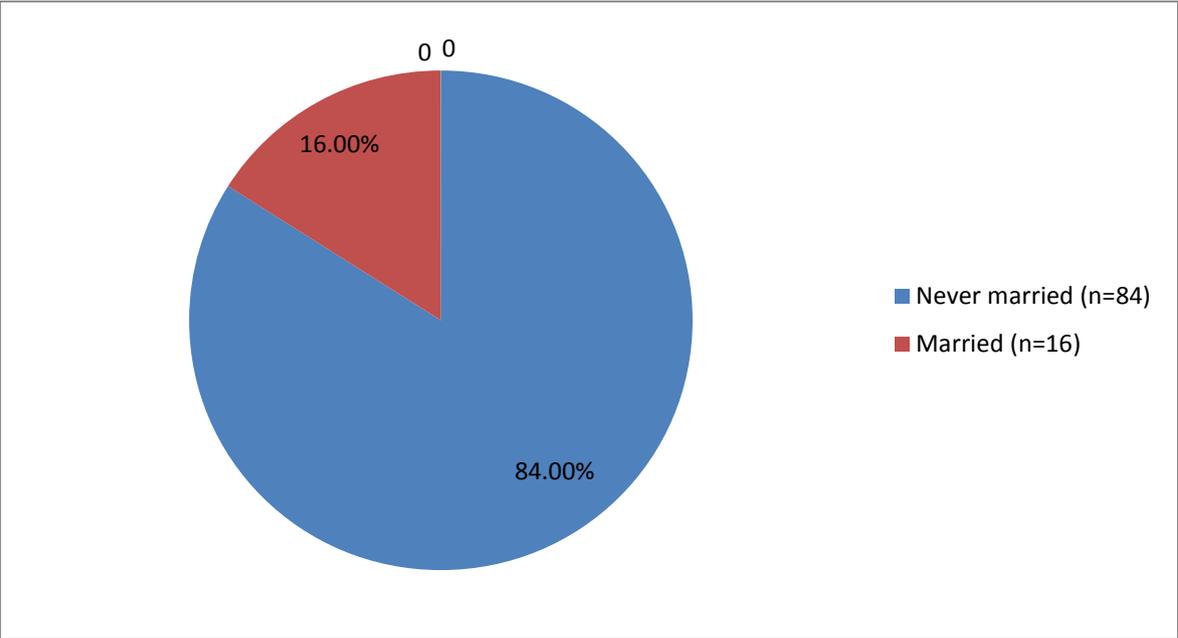


Figure 4.2
Respondents' marital status (N=100)

The findings of Goicolea et al (2009:223) indicate that marriage is statistically associated with teenage pregnancy. Of the respondents in this study, 84% (n=84) had never been married; only 16% (n=16) were married. These findings show that only a small percentage of teenagers studied were married.

According to Hindin and Fatusi (2009:58), early marriage and early marital sexual activity may lead to pregnancy in young women. The study further indicates that more than 10% of the teenage pregnancies in the Democratic Republic of Congo, Madagascar, Mozambique and Zambia are extra-marital, while in the rest of Sub-Saharan Africa and Latin America, the rate of extramarital pregnancies is below 10%. According to Oberlander et al (2010:32), in their seven-year study of marital expectations and marriage among urban, low-income, African-American adolescent mothers, it was found that mothers who marry are at risk of forfeiting their chances of

educational attainment, perhaps because of the increased demands of being a spouse, running a household and having more than one child.

4.3.1.3 Respondents' religion

Figure 4.3 illustrate respondents' religion in relation to teenage pregnancy.

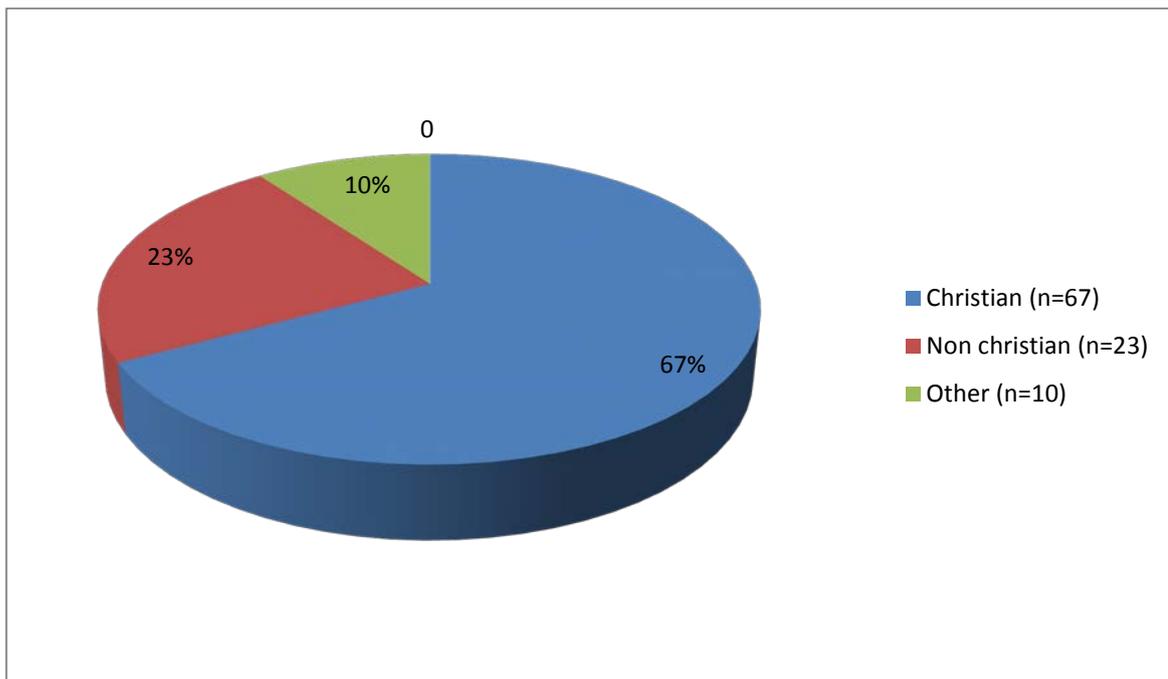


Figure 4.3
Respondents' religion (N=100)

As illustrated in figure 4.3, the study indicates that 67% (n=67) of respondents were Christians, 23% (n=23) non-Christians and 10% (n=10) indicated that they were neither Christians nor non-Christians as their religion is ancestral. According to these findings, religion seems to have little influence in the prevention of teenage pregnancy as 67% (n=67) of respondents who were pregnant indicated that they are Christians.

According to Maluleke (2007:14), in her study about youths' perceptions of sexuality in the Limpopo Province of South Africa, religion may have both a negative and a positive influence on the sexuality of young people. Some teenagers, according to Maluleke (2007:14), indicate that religious scruples may delay the individual's sexual debut, but does not necessarily provide teenagers with the knowledge and skills to make decisions about their sexuality and how to protect themselves against sexually transmitted

diseases and unwanted pregnancy. Some teenagers in the same study indicated that in their church they had youth programmes where they received life skills education and education about sexually transmitted infections, contracting HIV and the significance of refraining from pre-marriage sexual activities. Maja (2007a:33) contrasts the above findings as indicated in the study of factors impacting on contraceptive practices, noting that some Christian denominations are against birth control, since they maintain that contraception is contrary to God’s word, which requires that people shall multiply and become numerous. This is consistent with the study by Parlemo and Peterman (2009:159) about early marriage, early sexual debut and teenage pregnancy in Sub-Saharan Africa, who found that there was a greater incidence of early marriage among Muslim women in Chad and among Catholic women in Code d’Ivoire relative to their Protestant peers.

The majority of respondents in the study indicated that they were Christians, but nevertheless engaged in pre-marital intercourse; this indicates that they reject the Christian principle of no sexual intercourse before marriage.

4.3.1.4 Respondents’ home language

Figure 4.4 shows the respondents’ language distribution.

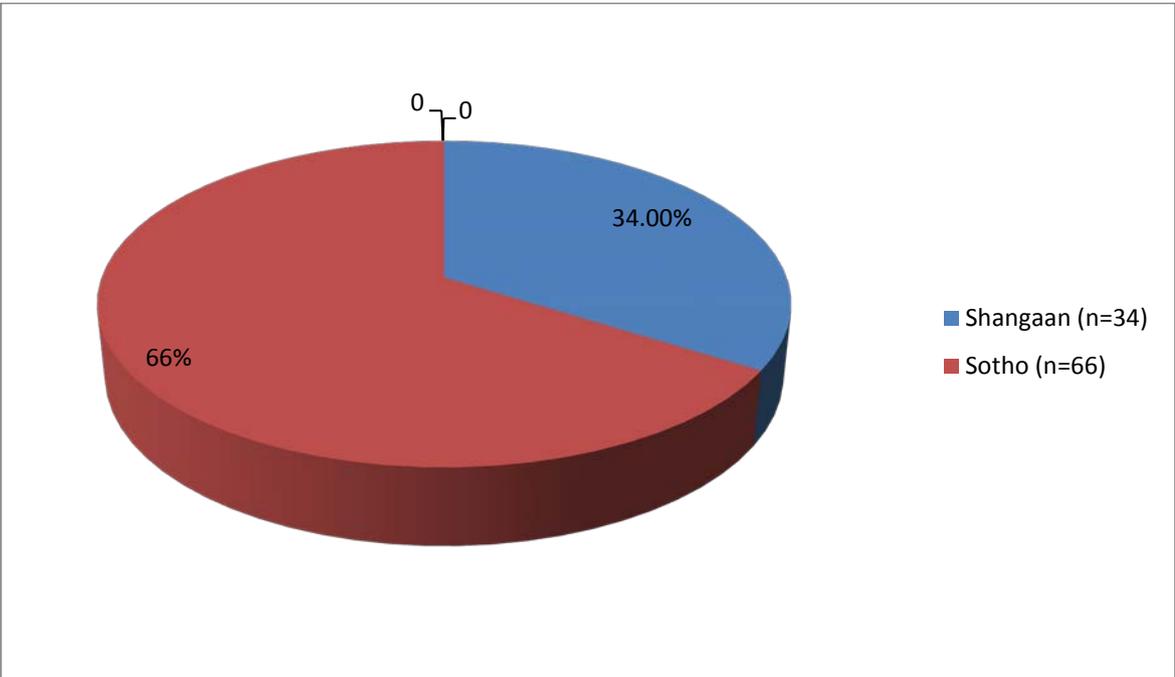


Figure 4.4
Respondents’ home language (N=100)

Of the respondents 66% (n=66) were Sotho-speaking and 34% (n=34) Tsonga- or Shangaan-speaking. These findings are consistent with the findings by Grobler et al (2007:36), who in their study of beliefs of grade six learners regarding adolescent pregnancy and sex; found that 78% (n=78) of learners came from a Sotho-speaking community.

4.3.1.5 Respondents' cultural perception of pregnancy

Figure 4.5 shows the respondents' cultural perception of pregnancy.

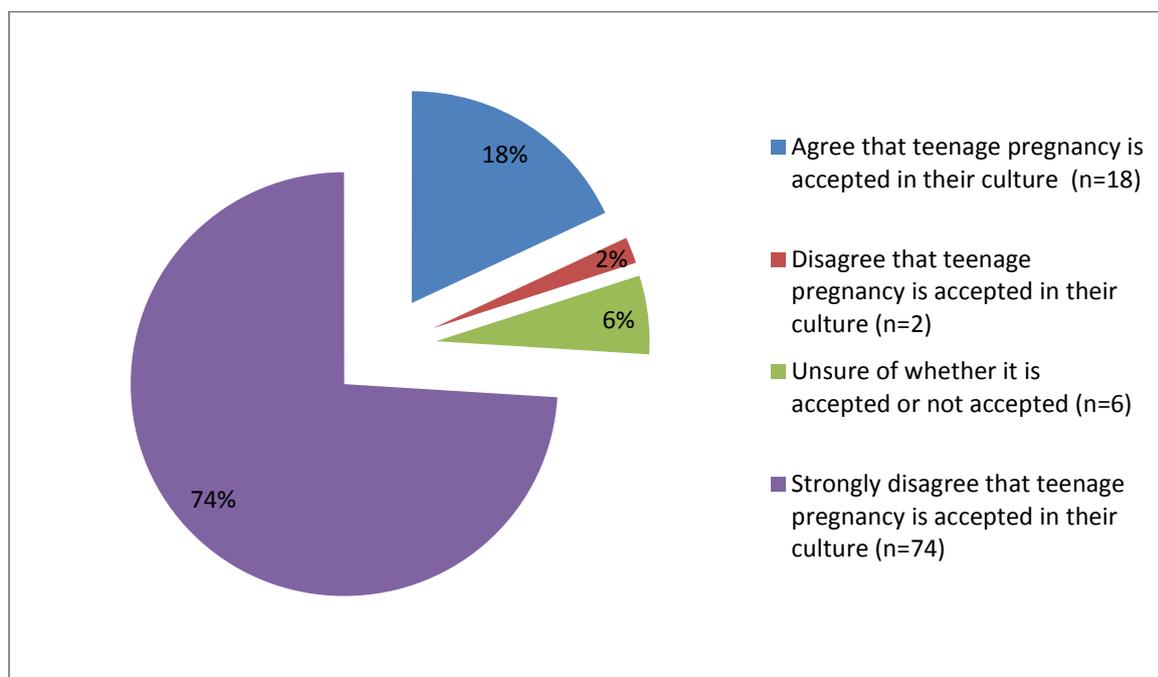


Figure 4.5
Respondents' cultural perception of pregnancy as an indicator of maturity (N=100)

According to the findings as indicated in figure 4.5 74% (n=74) of the respondents strongly disagreed with the perception that teenage pregnancy is accepted as an indication of maturity.

Mkhwanazi (2010:347) found that all teenage mothers said the pregnancy was unexpected and unplanned and that they initially reacted with sadness and apprehension but later accepted the fact of their pregnancy. Mkhwanazi's (2010:347)

findings tally with those of the researcher stated above. Of the respondents, 18% (n=18) agreed that teenage pregnancy is perceived as an indication of maturity, 2% (n=2) disagreed, and 6% (n=6) were unsure.

The findings of Mkhwanazi (2010:347) contrast with the results of this study as they found that, culturally, childbearing provided a way for a teenage girl to show that she is fertile and to demonstrate successful womanhood. The findings of this study are also inconsistent with the findings of Kirchengast (2009:5) who found that in many traditional societies, early marriages of teenagers are common and socially desired and that after marriage there is strong cultural and family pressure to reproduce as soon as possible.

The findings in Kirchengast (2009:5) correspond to the Theory of Planned Behaviour as described by Bowling (2009:41), which states that intention to adhere to certain behaviour is influenced by subjective norms e.g. the influence of family and peers, attitudes, expectations of future health and ability, self-efficacy and perceived control over the situation.

The findings in this study indicate that a large percentage of respondents strongly disagree that pregnancy is accepted as an indicator of maturity. Only a small percentage felt otherwise.

4.3.1.6 Respondents' school attendance

Figure 4.6 depicts the respondents' school attendance.

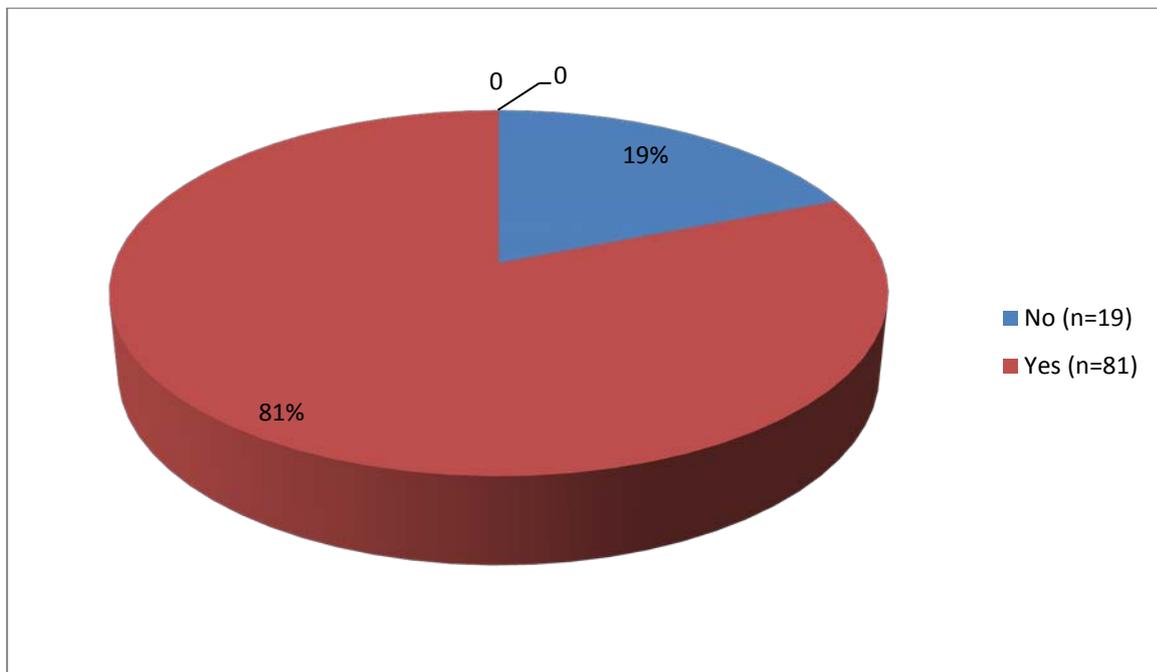


Figure 4.6
Respondents' school attendance (N=100)

Of the respondents 81% (n=81) of the respondents were attending school during the study and only 19% (n=19) were not at school. These findings indicate that pregnancy may not be the primary reason for girls dropping out of school within a district hospital under study in the Ehlanzeni district of the Mpumalanga Province, as indicated in the Human Sciences Research Council report (2009c:107) that pregnant teenagers should continue with school attendance even if the student is pregnant. According to Hindinand Fatusi (2009:58), teenage pregnancy and birth may lead to dropout and expulsion, since the school policy in some developing countries is unfriendly to pregnant teenagers. The findings by Hindinand Fatusi (2009:58) are comparable to those of a study done by Lall (2007:220) on the exclusion from school of pregnant learners, teenage pregnancy and the denial of education. This study indicates that there is growing evidence of unofficial and self-exclusion from school by teenage girls due to lack of support.

It was also found in the same study conducted by Lall, that pregnant teenagers and the denial of education indicate that most young women will leave school if they are told that being a teenage parent while at school is not good, or difficult. The findings of the above researchers contrast with those of this study as the latter indicate that 81% (n=81) of the respondents were attending school during their pregnancy. This confirms

that some schools around the hospital under study at Ehlanzeni district take into consideration the government’s policies of putting in place schemes to help pregnant teenagers and teenage mothers to remain in the school environment.

4.3.1.7 Highest level passed by respondents

Figure 4.7 depicts the highest level passed by the respondents.

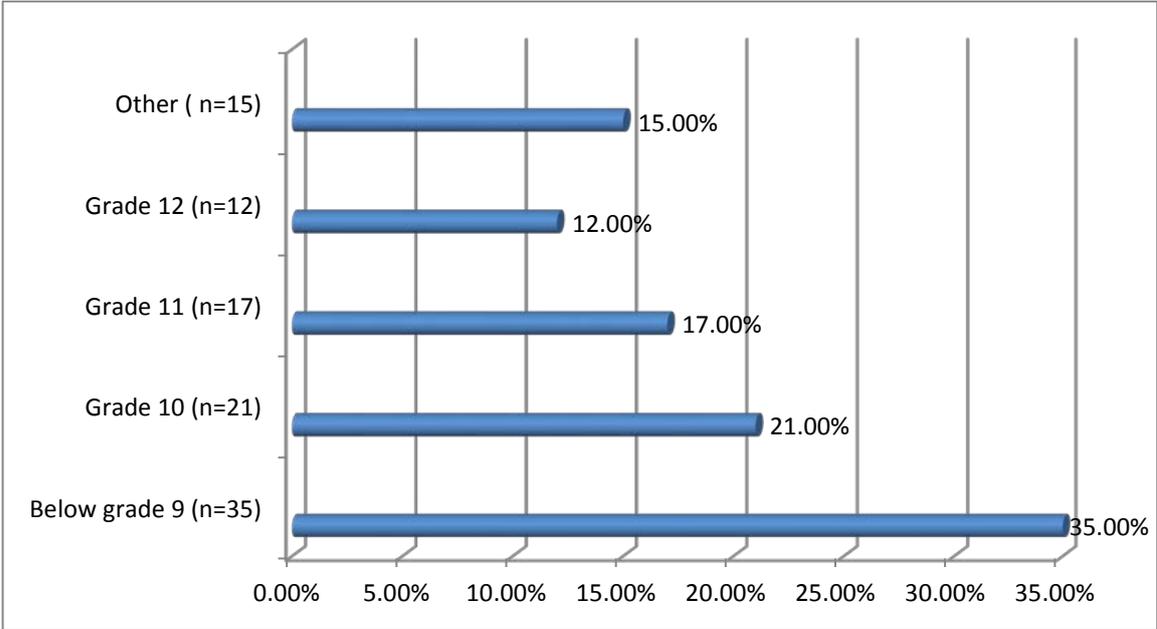


Figure 4.7
Highest grade passed by respondents (N=100)

The findings show that, 35% (n=35) were in grade nine or lower during the study, 21% (n=21) were in grade 10, 17% (n=17) were in grade 11 and 12% (n=12) were in grade 12. The findings of this study contrast with the findings in a study conducted by Bhana, Morrell, Shefer and Ngabaza (2010:872) who state that 34% of the 18-19-year-old group who dropped out of school and who went back afterwards did complete their studies. In a case control study about risk factors for teenage pregnancy among adolescent girls in Ecuador’s Amazon basin, Goicolea et al (2009:225) found that 41.3% dropped out of school due to teenage pregnancy and did not return. According to the present study, 15% of the pregnant teenagers classified under ‘other’, were not attending school at the time of the study, and this percentage includes those who had passed grade 12.

4.3.1.8 Communication between respondents and teachers

Figure 4.8 depicts the communication between the respondents and their teachers.

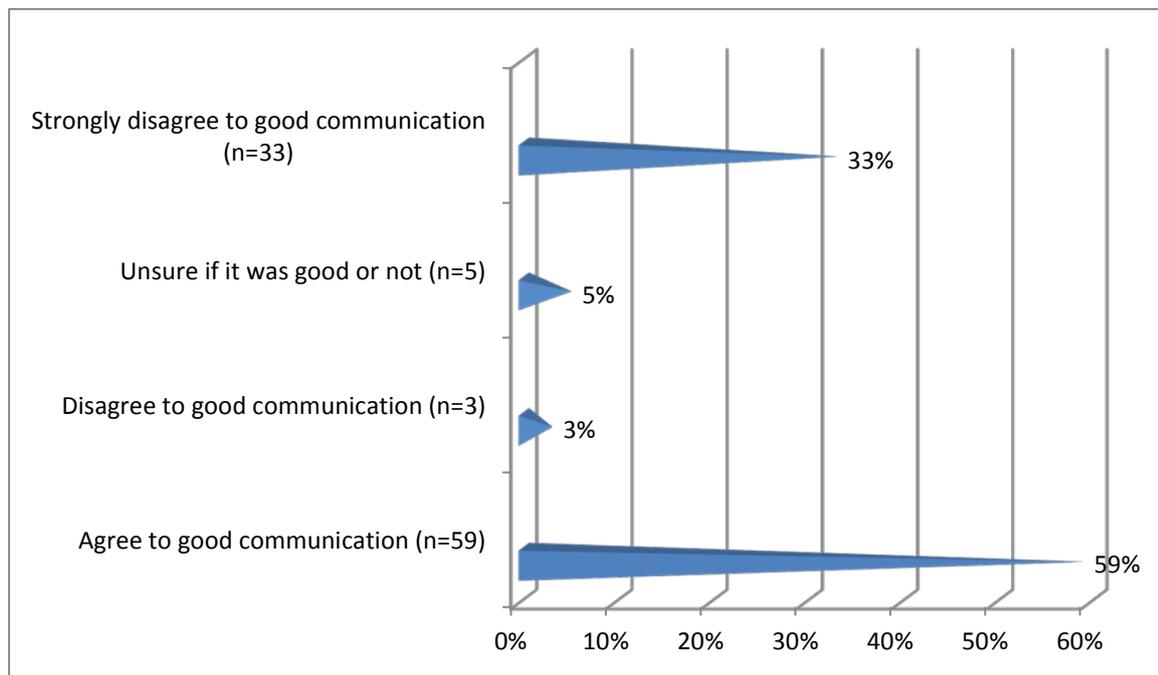


Figure 4.8

Communication between respondents and teachers (N=100)

The findings indicate that 59% (n=59) agreed that communication between them and their teachers was good, 3% (n=3) disagreed, 5% (n=5) were unsure, and 33% (n=33) strongly disagreed that communication with teachers was good. The findings of this study regarding communication of respondents with teachers are consistent with those of Bhana et al (2010:872) who, in their study of South African teachers' responses to teenage pregnancy and teenage mothers in schools, indicated that some teachers, who were found to be under difficult structural constraints (including constraints related to HIV/AIDS, poverty, social and economic stresses) were nevertheless able to show care and support for pregnant teenagers and teenage mothers. It is stated in the same study that the social context and support structures, both in and out of school, are important resources in the task of successfully negotiating schooling.

4.3.1.9 People with whom respondents spend time before being pregnant

Figure 4.9 illustrate the people with whom the respondents spent time before pregnancy.

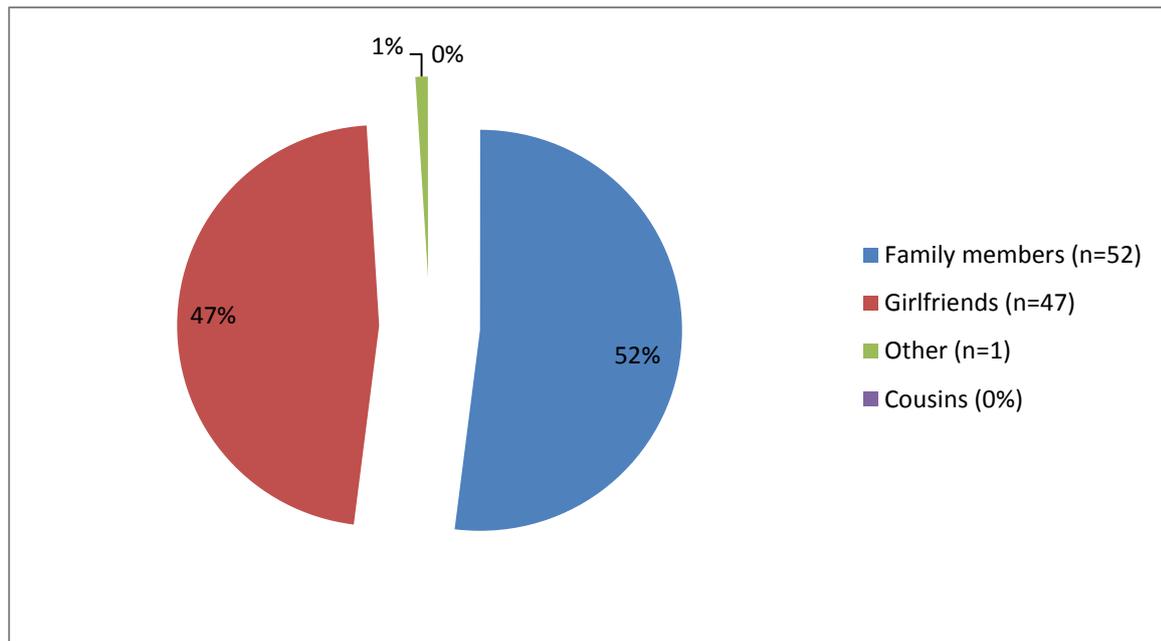


Figure 4.9

People with whom respondents spend time before being pregnant (N=100)

Figure 4.9 shows that 52% (n=52) of the respondents spent time with family members, 47% (n=47) spent time with girlfriends, 0% (n=0) rated for cousins and 1% (n=1) with other people. Although the results of this study revealed only that the pregnant teenagers spent much of their time with family and girlfriends, a study by Burns and Porter (2007:225) indicate that teenagers were sometimes alienated from family members and felt lonely to such an extent that they sought refuge from their loneliness by connecting with boyfriends. It is stated in the same study that teenagers want to be close to a person who will be there for them in tough times, they wanted to form a couple with someone, a real couple, so that they could feel safe and connected. According to the findings above, respondents spent most of their time with family and girlfriends.

4.3.1.10 Topics of communication with peers before pregnancy

Figure 4.10 shows the topic of conversation between the respondents and their peers before pregnancy.

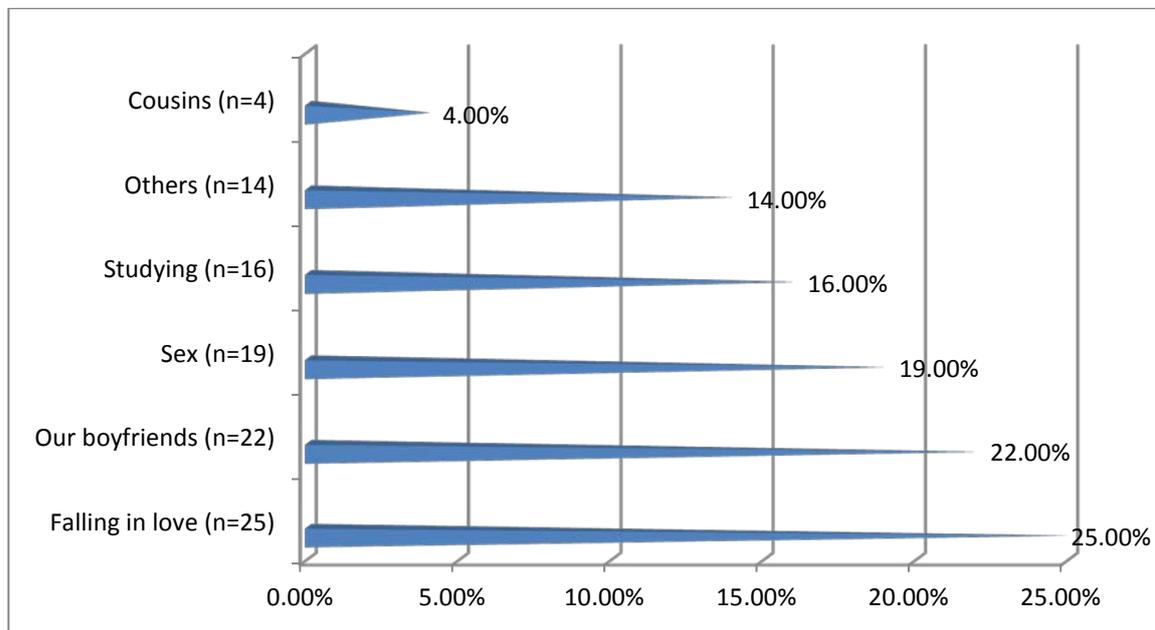


Figure 4.10
Topics of communication with peers (N=100)

Figure 4.10 shows communication between respondents and their peers. The findings indicate that 25% (n=25) talked about falling in love, 22% (n=22) about boyfriends, 19% (n=19) about sexual intercourse, 16% (n=16) about studying, 4% (n=4) about their cousins and 14% (n=14) about other topics such as family, household chores. According to Maluleke (2007:9), teenagers do talk about sexual experiences with their peers and even exaggerate in order to impress.

4.3.1.11 Respondents' experimentation with drugs before pregnancy

Figure 4.11 shows respondents experimentation with drugs before pregnancy.

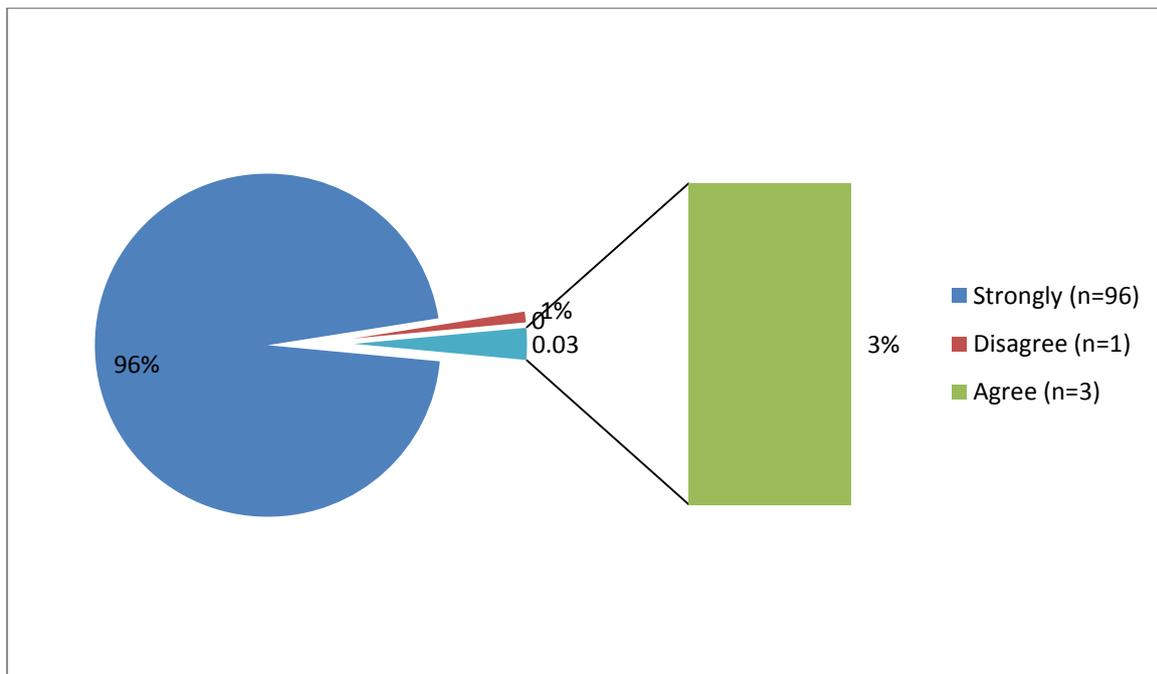


Figure 4.11

Respondents' experimentation with drugs before pregnancy (N=100)

Figure 4.11 indicated that 96% (n=96) strongly disagree that they had experimented with drugs, 1% (n=1) denied having used drugs and 3% (n=3) indicated that they have used drugs. These results indicate that there is little relationship between teenage pregnancy and drugs. The findings by Zapata, Hillis, Marchbanks, Curtis and Lowry (2008:642) in their study of methamphetamine use are independently associated with recent risky sexual behaviour and adolescent pregnancy. The study found that youth substance use in general, including use of cigarettes, alcohol, marijuana and other substances, was associated with initiation into sexual activity and non-use of contraception during the adolescents' last sexual intercourse.

4.3.1.12 Respondents family relations

Figure 4.12 indicates respondents' family relations.

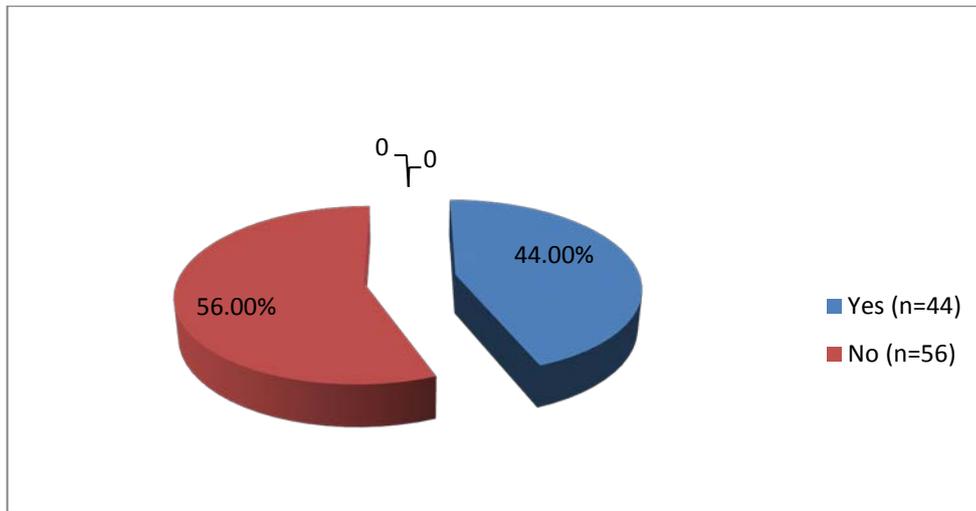


Figure 4.12
Respondents' family relations (N=100)

Figure 4.12 indicates that 44% (n=44) of the respondents live with both biological parents and 56% (n=56) do not live with their parents. A study by Goicolea et al (2009:225) show that teenage girls who have fallen pregnant tend not to have lived with two parents during some stage of their lives and some have lived for a year or longer without either mother or father.

According to Palermo and Peterman (2009:158) evidence from Sub-Saharan African studies about family planning indicated that female teenagers in Sub-Saharan Africa who have lost one or both parents are generally no more likely than their non-orphaned counterparts to marry before the age of 18.

4.3.1.12.1 People who live with the respondents

Figure 4.13 depicts people who live with respondents.

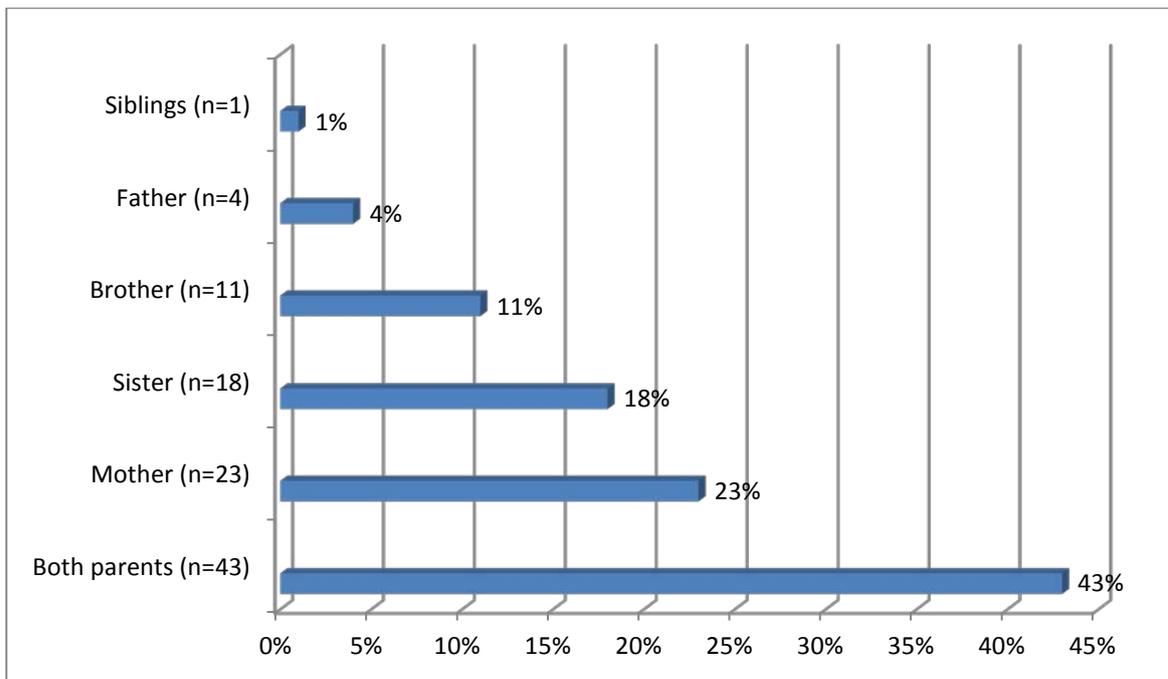


Figure 4.13
People who live with the respondents (N=100)

The study indicate 43% (n=43) of respondents living with both parents are likely to become pregnant. These findings contrast with the study done by Gaudie et al (2010:2) who found that antecedents of teenage pregnancy from a 14-year follow-up study using data linkage found that girls living in either step/blended or one-parent families were more likely to become pregnant as teenagers than those living with their original families.

Of the respondents 23% (n=23) live with the mother, 18% (n=18) live with sisters, 11% (n=11) with their brothers, 4% (n=4) with their father and 1% (n=1) with their siblings. According to the findings of the study done by Parlermo and Peterman (2009:158) about the risks facing orphans regarding early marriage, early sexual debut and teen pregnancy, it was found that in four countries female orphans had an increased chance of an early sexual debut, and in two countries, an increased chance of an early pregnancy.

4.3.1.12.2 People with whom respondents shared their thoughts

Figure 4.14 illustrates people with whom respondents share their thoughts.

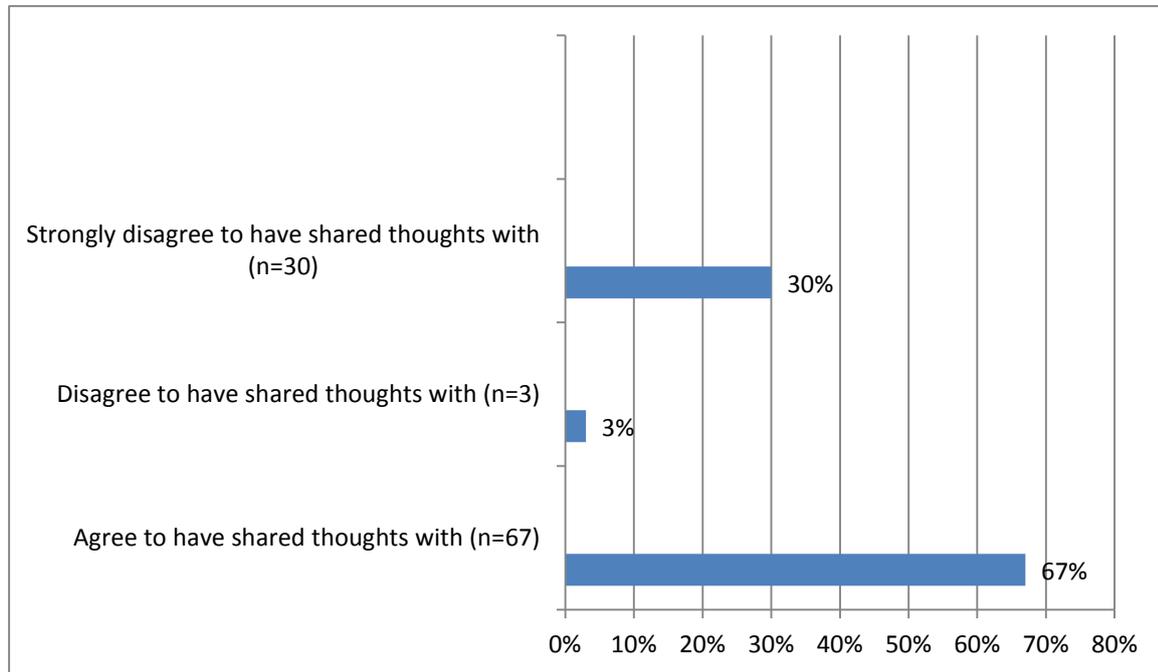


Figure 4.14

People with whom respondents shared their thoughts (N=100)

Figure 4.14 shows that 30% (n=30) of the respondents strongly disagreed with the statement that they shared their thoughts about relationships and feelings with the people they lived with, 3% (n=3) disagreed and 67% (n=67) agreed that they shared thoughts about relationships and feelings. According to Maja (2007b:43), poor communication between parents and their children about sexuality issues may be a contributory factor to teenage pregnancy. It was also found in this study that 30% (n=30) of the respondents did not share thoughts with those they live with and that this may contribute to teenage pregnancy. Grobler et al (2007:37) state that parents tend to abdicate their responsibility of seeing to the sex education of their children as they are unable to share information about sexuality with them.

4.3.1.13 Respondents' living conditions

Figure 4.15 shows respondents living conditions.

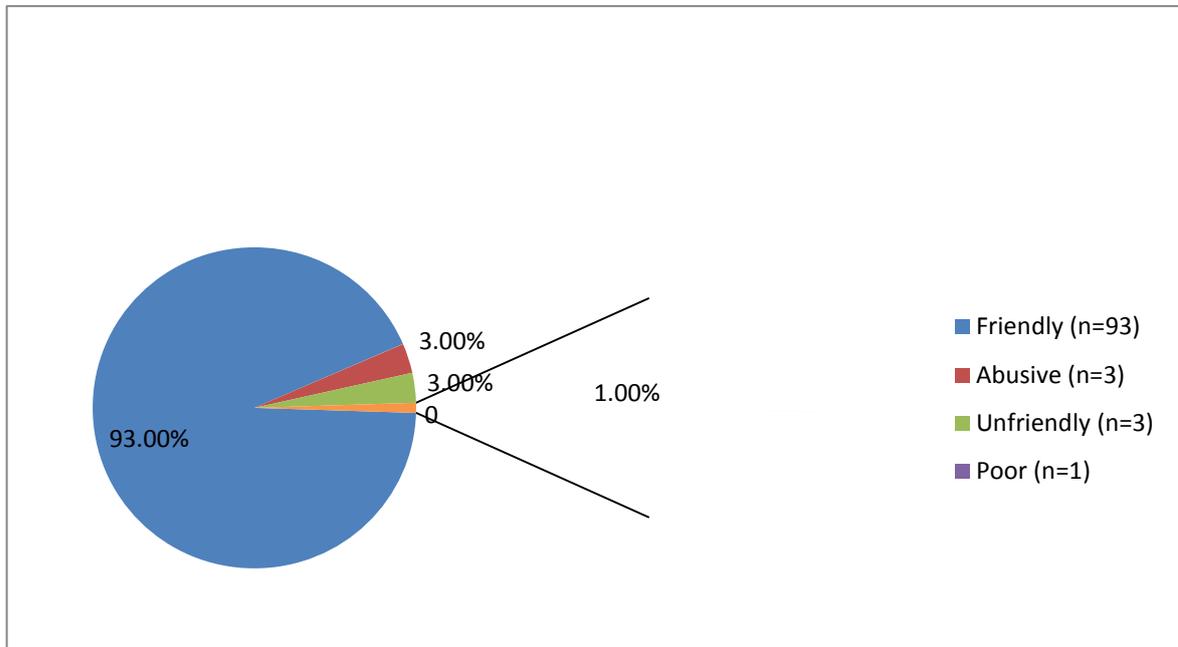


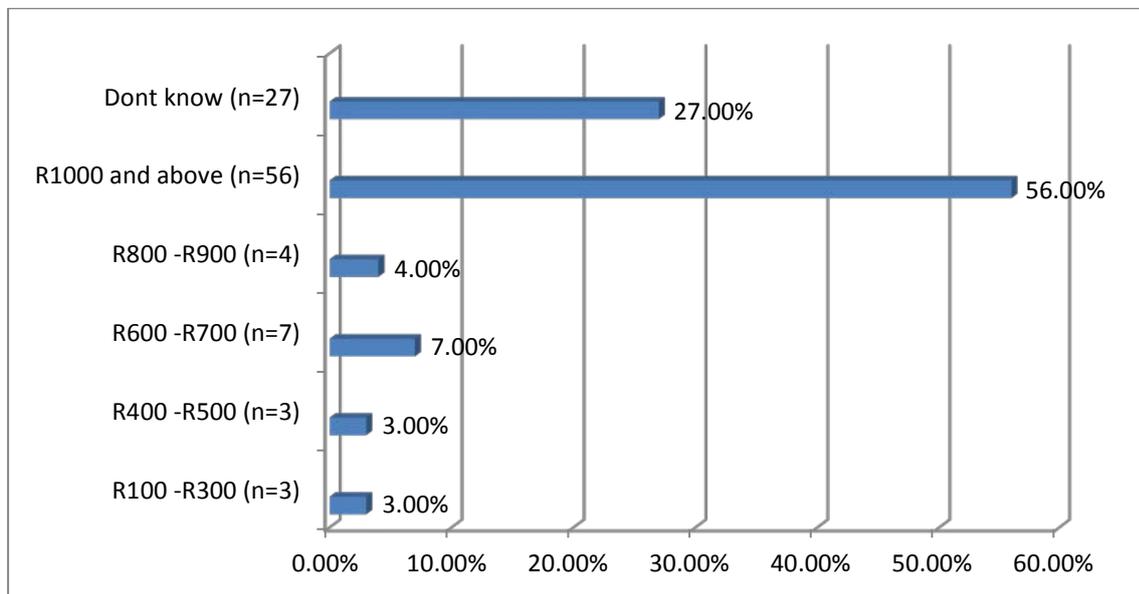
Figure 4.15
Respondents' living conditions (N=100)

Figure 4.15 shows that 93% (n=93) of the respondents live in a friendly environment, 3% (n=3) live in an abusive environment, 3% (n=3) live in an unfriendly environment and 1% (n=1) live without finances. A study done by Noll, Shenk and Putnam (2009:373) indicates that the experience of childhood sexual abuse has caused a significant increase in the risk of girls becoming pregnant during adolescence.

The above study is consistent with the findings by Goicolea et al (2009:223) who state that adolescent girls are also significantly more likely to become pregnant if they live in a very poor household where no parental control is present than in the conditions experienced by the control group. The findings by Francisco, Hicks, Powell, Styles, Tabor and Hulton (2008: 241) are that adolescents who report a history of sexual abuse, compared to those who do not report such a history, were significantly more likely to initiate sexual activity.

4.3.1.14 Respondents' household income distribution

Figure 4.16 indicates the combined household income distribution of the people living with respondents.



Figure

4.16

Respondents' combined household income distribution (N=100)

The combined income of the respondents between R100 and R300 was 3% (n=3), between R400 and R500 in another 3% (n=3) of the respondents. 7% (n=7) of respondents were between R600 and R700, while 4% (n=4) of respondents had household income of between R800–R900. 56% (n=56) of respondents had household income of R1000 and above, while 27% (n=27) of the respondents did not know the combined household income.

4.3.1.15 Respondents' contributions to the household income

Figure 4.17 depicts respondents' contributions to the household income.

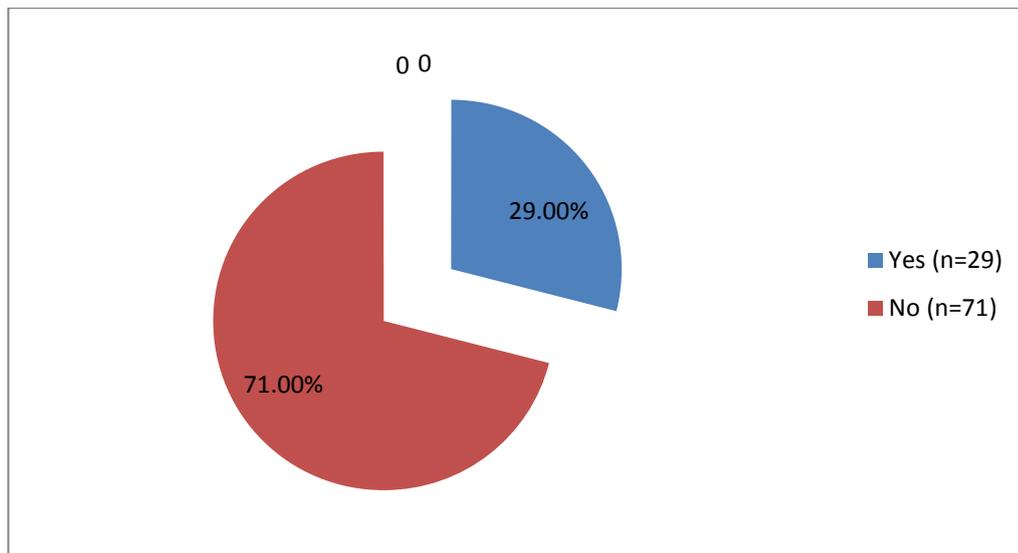


Figure 4.17
Respondents' contributions to the household income (N=100)

According to Grobler et al (2007:37), 75% (n=75) of teenagers who were sexually active before the age of 13 years old are receiving social grants if they qualify in accordance with South Africa's Department of Social Services guidelines. According to Grobler et al (2007:37), when teenagers were asked about their belief regarding the adequacy of a child support grant, namely whether it is sufficient or insufficient to raise a baby, 71% (n=71) believed it is not sufficient and 29% (n=29) believed it would be sufficient. Moultrie and McGrath (2007:442) report that the study commissioned by the Department of Social Development found no evidence of perverse incentives for childbearing associated with the child support grant.

These findings are cited in the report by South Africa(2009a:1), who found in their study that there was no empirical evidence of a link between teenage fertility and child support grants or that grants were being claimed but were not used for the welfare of the child. This is an interesting finding as this study also found no link between teenage pregnancy and social grants, as 71% (n=71) of the respondents did not receive any grants but were nevertheless pregnant.

4.3.1.16 Respondents' sources of income

Figure 4.18 shows the sources of respondents' income.

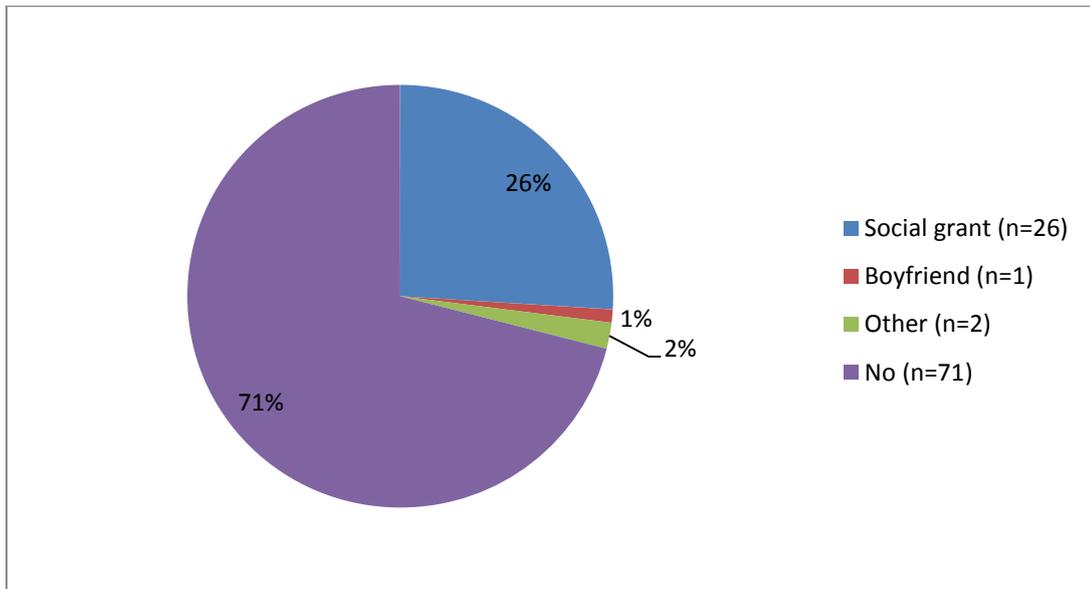


Figure 4.18
Respondents' sources of income (N=100)

The researcher found that 26% (n=26) contributed to the household income via child support grants. The inclusion criterion of respondents to this study was all teenagers who were younger than 19 years regardless of parity; thus it included teenagers who first became pregnant below the age of 14 years and were found to be pregnant again (they were therefore already receiving child support grants) as well as grants given to orphans in accordance with the Social assistance Act no 13 in (South Africa 2009b:10). Findings in this study tally with those of Grobler et al (2007:37) that 26% (n=26) of teenagers depend on support grants. These findings may have influenced the teenagers' perception of susceptibility to teenage pregnancy as they are already supporting themselves and think they can also take care of their children as they are already receiving a social support grant. The current study indicates that only 1% (n=1) contributed through money given by their boyfriend and 2% (n=2) contributed from other sources.

4.3.2 Section B: Individual perceptions, knowledge, awareness and practices relating to sexual intercourse and pregnancy

The individual perceptions of the respondents are given in this section. It deals with the knowledge, awareness of, and practices regarding sexual intercourse and pregnancy.

4.3.2.1 Age on commencing sexual intercourse

Figure 4.19 indicates the age of respondents' commencement of sexual intercourse.

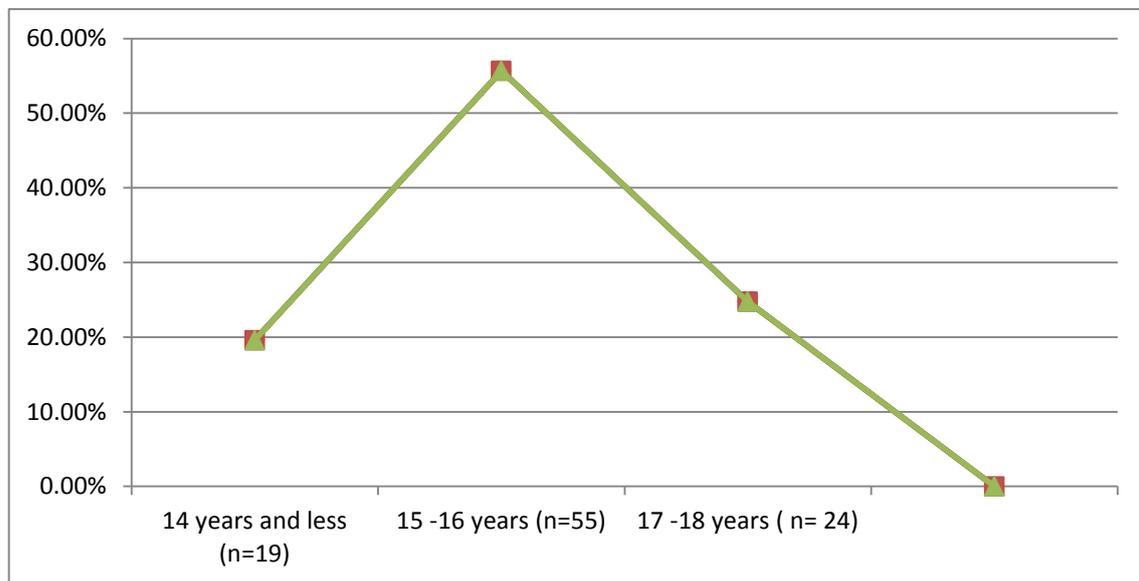


Figure 4.19

Respondents' age on commencing sexual intercourse (N=100)

Figure 4.19 indicates that 19% (n=19) of the participants started to have sexual intercourse when they were 14 years old or younger, 56% (n=56) between 15-16 years and 25% (n=25) started to have sexual intercourse when they were 17-18 years old. According to a study done by Krishnamoorthy et al (2008:100), data suggest that in Scotland 15% of 14-year-olds and 35 to 38% of 15-year-old females were sexually active with a mean age of first intercourse of 14 years and median age of 16 years old. HindinandFatusi (2009: 59) state that in Latin America and the Caribbean, half of the teenagers were between 18 and 19 years old when they had their first sexual experience as compared to 14 years and younger found in this study.

4.3.2.2 Respondents' reasons for engaging in sexual intercourse for the first time

Table 4.1 indicates reasons for respondents having sexual intercourse for the first time.

Table 4.1 Reasons for the respondents having sexual intercourse for the first time (N=100)

Reasons for having sexual intercourse	Frequency	Percentage
2.1.2.1 To enjoy sexual intercourse	36	36%
2.1.2.2 Please the boyfriend	22	22%
2.1.2.3 Made them feel secure and loved	13	13%
2.1.2.4 Fear of rejection by boy-friend	10	10%
2.1.2.5 Forced by boyfriend	9	9%
2.1.2.6 Peer pressure	5	5%
2.1.2.7 Others, please state	4	4%
2.1.2.8 It is un-cool to be a virgin	1	1%
2.1.2.9 Family pressure	0	0%
Total	100	100%

According to the HBM, perceived susceptibility means the teenagers' beliefs about their vulnerability to teenage pregnancy which will persuade them to take action to prevent pregnancy. Bowling (2009:41) indicates that the theory of reasoned action assumes that the intention to engage in certain behaviour is determined by the person's beliefs about the consequences of the behaviour and by subjective norms. Below are the findings about the respondents' perceived reasons for engaging in sexual intercourse for the first time:

Of the respondents 36% (n=36) engaged in sexual intercourse to enjoy the experience, 22% (n=22) permitted sexual intercourse to please their boyfriends, 13% (n=13) had sex because it made them feel secure and loved, 10% (n=10) feared rejection by their boyfriends if they refused, 9% (n=9) were forced by the boyfriend, 5% (n=5) were influenced by peer pressure, 4% (n=3) stated that they had sexual intercourse for other reasons like is natural to have a boyfriend and only 1% (n=1) said they thought its uncool to be a virgin.

The findings of this study are comparable to those of Burns and Porter (2007:225) who found that other reasons for the teenager to engage in sexual intercourse are to make a safe place for themselves in a chaotic and uncertain world and to establish closeness with someone warm and loving, a person who will be there for them in tough times. It is

also indicated in the same study that in some cases, having sexual intercourse was the teenagers' way of making a romantic life for themselves.

According to the WHO (2008:6), forced sexual intercourse may range from unwanted touching to forced marriage to rape. According to Bowling (2009:41), the theory of Reasoned Action was not applicable to the 4% (n=4) of teenagers who expressed no valid reason for engaging in sexual intercourse: according to this theory, behaviour is determined by the person's beliefs about the consequences of the behaviour and by subjective norms. Only 1% (n=1) of the respondents stated that it is "uncool to be a virgin" in their view, meaning they do not support the notion that they should maintain their virginity. Respondents rated 0% (n=0) for family pressure as playing a role in their engagement in sexual intercourse for the first time.

According to the above findings, respondents did not perceive themselves as vulnerable to teenage pregnancy, as indicated by their attitudes towards teenage pregnancy as a threat, and were not ready to prevent teenage pregnancy. The 9% (n=9) who were forced by their boyfriends to have sexual intercourse, which resulted in teenage pregnancy, are an exception. It is cited in Burns and Porter (2007:217) that many teenagers engage in sexual intercourse for fear that they may lose their partner or fear of being alone and insecure.

4.3.2.3 Respondents' knowledge about sexuality education before their first encounter

Figure 4.20 shows information on sexuality education received by respondents.

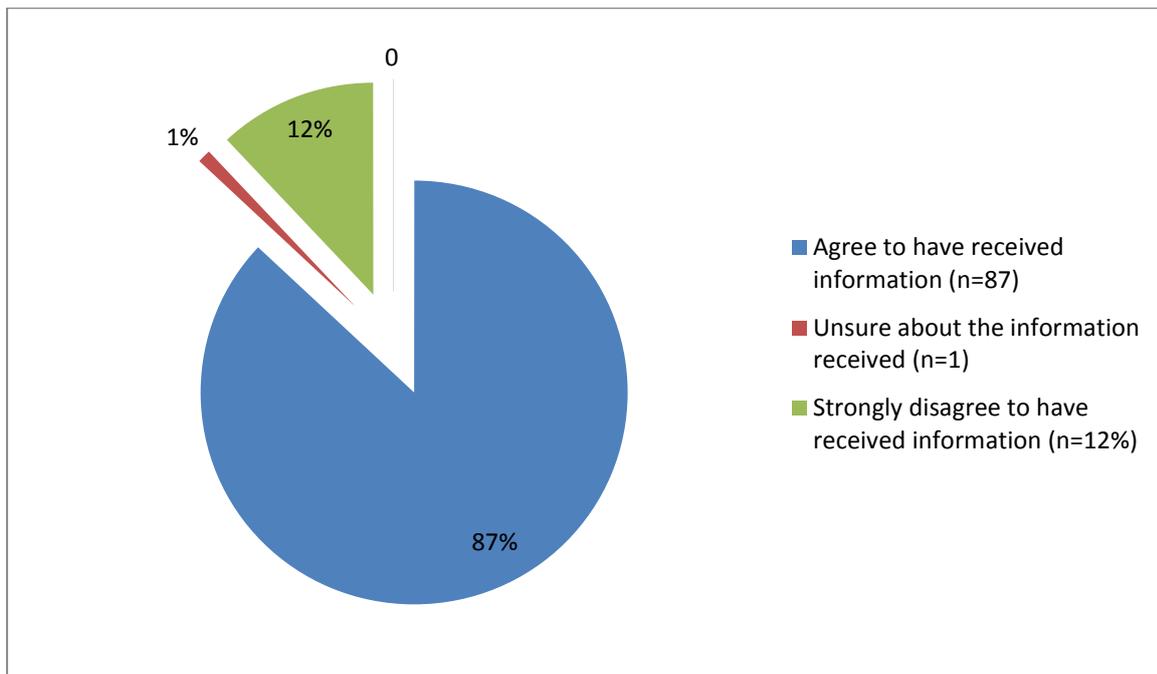


Figure 4.20

Respondents received information of sexuality education before their first encounter (N=100)

According to Polit and Beck (2008:148), the HBM postulates that people commit to engaging in behaviour from which they anticipate deriving valued benefits and that perceived competence or self-efficacy relating to a given behaviour increases the likelihood of commitment to action and actual performance of the behaviour. Knowledge of sexual intercourse and its consequences will cause the teenager to undertake the behaviour for reasons that would bring benefits.

Figure 4.20 shows that 87% (n=87) of the respondents agreed that they had received information on sexual intercourse before their first sexual encounter; only 1% (n=1) were unsure about whether they had received it and 12% (n=12) indicated that they received no such information before their first sexual encounter. According to the findings, if the respondents agree that they received information on sexual intercourse before their first sexual encounter, this means they were taught about methods of preventing teenage pregnancy; according to Blackburn (2009:6), abstinence should form part of comprehensive sex education about the start of sexual activity. Findings by Hindinand Fatusi (2009:59) indicate that teenagers do have knowledge of sexual intercourse before they engage in sexual activities but are more concerned about how safe are condoms than the risks of unintended pregnancy.

4.3.2.4 Respondents' age on receiving information about sexuality education

Figure 4.21 indicates respondents' age when receiving information on sexuality education.

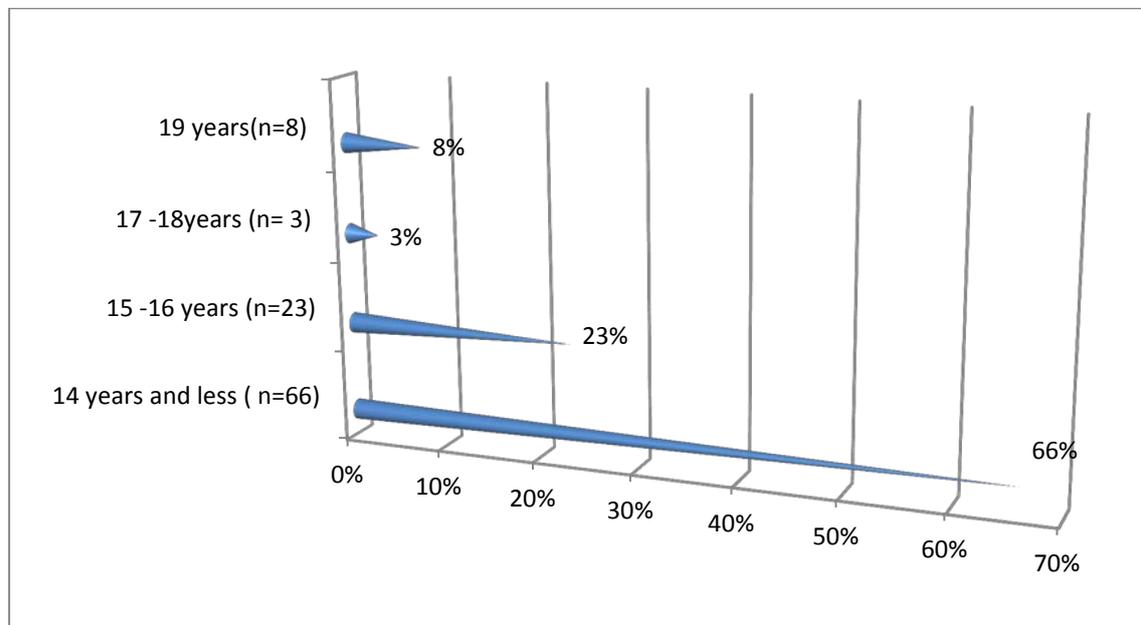


Figure 4.21

Respondents' age when receiving information on sexuality education (N=100)

Polit and Beck (2008:150) explain that the HBM postulates that even when one recognises personal susceptibility, action will not take place unless the individual perceives the severity to be high enough to have serious organic or social implications. Teenage pregnancies were not perceived as a threat, since the above findings indicate that 66% of the respondents received sexuality education before the first encounter but became pregnant nevertheless. According to the HBM, health behaviour, using a wellness orientation, serves to empower teenagers to take action to prevent teenage pregnancy.

Figure 4.21 indicates that 66% (n=66) of the respondents received sexuality education when they were 14 years or younger, 23% (n=23) at 15-16 years old, 3% (n=3) at 17-18 years of age and, lastly, 8% (n=8) were 19 years old. According to these findings, receiving information about sexuality had no impact on the prevention of teenage pregnancy, since the majority of teenagers were informed at an early stage of 14 years and below.

4.3.2.5 Respondents' sources of information about sexuality

Table 4.2 indicates respondents source of information received on sexuality.

Table 4.2 Sources of information about sexuality (N=100)

Source of information	Frequency	Percentage
2.1.5.1 Teachers	32	32%
2.1.5.2 Parents	17	17%
2.1.5.3 Radio	14	14%
2.1.5.4 Health workers	12	12%
2.1.5.5 Magazine	12	12%
2.1.5.6 Television	9	9%
2.1.5.7 Friends	4	4%
Total	100	100%

Table 4.2 shows the respondents' source of information about sexual intercourse. The total percentage of respondents who received information from teachers was 32% (n=32), while 17% (n=17) received information from parents. These findings differ from those of Grobler et al (2007:36) who found that 50% respondents receive information about sexual intercourse from parents (as compared to the 17% (n=17) found in this study). A further 14% (n=14) received information from the radio, 12% (n=12) from health care workers, 12% (n=12) from magazines, 9% (n=9) from television, 4% (n=4) from friends and none from other sources.

4.3.2.6 Type of information received by respondents about sexuality

Table 4.3 shows the type of information received by the respondents about sexuality.

Table 4.3 Type of information received about sexuality (N=100)

Information received about sexuality	Frequency	Percentage
Consequences of unsafe sex	20%	20%
Sexually transmitted infections	17%	17%
Contraception	16%	16%
Consequences of teenage pregnancy	15	15%
Teenage pregnancy prevention	14	14%
Safe sex	10	10%
Abstinence	5	5%
Other, please state	2	2%
Consequences of abortion	1	1%
Total	100	100%

Of the respondents 20% (n=20) indicated that they were advised about the consequences of unsafe sex, 17% (n=17) about sexually transmitted infections, 16% (n=16) about contraception, 15% (n=15) about the consequences of teenage pregnancy, 14% (n=14) about teenage pregnancy prevention, 10% (n=10) about safe sex, 5% (n=5) about abstinence from sexual intercourse, 2% (n=2) about others such as contraception, 1% (n=1) about the consequences of abortion.

The findings of a study conducted by Lall (2007:234) are in contrast with the results of this study in that teenagers reported that they had not received any information on sexual intercourse and contraception. It is indicated in the same study that teenagers said that they were not taught about where to get contraception and that they were embarrassed to ask for condoms in the shops. Teenagers were only told not to have sexual intercourse but without any further explanations.

In a study conducted by Lall (2007:234) about exclusion from school due to pregnancy and the denial of education it is indicated that inadequate sex education was given in many schools and no information was provided to learners about contraception, the emotions and feelings about sexual experiences, pregnancies and abortions or about where to obtain oral contraceptives. These findings are described in Santelli et al (2007:155) who found that the promotion of abstinence is a worthwhile goal, particularly among younger teenagers, but that only 6% (n=6) of the teenagers were informed about abstinence and only 10% (n=10) were advised about safe sex.

Maluleke (2007:14), in a study about youth perceptions of sexuality in the Limpopo Province of South Africa, revealed a varied understanding of the concept of sexuality. According to the author's findings, the discussion of sexuality was mainly related to heterosexual activity which is kept private and seen as a personal matter and not openly discussed between parents and siblings. According to Bandura's Social Cognitive Theory, self-efficacy is one of the four factors that influences cognitive appraisal, which is a person's belief in his/her own capacity to carry out particular behaviour e.g. using contraceptives to prevent teenage pregnancy (Polit& Beck 2008:149). This means that empowering teenagers via sexuality education will enable them to make an informed decision in preventing the threat of teenage pregnancy. The above findings show that only 5% were aware of the role of abstinence which might have influenced their self-efficacy if they had decided to abstain from sex.

4.3.2.7 Respondents' knowledge about the consequences of sexual intercourse

According to the HBM, individuals will change their behaviour if they believe that it could have detrimental consequences. Thus, unless teenagers understand the personal impact (clinical or social) of becoming pregnant and the benefits of preventing it, action to avoid becoming pregnant will not be taken (Daddario 2007:364).

Table 4.4 illustrates the percentage of the total responses on knowledge of consequences of sexual intercourse.

Table 4.4 Respondents' knowledge about the consequences of sexual intercourse (N=100)

Consequences of sexual intercourse	Frequency	Percentage
Pregnancy	20	20%
Sexually transmitted infections e.g. syphilis	20	20%
Contracting HIV	20	20%
Loss of virginity	10	10%
Illegitimate children	9	9%
Having to drop out of school	7	7%
Early marriage	7	7%
Being a mother at an early age	7	7%
Total	100	100%

Of the respondents, 20% (n=20) indicated that they were aware of pregnancy as a consequence of sexual intercourse; 20% (n=20) were aware of sexually transmitted infections such as syphilis, 20% (n=20) were aware of contracting HIV; 10% (n=10) were aware that they would lose their virginity; 9% (n=9) were aware of the possibility of having an illegitimate child; 7% (n=7) were aware of having to leave school if they were pregnant; 7% (n=7) were aware of the possibility of an early marriage if they were to fall pregnant and 7% (n=7) were aware that they could become a mother at an early age. No participants reported that they were aware of other consequences beside the ones given.

Hindinand Fatusi (2009:59) revealed that despite knowledge of the various consequences of sexual intercourse such as the risk of pregnancy and STIs (including the possibility of contracting HIV), adolescents were more concerned about the safety of condoms than the risks of an unintended pregnancy. It is stated in the same study that adolescents did not consider contraception and were sometimes pressurised to prove their fertility

4.3.2.8 Respondents' perceptions about falling pregnant as a teenager

Figure 4.22 reflex respondents' perceptions about becoming pregnant.

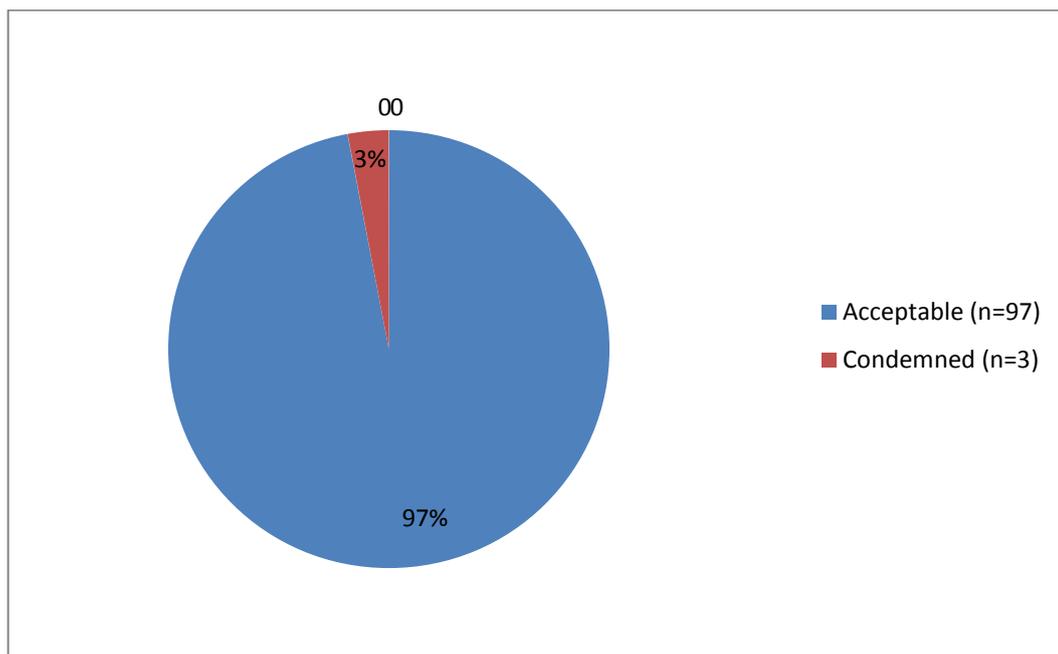


Figure 4.22
Respondents' perceptions about becoming pregnant (N=100)

Figure 4.22 reflects that 97% (n=97) of the respondents perceived falling pregnant as acceptable while only 3% (n=3) condemned falling pregnant. According to (Mkhwanazi 2010:353), a teenager indicated that the pregnancy was unexpected and was sad and embarrassed. It is indicated in the same study that some teenagers felt ashamed and perceived being pregnant as a mistake.

4.3.2.9 Respondents' received information about teenage pregnancy before becoming pregnancy

Figure 4.23 shows the information received by respondents regarding information received about teenage pregnancy.

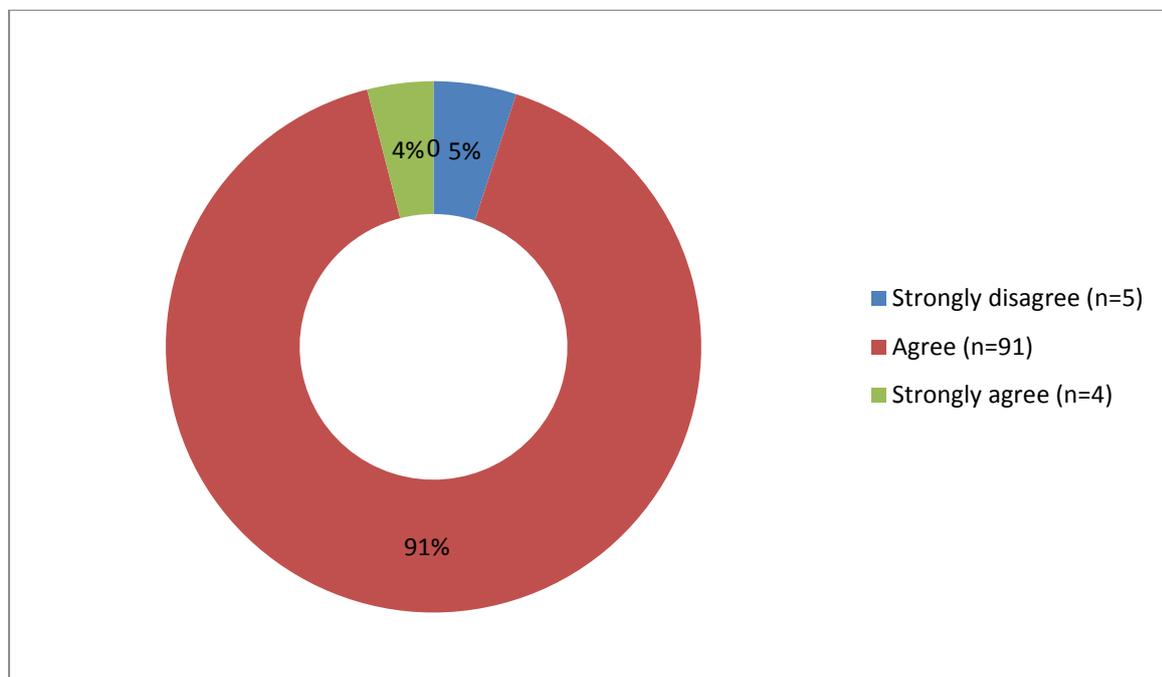


Figure 4.23

Respondents' information about teenage pregnancy (N=100)

Of the respondents, 5% (n=5) strongly disagreed that they had received information regarding teenage pregnancy before pregnancy, 91% (n=91) agreed that they did receive the information and 4% (n=4) strongly agreed that they had been given the information.

4.3.2.10 Information received by respondents before falling pregnant

Table 4.5 reflects the type of information the respondents received about teenage pregnancy before becoming pregnant.

Table 4.5 Information received by respondents before becoming pregnant (N=100)

Information received	Frequency	Percentage
Contracting HIV	19	19%
The prevention of teenage pregnancy	18	18%
That teenage pregnancy may lead to lower socio-economic status	18	18%
Poverty	11	11%
Illegitimate child	10	10%
Dropout of school	10	10%
The consequences of teenage pregnancy	7	7%
Unemployment	4	4%
Other, please state	2	2%
That teenage pregnancy may cause hypertensive disorders of pregnancy such as pre-eclampsia	1	1%
The benefit of having a baby when ready	0	0%
Total	100	100%

Of the respondents, 19% (n=19) received information on the possibility of contracting HIV, 18% (n=18) received information on the prevention of teenage pregnancy while 18% (n=18) indicated that they had been made aware that a teenage pregnancy may lead to a lower socio-economic status. Of the responded, 11% (n=11) were made aware that pregnancy may lead to poverty, 10% (n=10) were informed that the child born out of wedlock will be regarded as illegitimate and 10% (n=10) were informed that pregnancy may result in a drop out of school. Of the respondents 7% (n=7) stated that they were informed about the consequences of teenage pregnancy, 4% (n=4) were informed that a teenage pregnancy may lead to unemployment, 2% (n=2) received other information such as teenage pregnancy may lead to early marriage, than that specified and only 1% (n=1) received information that teenage pregnancy may cause hypertensive disorders associated with pregnancy, such as pre-eclampsia.

According to Lall (2007:234), in a study on exclusion from school, teenage pregnancy and the denial of education indicated that teenagers were given the following message: 'This is the female body, this is the male body, put them together and you have a baby. Respondents in this study indicated that they never received any information about contraception, emotions and feelings about pregnancy and abortions, and they were often simply advised not to have sex, not that if they do have sexual intercourse, they should use contraceptives.

4.3.2.11 Factors that encouraged pregnancy

Table 4.6 reflects the factors that encouraged the respondents to fall pregnant.

Table 4.6 Indicate factors that encouraged teenage pregnancy (N=100)

Factors that encourage pregnancy	Frequency	Percentage
I felt loved by my boyfriend	30	30%
To please my boyfriend	24	24%
Others, please specify	15	15%
Perceived sexual intercourse as a game or adventure	16	16%
Sexual intercourse gives me comfort	6	6%
Peer pressure	5	5%
Was afraid to loose my boyfriend	3	3%
To prove my fertility	1	1%
Poverty in order to receive social grant.	0	0%
All my friends are having sexual intercourse	0	0%
Curiosity	0	0%
Total	100	100%

Of the participants 30% (n=30) indicated that they felt loved by their boyfriends while 24% (n=24) of respondents wanted to please the boyfriend. 16 % (n=16) were encouraged by other reasons than those specified such as pressure from boyfriends and their families, and 15% (n=15) perceived sexual intercourse as a game or an adventure. Of the respondents 6% (n=6) engaged in sexual intercourse for comfort and 5% (n=5) was due to peer pressure, 3%(n=3) was afraid to lose their boyfriend while 1% (n=1) wanted to prove their fertility.

The findings of Minnick and Shandler (2011:242) in their study on changing adolescent perceptions on teenage pregnancy are consistent with some of the findings of this study, as some teenagers knew about teenage pregnancy but did not know how to prevent it. They wanted to have a baby to love, had a partner who wanted a baby, or thought that a baby would bring the partners together (Minnick and Shandler 2011:242).

4.3.3 Section C: Perceptions regarding the use of contraceptives

4.3.3.1 Utilisation of contraceptives by the respondents

Figure 4.24 depicts respondents' utilisation of contraceptives

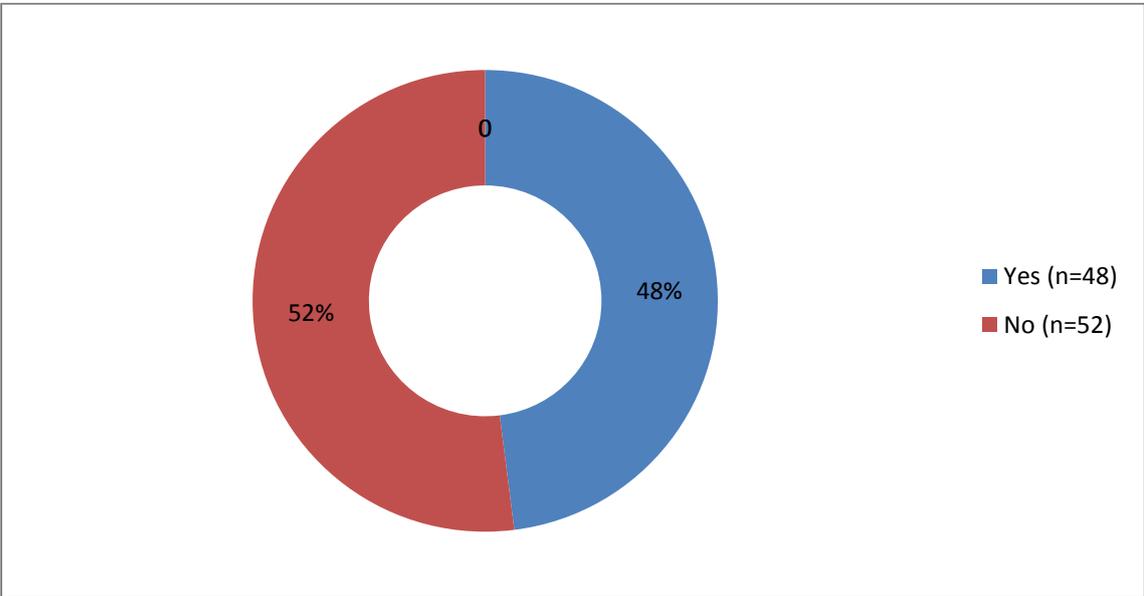


Figure 4.24
Respondents' utilisation of contraceptives (N=100)

According to Daddario (2007:364), a person's perceived risk of contracting a disease, the perceived severity of the threat or disease (in this study a teenage pregnancy), as well as the person's perception of good things that could happen from engaging in certain behaviour, will depend on the primary resource for change which is self-efficacy or confidence in making use of contraceptives to prevent teenage pregnancy and improve health.

Of the respondents in the present study, only 48% (n=48) used contraceptives inconsistently before pregnancy; 52% (n=52) did not use contraception, thus exposing

themselves to the risk of falling pregnant. According to the study done by Mkhwanazi (2010:355) on understanding teenage pregnancy in a post-apartheid South African township, it was found that 56% (n=56) of the respondents lack contraceptive knowledge, which contributed to poor utilisation of contraceptives and thus to teenage pregnancy. Maja (2007b:43) cited Mkhwanazi (2010:355) with regard to the factors impacting on contraceptive use among youth in Northern Tshwane; finding that young people have been reported as having inadequate knowledge about the reproductive function and consequently lack knowledge of contraception.

4.3.3.2 Respondents' reasons for not using contraceptives

Table 4.7 indicates respondents' reasons for not using contraceptives.

Table 4.7 Reasons for not using contraceptives (N=100)

Reasons for not using contraceptives	Frequency	Percentage
Other, please specify	45	45%
I thought I am still young to fall pregnant	24	24%
Did not know about contraception	13	13%
It was too late to use, pregnant already	8	8%
My boyfriend wanted a baby	4	4%
Wanted to prove my fertility	4	4%
The reproductive clinic was far	2	2%
Culturally taboo	1	1%
I was raped	0	0%
Total	100	100%

Maja (2007b:43) states that among the reasons why clients do not use contraceptives is the attitude of the staff; one of the teenagers said that she went to the clinic twice and she was not given the injection she wanted and was forced to use a pill. Amy and Loeber (2007:300), in their study on pregnancy during adolescence, indicate that teenagers stated that they felt they were not vulnerable after repeated sexual intercourse had not led to conception. Some of the findings of this study are consistent with those of Amy and Loeber (2007:300) as 14% (n=14) of the respondents did not have information on contraception before they fell pregnant.

Of the respondents' 45% (n=45) of the respondents mentioned other reasons besides what was asked such as fear of nurses and fear of infertility. Of the respondents 24% (n=24) thought they were still too young to fall pregnant so did not use contraceptives, 13% (n=13) did not know about contraception, 8% (n=8) did not use contraception as it was too late because they were already pregnant, 4% (n=4) indicated that the boyfriend wanted a baby, 4% (n=4) wanted to prove their fertility, and 2% (n=2) said that the reproductive clinic was too far away to enable them to obtain contraceptives. 1% (n=1) stated that culturally it is a taboo to use contraceptives.

4.3.3.3 Respondents' age when starting to use contraceptives

Figure 4.25 shows the age at which the respondents started to use contraceptives.

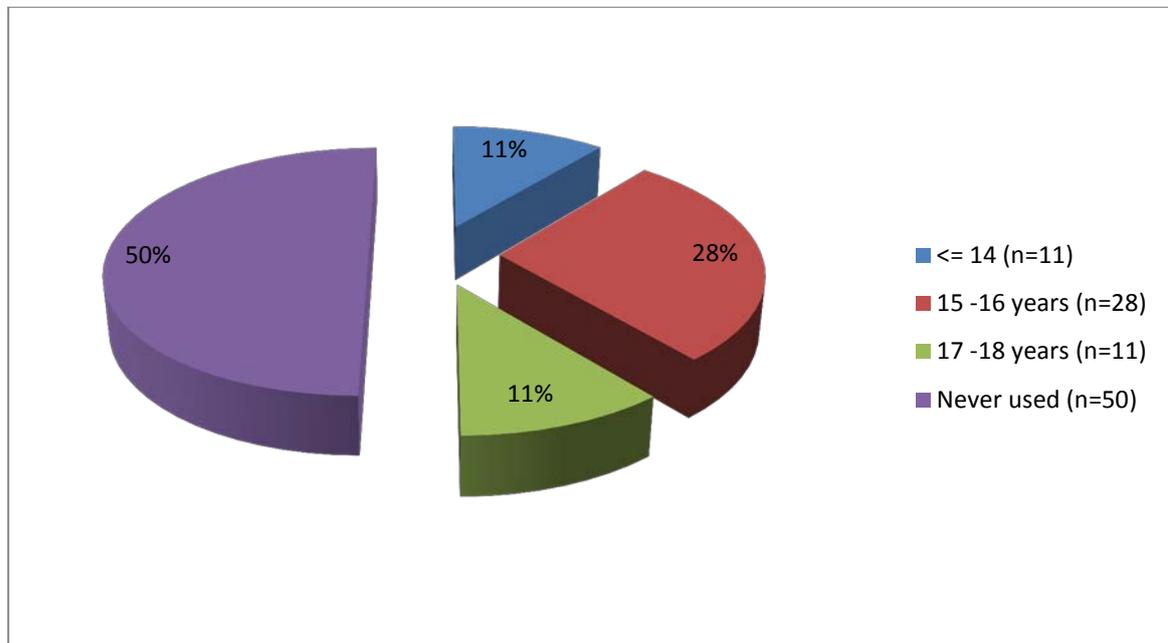


Figure 4.25

Age at which respondents started to use contraceptives (N=100)

Of the respondents 11% (n=11) indicated that they started at 14 years and below, 28% (n=28) started when they were between 15 and 16 years, 11% (n=11) started when they were 17-18 years old, and 50% (n=50) have never used contraceptives.

Krishnamoorthy et al (2008:99), in their study on adolescent females and hormonal contraception, indicate that there has been a significant increase in the number of adolescent females aged >12 years prescribed hormonal contraception by their primary care physicians. The study further explains that the proportion of 10-11 year-olds

prescribed the combined oral contraceptive pill. The findings of Krishnamoorthy et al (2008:99) are consistent with the findings of this study as 14% (n=14) of the respondents stated that they started to use contraceptives at 14 years and younger.

4.3.3.4 Age at which respondents' received information on contraception for the first time

Figure 4.26 indicates the age at which the respondents' received information about contraceptives for the first time.

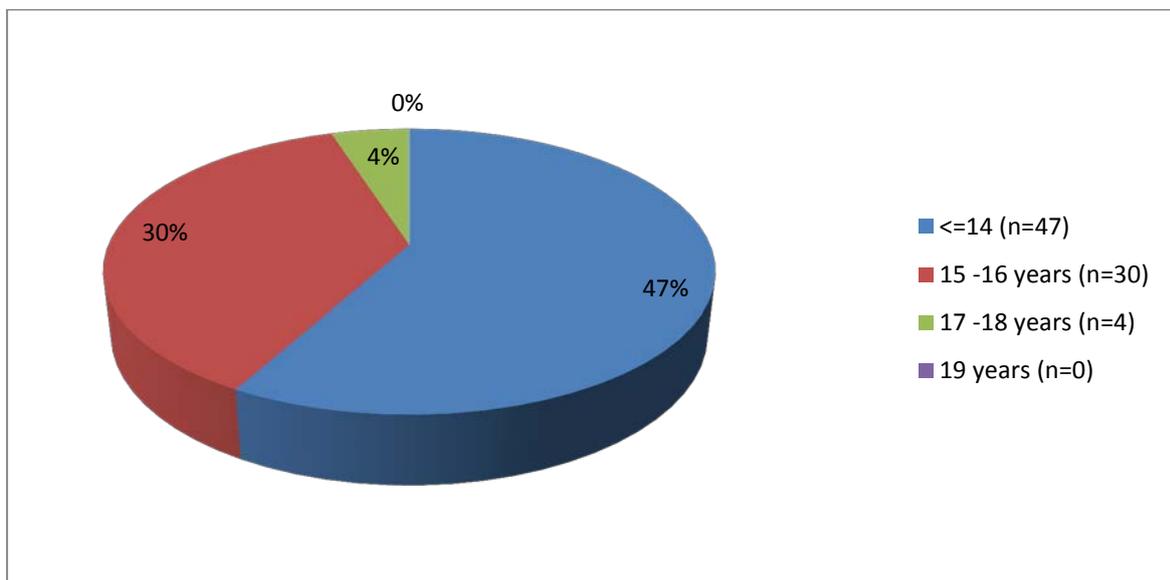


Figure 4.26
Age at which information on contraceptives was received for the first time (N=100)

Of the respondents, 47% were 14 years and younger, 30% (n=30) aged 15-16 years, 4% (n=4) aged 17-18 years and at 19 years all respondents had received the information on contraceptives. 19% (n=19) cases age was not specified.

4.3.3.5 Respondents' choice of contraception

Figure 4.27 indicates the choices respondents had in regard to contraception.

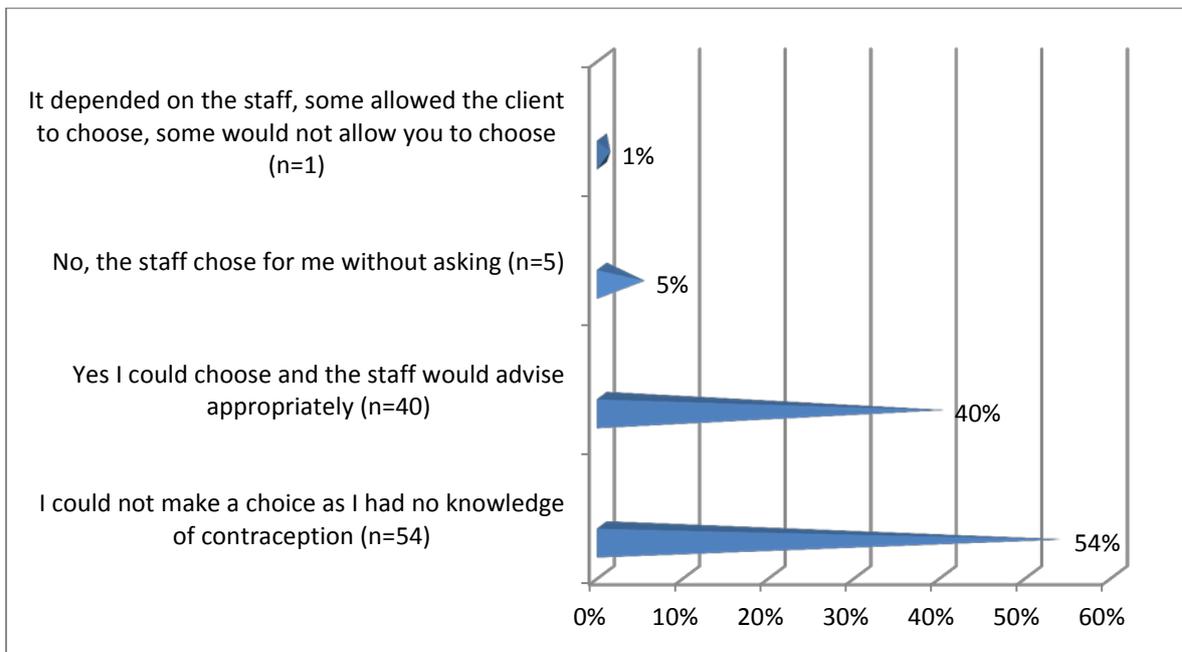


Figure 4.27
Choice on the type of contraception (N=100)

Of the respondents, 54% (n=54) could not specify the choices they had, 40% (n=40) were allowed to choose and were given appropriate advice and 1% (n=1) indicated that some of the staff would choose and some not.

According to this study, 5% (n=5) of the respondents indicated that the staff was choosing for them without asking. This is consistent with the findings of a study conducted by Maja (2007b:45), where one teenager reported that she was told that she thinks she knows too much and the staff simply made the choice for her. Maja (2007b:45) states that among the reasons why clients do use contraceptives is the attitude of the clinic nursing staff; according to the findings in one of the provinces in South Africa, teenagers who attend state clinics were harassed by nurses who were rude, short-tempered and arrogant. In the same study, nurses acknowledged that their comments were usually intended to make the teenager shy and embarrassed. Despite being allowed to choose their own method of contraception, 40% (n=40) of respondents did not use contraceptives as they were already pregnant during the study.

4.3.3.6 Types of contraceptives used by the respondents

Of the respondents 55% (n=55) had the injection, 41% (n=41) were using condoms, 3% (n=3) used other unspecified methods such as traditional methods of contraception. and

only 1% (n=1) was taking oral contraceptives. Goncalves et al (2011:205), in their study about contraceptive medication, fear of infertility and teenage pregnancy in Brazil, found that because many knew that hormones continue to circulate through the body for quite some time, intermittent interrupted contraceptive use was, by and large, not believed to diminish the protection against pregnancy provided by the contraceptive pill. Poor utilisation of different methods is confirmed by the results of this study: 55% (n=55) reported that they had had the injection and 41% (n=41) used condoms but were found to be pregnant during the study.

Table 4.8 indicates the total percentage of contraceptives used by the respondents.

Table 4.8 Types of contraception used by the respondents (N=100)

Contraceptives used	Frequency	Percentage
Injectable contraception	55	55%
Condom	41	41%
Other, please specify	3	3%
Oral contraception	1	1%
Intrauterine contraceptive device	0	0%
Calendar method	0	0%
Coitus interruptus	0	0%
Body temperature method	0	0%
None of the above	0	0%
Total	100	100%

4.3.3.7 Respondents’ access to contraception before falling pregnant

Figure 4.28 depicts the accessibility of contraceptives for use by respondents before they fell pregnant.

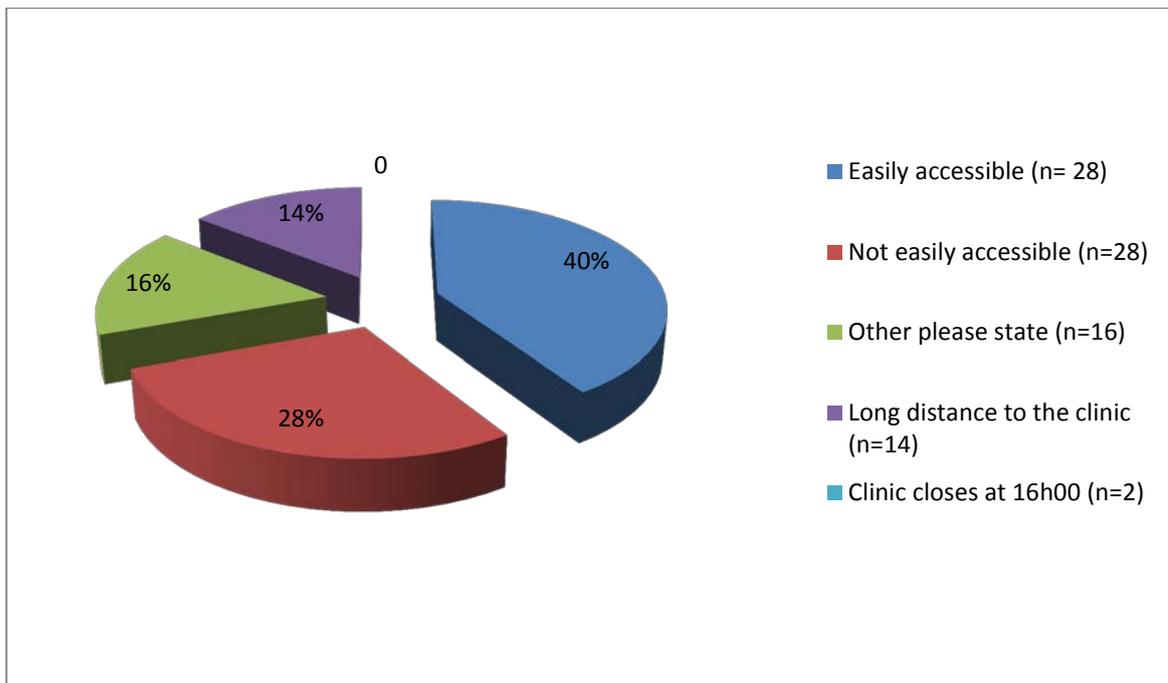


Figure 4.28
Accessibility of contraceptives before pregnancy (N=100)

Of the respondents, 40% (n=40) indicated that contraceptives were easily accessible, 28% (n=28) indicated that contraceptives were not easily accessible. 16% (n=16) did not specify accessibility, 14% (n=14) indicated that the clinic was too far from home to obtain the contraceptives and 2% (n=2) indicated that the clinic closed at 16h00 daily, making access after-hours impossible.

Maja (2007b:44), in a study on the factors impacting on contraceptive use among youth in Northern Tshwane, indicates that failure of services to provide clients with methods of choice or continual contraception because of lack of stock may hamper the effective utilisation of such health service by clients.

4.3.3.8 Respondents' opinions about using a condom

Table 4.9 shows the opinion of respondents regarding using a condom.

Table 4.9 Respondents' opinions on using a condom (N=100)

Respondents' opinions on using a condom	Frequency	Percentage
It is 100% effective in preventing pregnancy	35	35%
It is good as it can prevent sexually transmitted infections in pregnancy	32	32%
It interferes with sexual intercourse	15	15%
Do not have a problem with using condom	8	8%
It shows that you don't trust each other	5	5%
It is against my culture	3	3%
It will burst in the uterus	2	2%
Total	100	100%

Table 4.9 indicates that 35% (n=35) of the respondents indicate that the use of a condom is effective in preventing pregnancy, 32% (n=32) stated that using a condom is a good idea as it can prevent sexual infections, 15% (n=15) indicated that using a condom can interfere with sexual intercourse, 8% (n=8) reported no problems with using condoms, 5% (n=5) stated that using a condom shows that there is no trust between partners, 3% (n=3) said that using a condom is against their culture, and 2% (n=2) stated they feared that the condom might burst in the uterus.

Hindinand Fatusi (2009:60) indicate that a recent review done in both developing and developed nations found that peer-led sex education interventions had a limited impact on condom use, pregnancy and obtaining a new sexual partner. Mkhwanazi (2010:351) found that teenagers who were in love with one another perceived sexual intercourse as an expression of their love and regarded not using condoms as an expression of fidelity.

Santelliet al (2007:152), in their study explaining recent declines in adolescent pregnancy in the USA between 1995 and 2002 were primarily attributable to improved contraceptive use.

4.3.3.9 Respondents' means of using the contraceptive method chosen

Figure 4.29 shows respondents' means of using the contraceptive method chosen.

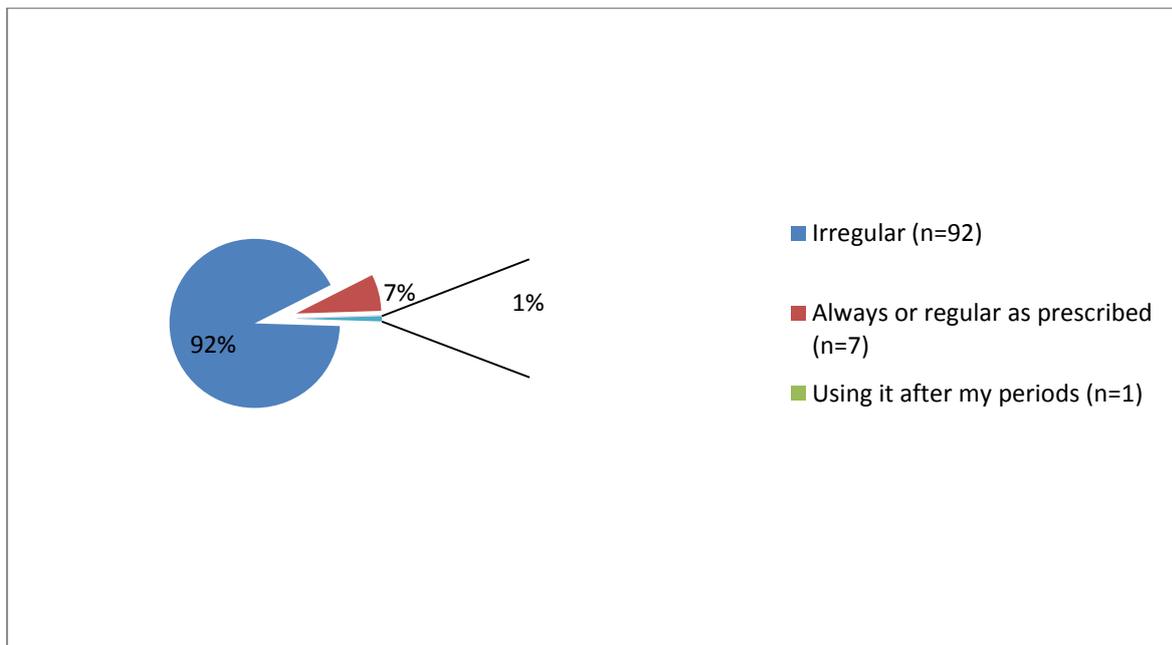


Figure 4.29
Ways of using contraception (N=100)

Of the respondents 92% (n=92) of the respondents used contraceptives on an irregular basis. Seven percent (n=7) of the respondents indicated always using contraception as prescribed, 1% (n=1) indicated they were using contraceptives only after they had had their menstrual period. Santelli et al (2007:154) stated that effective contraceptive use may be responsible for more than a 100% decline in pregnancy risks. Mkhwanazi (2010:352) found that teenagers who were pregnant had either not used contraceptives or had used them incorrectly and failed to prevent becoming pregnant. This was confirmed in the same study by a teenager who stated that she fell pregnant because she did not go back for a follow up to receive her contraception.

4.3.3.10 Respondents' experience with the injection as contraception

Figure 4.30 depicts the experience of respondents when using injectable.

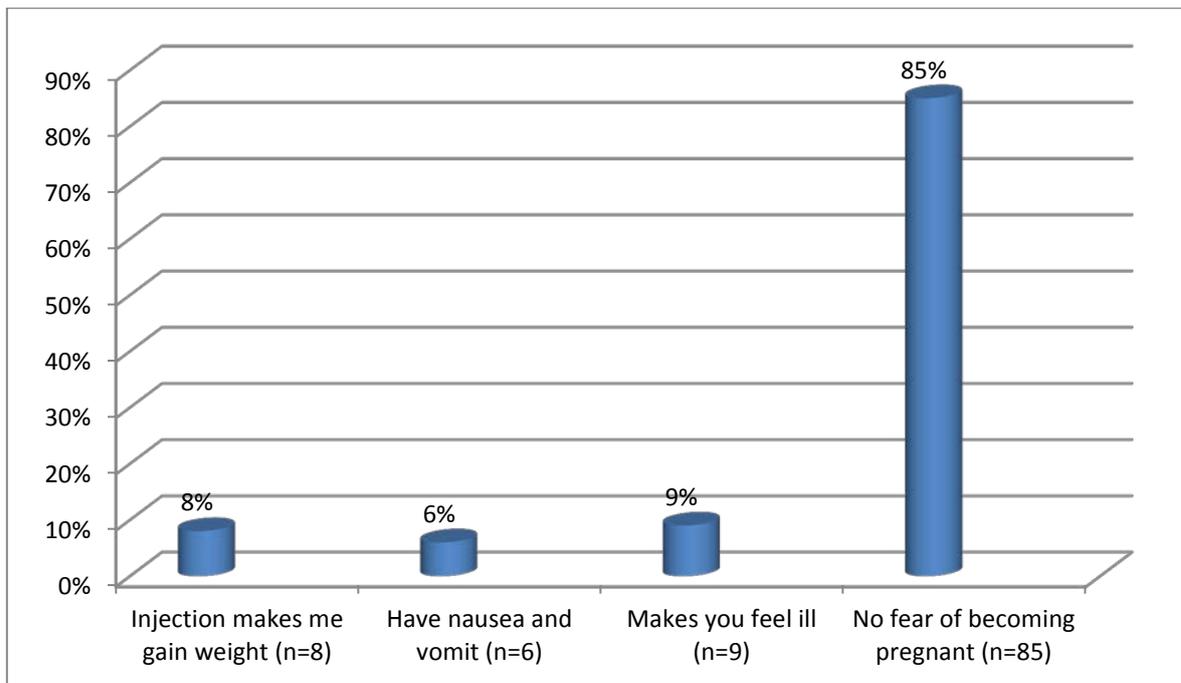


Figure 4.30
Experiences of respondents using an injection (N=100)

Of the respondents 8% (n=8) reported that they had gained weight, 6% (n=6) experienced nausea and vomiting, 9% (n=9) stated that the contraceptive injection made them feel ill and 85% (n=85) reported no side effects of injections. The findings of this study show that even though 85% of teenagers were confident about the effect of injection contraception, they did not use it effectively as they were pregnant during the study.

4.3.3.11 Individuals with whom respondents discussed contraception

Figure 4.31 illustrates individuals with whom use of contraceptives were discussed.

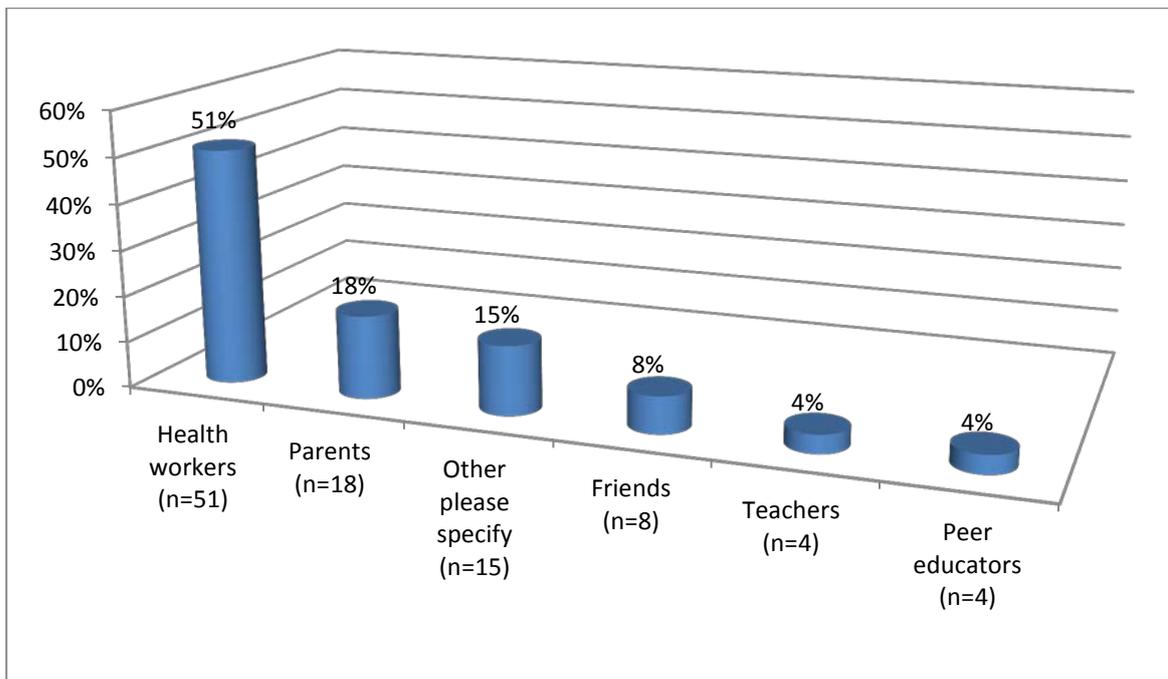


Figure 4.31

Individuals with whom use of contraceptives were discussed (N=100)

Of the respondents 51% (n=51) discussed contraceptive methods with health care workers, 18% (n=18) with parents, 15% (n=15) with other sources such as traditional healers and elders, 8% (n=8) with friends, 4% (n=4) with teachers, and 4% (n=4) with peer educators.

According to these findings, health care workers and parents were the primary adults with whom contraceptives could be discussed.

Mkhwanazi (2010:356) showed that parents do not talk to their children about contraception and nurses ridiculing teenagers when the latter try to access contraceptives in clinics creates a fertile ground for a teenage pregnancy to occur. The researcher in this study found that 8% (n=8) of the respondents could discuss contraception with friends and this is consistent with the study by Mkhwanazi (2010:356) who found that in trying to prevent pregnancy, girls turned to their peers for advice and were often given incorrect information regarding what contraception to use, when to use it and what its effects were.

4.3.3.12 Attitudes of nurses regarding the provision of contraceptives

Figure 4.32 illustrates the perceptions of respondents about the attitudes of the nursing staff concerning the provision of contraceptives.

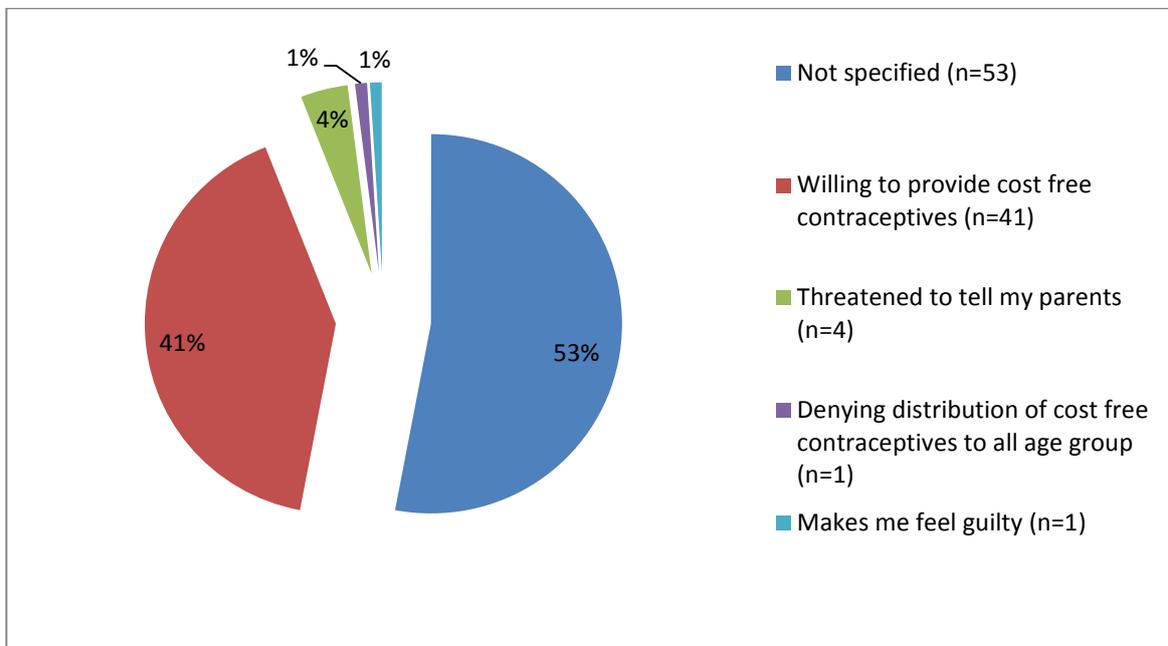


Figure 4.32

Attitudes of nursing staff regarding the provision of contraceptives (N=100)

Of the respondents 53% (n=53) indicated that this question was not specific to them, which is in line with poor utilisation of contraceptives by teenagers; 41% (n=41) stated that nurses were willing to provide cost free contraceptives; 4% (n=4) of the respondents indicated that some of the nursing personnel threatened to tell their parents, 1% (n=1) indicated that nursing personnel refused to provide cost free contraceptives and 1% (n=1) indicated that nurses made her feel guilty about using contraceptives. The findings of this study are comparable to those in the study by Mkhwanazi (2010:536) who indicated that some teenagers were ridiculed by nurses when trying to access contraceptives at the clinics.

4.3.3.13 Respondents' use of emergency contraception

Figure 4.33 shows the respondents' use of emergency contraception.

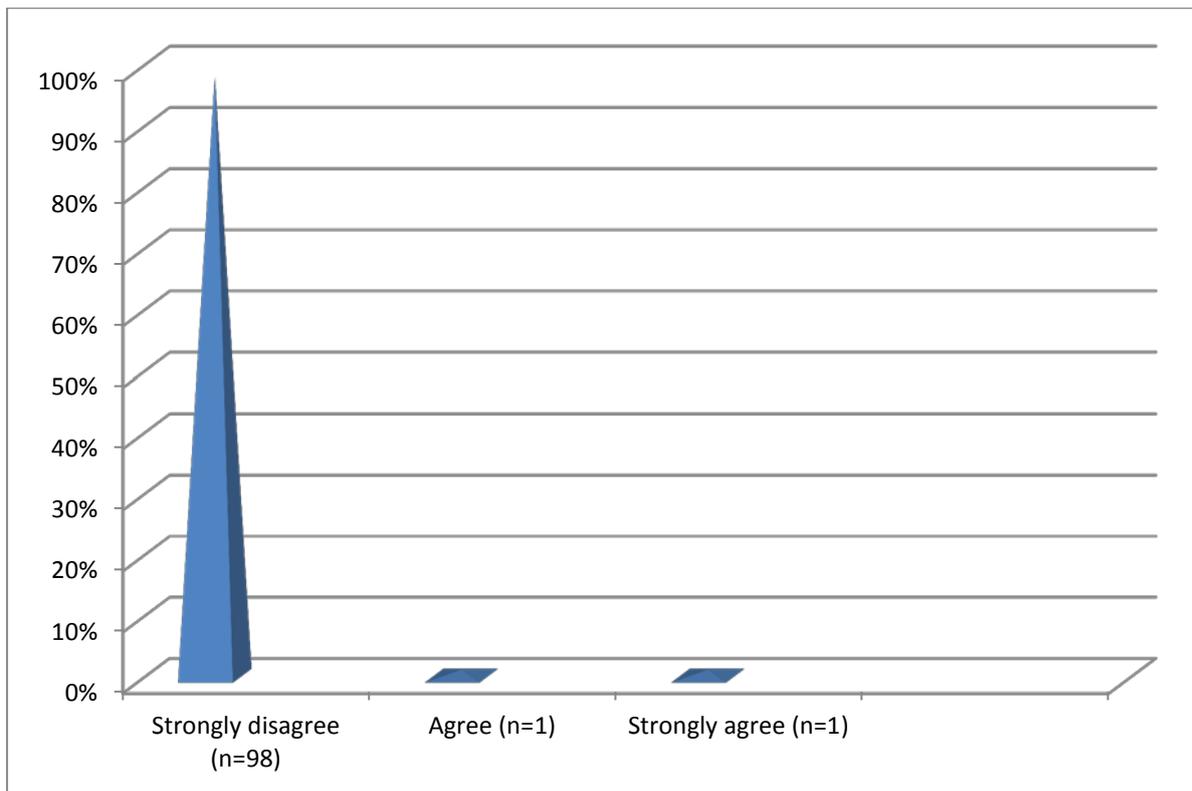


Figure 4.33

Respondents' use of emergency contraception (N=100)

Of the respondents 98% (n=98) strongly disagreed with the statement that they had used emergency contraception, 1% (n=1) agreed that they had and another 1% (n=1) strongly agreed that they had used emergency contraception. This finding shows that most respondents did not make use of emergency contraception.

4.3.3.14 Respondents' knowledge about termination of pregnancy

Figure 4.34 shows the respondents' knowledge about termination of pregnancy.

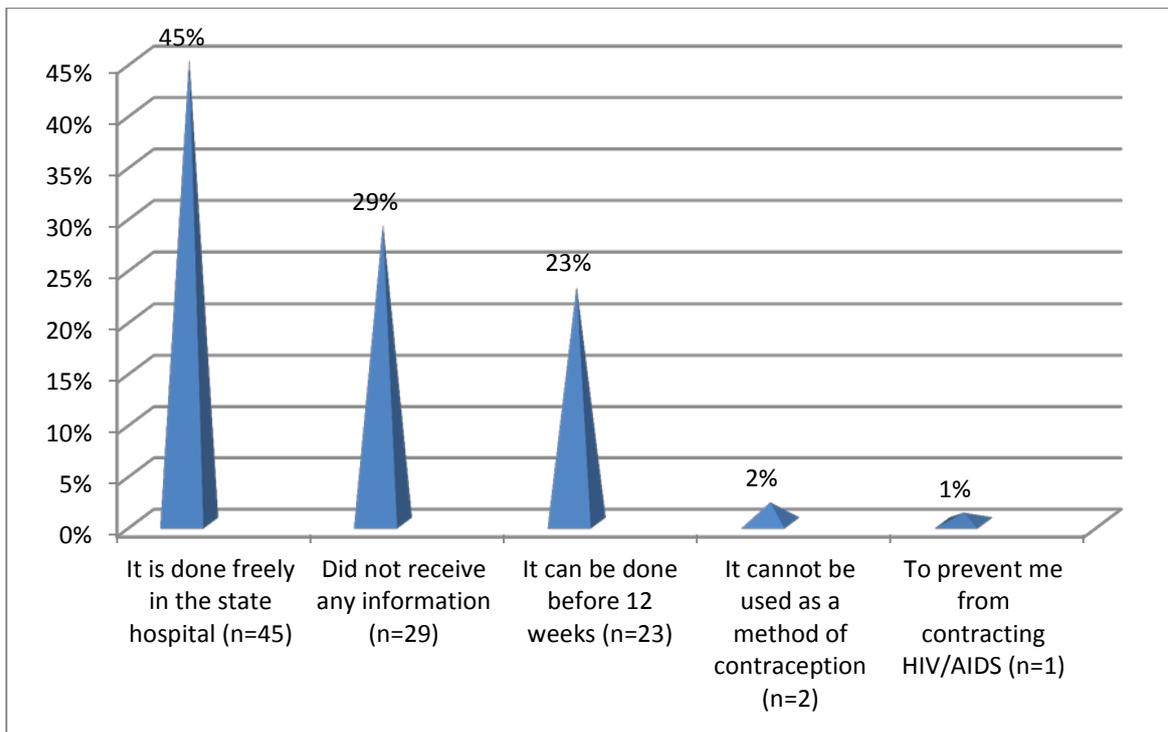


Figure 4.34
Knowledge of termination of pregnancy (N=100)

Of the respondents 45% (n=45) indicated that they know that termination is done in the hospitals while 29% (n=29) did not receive any information regarding the termination of pregnancy. The findings indicate that only 2% (n=2) knew that it cannot be used as a method of contraception but 23% (n=23) knew that it can be done before 12 weeks and is only 1% (n=1) who believe that using emergency contraception will prevent HIV. South Africa (2008:2) indicated that termination of pregnancy by teenagers had increased over time.

It is indicated in this study that although termination of pregnancy was legalised in South Africa in 1996, teenagers did not make use of this service. These findings of the current study indicate that 45% (n=45) of the respondents have knowledge about the services to terminate the pregnancy but failed to utilise it while 29% (n=29) reported that they were not aware of the service.

Table 4.10 illustrates the knowledge about terminate pregnancy.

Table 4.10 Knowledge about termination of pregnancy (N=100)

Knowledge of termination of pregnancy	Frequency	Percentage
It is offered cost freely in a state hospital	45	45%
Did not receive any information	29	29%
It can be done before 12 weeks	23	23%
It cannot be used as a method of contraception	2	2%
To prevent me from contracting HIV	1	1%
Can use it at any time if I am too lazy to go and collect my regular contraceptives	0	0%
As a form of family planning	0	0%
Total	100	100%

Of the respondents 45% (n=45) knew that it is done free of charge in a state hospital, 29% (n=29) did not have this information. 23% (n=23) knew it can be done before 12 weeks, only 2% (n=2) knew that it cannot be used as a method of contraception. 1% (n=1) of the respondents does not believe that termination of pregnancy can prevent HIV. 100% (n=100) disagree that it can be used at any time if they are too lazy to go and collect regular contraceptives and none used it as a form of family planning.

4.3.3.15 Respondents' age of awareness about termination of pregnancy

Table 4.11 Age of respondents' awareness about termination of pregnancy (N=100)

Table 4.11 illustrates the knowledge about the choice to terminate pregnancy.

Awareness of termination of pregnancy	Frequency	Percentage
14 years and younger	25	25%
15-16 years	75	75%
17-18 years	0	0%
19 years	0	0%
Total	100	100%

Table 4.11 indicates the age distribution of pregnant teenagers who were unaware of the possibility of terminating their pregnancy. Of the respondents, 25% (n=25) of those 14 years and younger indicated that they were unaware of the possibility of termination

of pregnancy and 75% (n=75) of respondents between 15-16 years knew about termination of pregnancy

4.3.4 Section D: Perceived severity (seriousness) of pregnancy

4.3.4.1 Respondents' knowledge about the consequences of unprotected sexual intercourse leading to pregnancy

Figure 4.35 shows the percentage of respondents who had knowledge about the consequences of engaging in unprotected sex.

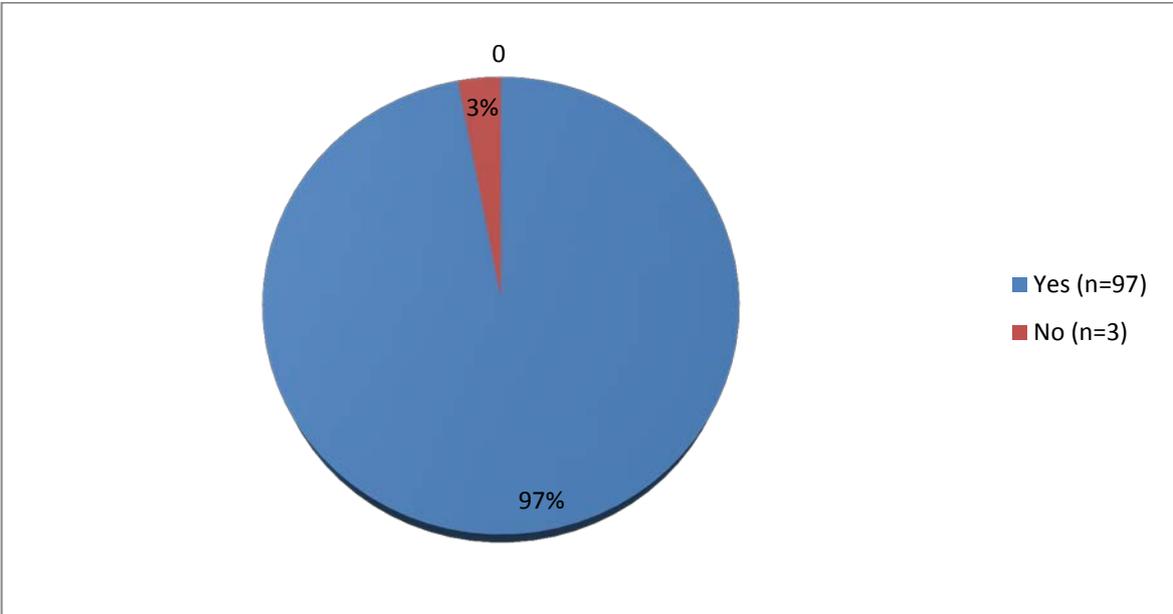


Figure 4.35

Knowledge about the consequences of unprotected sexual intercourse (N=100)

Of the respondents, 97% (n=97) knew that unprotected sexual intercourse could lead to pregnancy but continued to have unprotected sexual intercourse. Only 3% (n=3) indicated that they were unaware that having unprotected sexual intercourse once can lead to pregnancy because they thought sexual intercourse causes pregnancy only when engaged in repeatedly.

According to Grobler et al (2007:36), teenagers who perceive that their mothers disapprove of them being sexually active or who talk to their daughters about condom use before their first sexual intercourse are less likely to become sexually active.

The results of this study show that 97% (n=97) of the respondents knew that unprotected sexual intercourse will lead to pregnancy. As stated in Grobler et al (2007:37), parents and teachers do warn teenagers to refrain from sexual activity before they fall pregnant.

4.3.4.2 Respondents’ awareness of the effects of teenage pregnancy before falling pregnant

Figure 4.36 reflects the respondents’ awareness of the effects of teenage pregnancy.

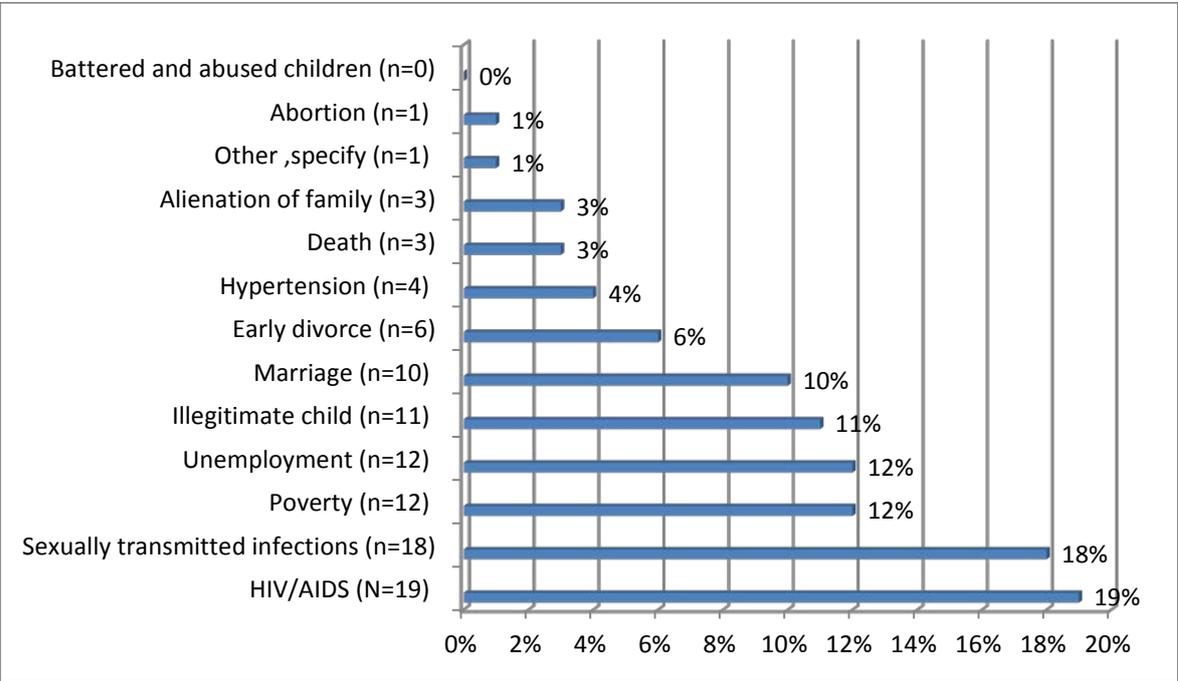


Figure 4.36
Awareness of the effects of teenage pregnancy – percentages(N=100)

Figure 4.36 reflects the respondents’ awareness of the effects of teenage pregnancy. Of the respondents, 19% (n=19) were aware of HIV as an effect of teenage pregnancy and 18% (n=18) were aware of sexually transmitted infections, 12% (n=12) were aware that teenage pregnancy may cause poverty, 12% (n=12) were aware of unemployment as an effect of teenage pregnancy. Only 11% (n=11) were aware that one of the results of a teenage pregnancy would be an illegitimate child, but unaware of the longer-term effects upon the foetus/baby such as low birth-weight, battered and abused children which was 1% (n=1) or the possibility of having an abnormal baby.

Table 4.12 indicates the frequency of the respondents' awareness of the effects of pregnancy before falling pregnant.

Table 4.12 Awareness of the effects of teenage pregnancy (N=100)

Effects of teenage pregnancy	Frequency	Percentage
HIV	19	19%
Sexually transmitted infections	18	18%
Poverty	12	12%
Unemployment	12	12%
Illegitimate child	11	11%
Marriage	10	10%
Early divorce	6	6%
Hypertension	4	4%
Death	3	3%
Alienation from family	3	3%
Other, please specify	1	3%
Abortion	1	3%
Battered and abused children	0	0%
Stigmatisation	0	0%
Abnormal baby	0	0%
Low birth weight	0	0%
Alienation from religious community	0	0%
Total	100	100%

According to the findings indicated in table 4.12 the respondents were aware of the effects of teenage pregnancy, especially of the possibility of contracting HIV and other STIs. Fantasia (2008:86) found that, many teenagers reported that they did not believe that they were at risk of becoming pregnant or of contracting STIs and laboured under the misconception that they were not personally susceptible to pregnancy or health risks. It is stated in the same study that teenage girls underestimate their personal vulnerability to hazards such as pregnancy and seemed to believe that negative outcomes just would not happen to them.

These findings tally with the findings by the WHO (2008:4) that teenage boys continue to practise unsafe sex in Kenya despite considerable awareness of sexual risks, modes of transmission of infection and the protective value of condoms. The WHO (2008:4) further states that adolescents continue to exhibit risk behaviour despite knowledge of the severity of the risks. Moultrie and McGrath (2007:443) emphasise that becoming

pregnant requires unprotected sex, meaning exposure to HIV and other STIs. According to Mahavarkar, Madhuand Mule (2008:606), extremes in age are described as a risk factor for pregnancy-related hypertensive problems and teenage mothers were twice as much at risk of developing pre-eclampsia and its associated problems.

4.3.5 Section E: Barriers to the use of safeguards that could prevent pregnancy

Table 4.13 lists the barriers to the safeguarding the prevention of teenagers from falling pregnant.

Table 4.13 Barriers (safeguards) that might have prevented pregnancy (N=100)

Barriers to the use of safeguards	Frequency	Percentage
My boyfriend refused to use the male condom	29	29%
My boyfriend did not let me use the female condom	17	17%
I thought my boyfriend will feel I don't love him if he insisted on him using a condom	11	11%
I did not have information about family planning	10	10%
I was ignorant of the	9	9%
I wanted a baby to access the social grant	7	7%
I felt I will lose my fertility if I used contraceptives	6	6%
The clinic was far from home	4	4%
The health worker refused to assist me because I was younger than 18 years old	3	3%
The healthcare workers were not friendly	2	2%
There are no services provided during the weekend	1	1%
Other, please specify	1	1%
Total	100	100%

Of the respondents, 29% (n=29) reported that their boyfriends refused to use a condom, and 17% (n=17) did not allow their girl-friends to use a female condom. 11% (n=11) of the respondents thought their boyfriends will think they don't love them if they insist on condom use. Of the respondents, 10% (n=10) did not have information on family planning. 9% (n=9) of the respondents indicated that they were ignorant of the consequences and 7% (n=7) wanted to have a baby in order to access the social grant. This is a barrier as it led them to fail to prevent pregnancy.

The findings are consistent with the findings by Maluleke (2007:13) which indicate that access to the child support grant was mentioned as a contributory factor to young girls getting some money to support themselves.

Of the respondents, 6% (n=6) thought they will lose their fertility and only 4% (n=4) indicated that the clinic was far from home.

This is supported in the study by Maluleke (2007:12) who states that most parents gave very little information due to shyness, cultural taboos or lack of sufficient knowledge about the subject.

The most prominent barriers are refusal by the boyfriend for him or her to use a condom and the girl's need to please her boyfriend. The other reasons seem to play a minor role. The findings indicate a lack of assertiveness on the part of teenage girls who gave in to the refusal of condom use by the boyfriend.

Imamura et al (2007:631), in their study on factors associated with teenage pregnancy in the European Union countries, found that the distance to youth family planning clinics may be associated with a higher conception rate. Although the findings of this study revealed that only a small percentage of respondents failed to use contraceptives effectively to prevent pregnancy due to the distance to the clinics and specialised clinics, this factor does play a role as a barrier to the prevention of teenage pregnancies.

4.3.6 Measures the family planning provider can take to improve the service in preventing teenage pregnancy

Table 4.14 shows the frequency of respondents' views about what the family planning provider can do to improve the service. Of the respondents, 22% (n=22) suggested more education be provided about reproductive health matters. In this study, teenagers indicated that they were given basic sex education like this is the female body, 'this is the male body, put them together and you have a baby'(Lall 2007:234).20%(n=20) of the respondents indicated that parents should be motivated to talk to both girls and boys about the long-lasting effects of teenage pregnancy. Of the respondents, 12% (n=12) of the respondents indicated that urging the government to activate school health services may improve the family planning services. This is consistent with what is indicated by Lall (2007:231) that the government hold the Local Education Authority responsible for both pregnancy prevention education and the education of pregnant teenagers and teenage mothers. It is only 11% (n=11) of the respondents who supported that sexual

active boys should be encouraged to use a condom during sexual intercourse. Of the respondents, 10% (n=10) indicated that girls should be able to say no to boys until they are ready to do so.

Table 4.14 shows the frequency of respondents' views about what the family planning provider can do to improve the service.

Table 4.14 Measures that will improve the family planning services and assist in preventing teenage pregnancy (N=100)

Measures to improve family planning	Frequency	Percentage
To provide education about reproductive health matters	22	22%
Motivate parents to talk to both girls and boys about the long-lasting effects of teenage pregnancy	20	20%
Urge the government to activate school health services	12	12%
Encourage sexually active boys to use condoms during sexual intercourse to prevent teenage pregnancy	11	11%
To motivate girls to be able to say no to boys until mature enough to be responsible	10	10%
Discourage boys not to sleep with girls before marriage	9	9%
Reproductive services to be offered 24 hours a day	3	3%
To display condoms in all supermarkets, schools	3	3%
The staff should have enough information to assist teenagers	3	3%
To initiate health education classes	3	3%
To have enough stock of contraceptives at the clinics	2	2%
Staff to be approachable	1	1%
Not to be judgemental towards teenagers	1	1%
No need to improve the service	0	0%
Refer to a social worker	0	0%
Show understanding	0	0%
Total	100	100%

Of the respondents 9% (n=9) indicated that discouraging boys to sleep with girls before marriage can improve the family planning service. Of the respondents, only 10% (n=10) indicated that displaying condoms in all supermarkets and schools can improve the family planning service, 3% (n=3) indicated that the staff should have enough information to assist teenagers as well as to initiate health education classes to improve the family planning service. 2% (n=2) of the respondents indicated that having enough stock cannot help to improve the family planning service. The most important issues that 22% (n=22) respondents highlighted regarding the family planning service's role in

preventing teenage pregnancies is a need for education on reproductive health matters and the involvement of parents in informing their children about the long-lasting effects of teenage pregnancy. Lederman (2008:142) indicates that preventive education programmes include the goal of increasing or improving parent-child communication about sexual and reproductive health. It is stated in the same study that efforts should be directed toward increasing adolescent access to school-based, clinic-based, and Web-based programs that provide direct education and assistance to young people.

4.3.7 Section F: Cues to action

4.3.7.1 Factors that motivated the respondents to take action to prevent teenage pregnancy

Figure 4.37 depicts factors that motivated the respondents to take action to prevent teenage pregnancy.

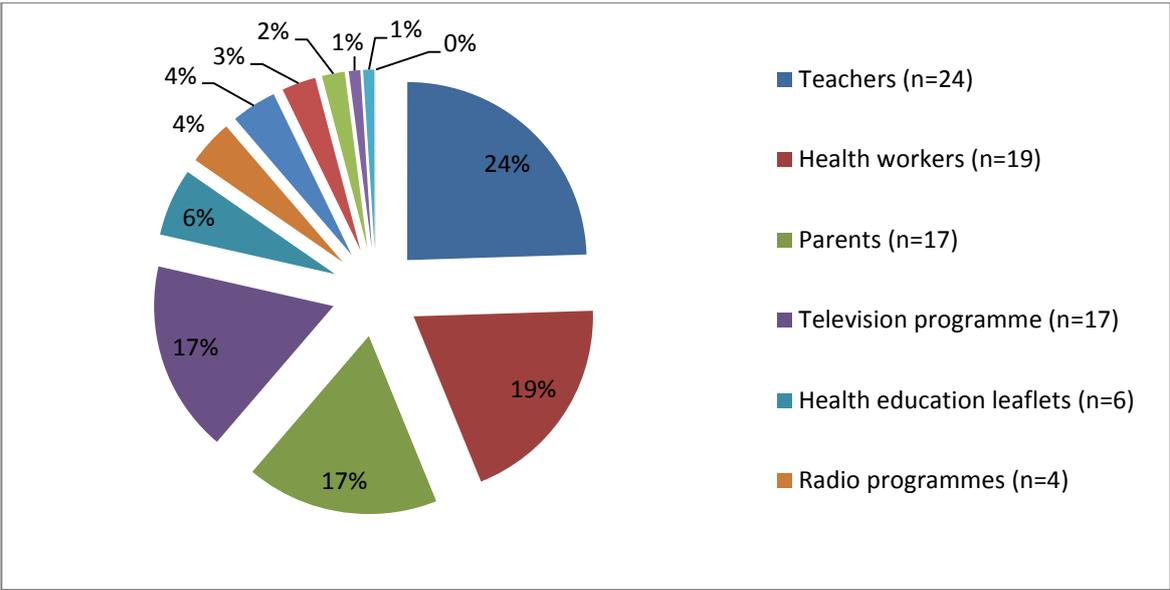


Figure 4.37
Factors that motivated respondents regarding the prevention of teenage pregnancy (N=100)

Of the respondents, 24% (n=24) indicated that they were motivated by their teachers not to fall pregnant as a teenager, 19% (n=19) were advised by the health workers, 17% (n=17) indicated that they received information from parents and television program, 6% (n=6) from health education leaflets and 4%(n=4) from radio programmes and friends. Studies done by Maluleke (2007:11) indicate that media can be used to promote healthy

sexual behaviour depending on the type of standards and norms that the particular media observes.

Table 4.15 Persons/programmes that motivated respondents regarding prevention of teenage pregnancy (N=100)

Advisors on prevention of teenage pregnancy	Frequency	Percentage %
Teachers	24	24%
Health workers	19	19%
Parents	17	17%
Television programme	17	17%
Health education leaflets	6	6%
Radio programmes	4	4%
Friends	4	4%
Health posters on sexual transmitted infections	3	3%
Church	2	2%
Newspaper reports on teenage pregnancy	0	0%
Others, please specify	1	1%
Total	100	100%

Table 4.15 indicates the frequency distribution of those that advised the respondents regarding the prevention of teenage pregnancy. Of these, 24% (n=24) were teachers, 19% (n=19) health care workers, 17% (n=17) parents and 17% (n=17) television programmes. The other sources have also been considered but to a lesser degree than the above. Minnick and Shandler (2011:241) indicate that a programme referred to as “teen choices” was established in which former teenage parent clients of parent child centre become peer educators to other teenagers. It is believed that these young parents can best reach and educate their peers on the challenges of the parenthood in adolescence. It is indicated by Lederman et al (2008:141) that although students reported talking less to parents and more to friends about sex, protection against pregnancy, and HIV, their level of comfort in talking to parents about these topics remained constant. Grobler et al (2007:36) found that although parents do warn adolescents to refrain from sexual activity, the required guidance and discipline is often delegated to overburdened teachers. This is confirmed by the results, which indicate that 24% (n=24) of the advice is given by teachers.

According to the findings of these results, only 4% (n=4) of friends advised the respondents on the above topics when compared to the findings by Lederman

(2008:141) where more talking was done to friends. According to the current study, teachers, parents and health workers are regarded by the teenagers as persons who could influence teenage behaviour, something that television programmes can achieve as well. Maluleke (2007:10) indicates that some teenagers were concerned about the way sexuality was discussed over the radio as it may contribute to encouraging teenagers to be sexual active.

4.4 CONCLUSION

In this chapter the data analysis and the findings were discussed and presented in the form of figures and tables and the discussions were backed by references to literature on the subject.

Chapter 5 concludes the study; limitations are stated and recommendations made.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

4.1 INTRODUCTION

The data analysis and findings of the study are discussed in this chapter. The data collection tool used in this study was analysed to ensure that data gathered were presented clearly with the aid of graphs, tables and percentages.

The purpose of the study was to explore the contributory factors to the high teenage pregnancies rate in a hospital under study at Ehlanzeni district in the Mpumalanga Province.

The researcher used a self-designed interview schedule to collect data from respondents within the hospital under study. The interview schedule included the following six sections:

Where respondents were asked to name “other” options, the researcher analysed the data per hand.

Section A comprises items on the assessment of the biographical profile of the respondents; section B relates to the assessment of individual perceptions, including those relating to knowledge, awareness and practices relating to sex and pregnancy; section C contains items on the assessment of perceptions regarding the use of contraceptives; section D comprises items on the assessment of the perceived severity of pregnancy; and section E deals with barriers that may have prevented the occurrence of pregnancy, and section F with cues to action.

The following symbols in this study will bear the meanings in the interpretation of the findings:

N = Total number of respondents

n = Total of subsections

F = Frequency

4.2 DATA COLLECTION

Parahoo (2006:467) defines data as the information collected by researchers during the course of a study. Burns and Grove (2011:430) define data collection as the process of selecting subjects and gathering data from subjects. In this study, data were collected by means of structured interviews.

4.3 DATA ANALYSIS

Polit and Beck (2008:751) define data analysis as the systematic organisation and synthesis of research data and, in quantitative studies, the testing of hypotheses using those data. The data obtained through the interview schedule were subject to computer analysis with the aid of a professional statistician and converted into percentages. The data are presented in the form of tables, graphs and figures to enable the presentation of data to have meaning.

4.3.1 Section A: Biographical data

Section A of the self-designed structured interview schedule was developed to enable the biographical data of the respondents to be assessed with regard to age, marital status, religion, racial group, culture, school information, communication between the participants and their teachers, relationships, habits, family relations and socio-economic status.

4.3.1.1 Teenage pregnancy in relation to age

Figure 4.1 depicts teenage pregnancy in relation to age.

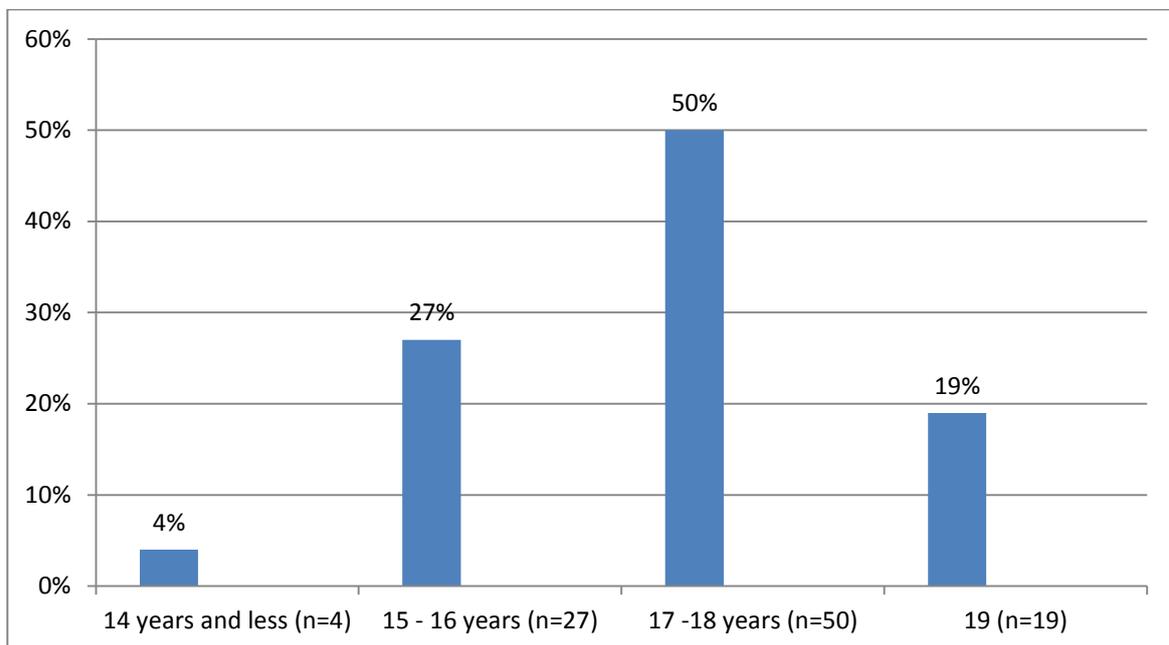


Figure 4.1
Teenage pregnancy in relation to age (N=100)

The respondents were younger than 19 years. Of the respondents 4% (n=4) were 14 years of age and younger, 27% (n=27) between 15 and 16 years old, 50% (n=50) between 17 and 18 years old and 19% (n=19) were 19 years old. Goicolea et al (2009:225) state that having sexual intercourse before the age of 15 years and not using contraception with the first sexual encounter increases the risk of pregnancy during adolescence. These findings correspond to the findings by Grobler et al (2007:32) who indicate that teenage pregnancy and sexual activity were found in teenagers as young as 13 years. This means that teenage pregnancy was not perceived as a threat by teenagers and so they did not take any action to prevent it.

According to these findings, girls of 14 years and younger are sexually active, as is evident from the fact that 4% (n=4) of girls of this age were already pregnant during the study. The majority of pregnant girls 50% (n=50) were between 17 and 18 years old. The researcher's findings in this study are consistent with the findings of Krishnamoorthy, Simpson, Townend, Helms and McLay (2008:99) in a retrospective study on hormonal contraceptives in a primary health-care study which indicate that

there was an increase in the use of prescribed contraceptives by girls aged 12 and older, which suggests that girls in this age group are sexually active.

4.3.1.2 Respondents' marital status

Figure 4.2 shows the respondents' marital status.

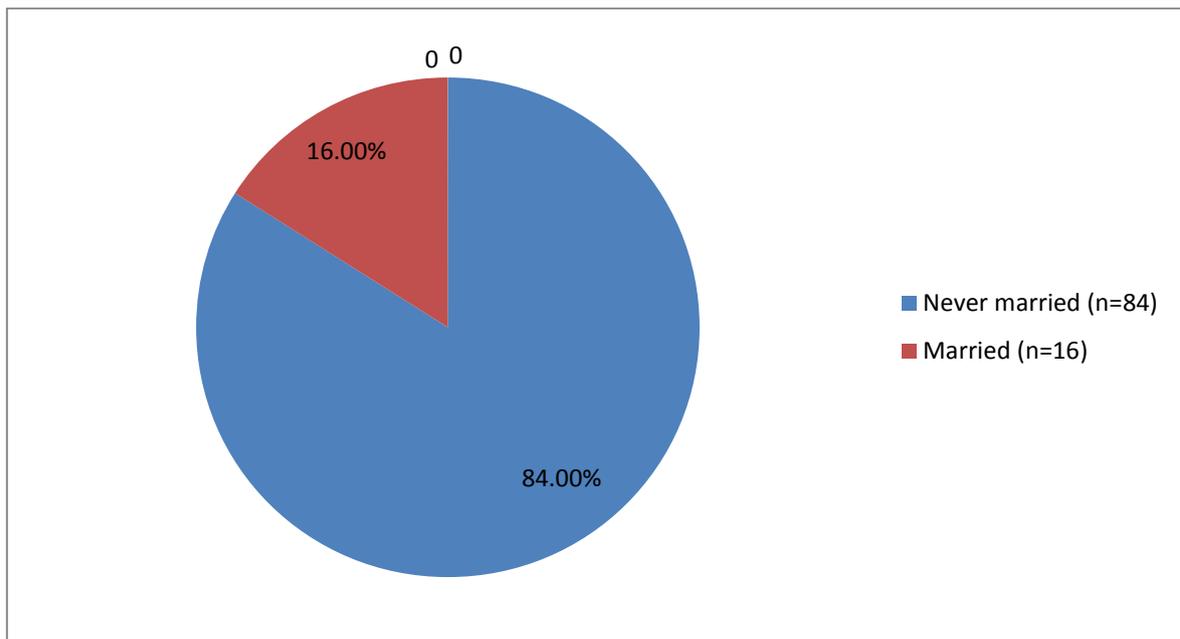


Figure 4.2
Respondents' marital status (N=100)

The findings of Goicolea et al (2009:223) indicate that marriage is statistically associated with teenage pregnancy. Of the respondents in this study, 84% (n=84) had never been married; only 16% (n=16) were married. These findings show that only a small percentage of teenagers studied were married.

According to Hindin and Fatusi (2009:58), early marriage and early marital sexual activity may lead to pregnancy in young women. The study further indicates that more than 10% of the teenage pregnancies in the Democratic Republic of Congo, Madagascar, Mozambique and Zambia are extra-marital, while in the rest of Sub-Saharan Africa and Latin America, the rate of extramarital pregnancies is below 10%. According to Oberlander et al (2010:32), in their seven-year study of marital expectations and marriage among urban, low-income, African-American adolescent mothers, it was found that mothers who marry are at risk of forfeiting their chances of

educational attainment, perhaps because of the increased demands of being a spouse, running a household and having more than one child.

4.3.1.3 Respondents' religion

Figure 4.3 illustrate respondents' religion in relation to teenage pregnancy.

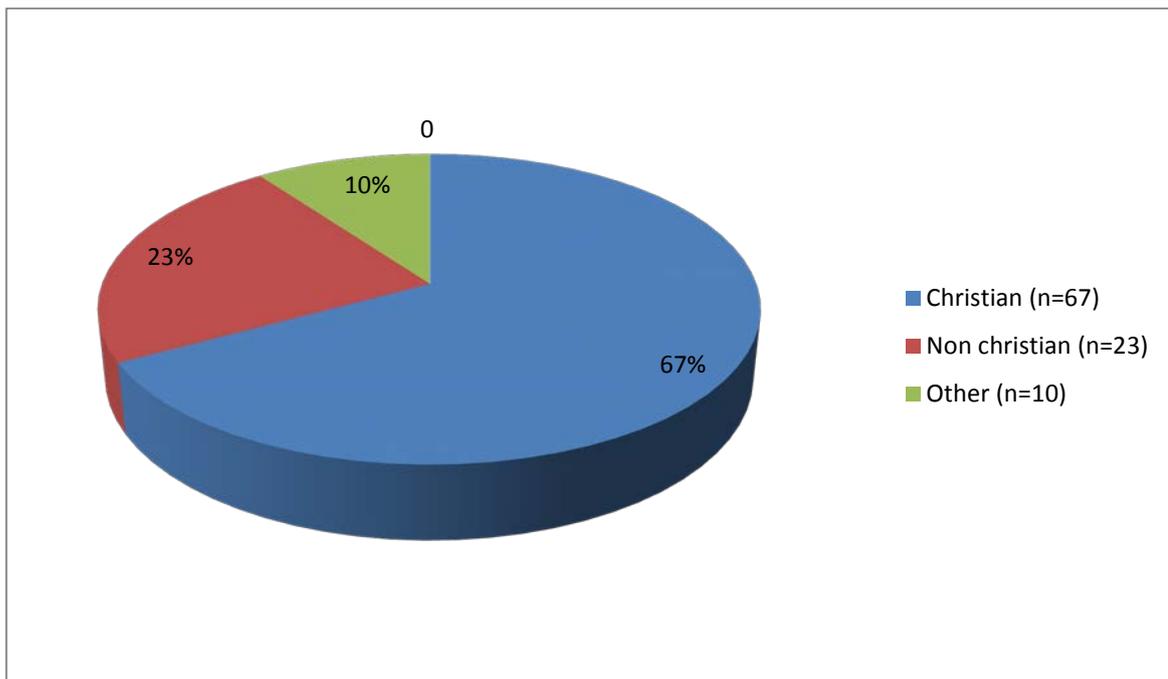


Figure 4.3
Respondents' religion (N=100)

As illustrated in figure 4.3, the study indicates that 67% (n=67) of respondents were Christians, 23% (n=23) non-Christians and 10% (n=10) indicated that they were neither Christians nor non-Christians as their religion is ancestral. According to these findings, religion seems to have little influence in the prevention of teenage pregnancy as 67% (n=67) of respondents who were pregnant indicated that they are Christians.

According to Maluleke (2007:14), in her study about youths' perceptions of sexuality in the Limpopo Province of South Africa, religion may have both a negative and a positive influence on the sexuality of young people. Some teenagers, according to Maluleke (2007:14), indicate that religious scruples may delay the individual's sexual debut, but does not necessarily provide teenagers with the knowledge and skills to make decisions about their sexuality and how to protect themselves against sexually transmitted

diseases and unwanted pregnancy. Some teenagers in the same study indicated that in their church they had youth programmes where they received life skills education and education about sexually transmitted infections, contracting HIV and the significance of refraining from pre-marriage sexual activities. Maja (2007a:33) contrasts the above findings as indicated in the study of factors impacting on contraceptive practices, noting that some Christian denominations are against birth control, since they maintain that contraception is contrary to God’s word, which requires that people shall multiply and become numerous. This is consistent with the study by Parlemo and Peterman (2009:159) about early marriage, early sexual debut and teenage pregnancy in Sub-Saharan Africa, who found that there was a greater incidence of early marriage among Muslim women in Chad and among Catholic women in Code d’Ivoire relative to their Protestant peers.

The majority of respondents in the study indicated that they were Christians, but nevertheless engaged in pre-marital intercourse; this indicates that they reject the Christian principle of no sexual intercourse before marriage.

4.3.1.4 Respondents’ home language

Figure 4.4 shows the respondents’ language distribution.

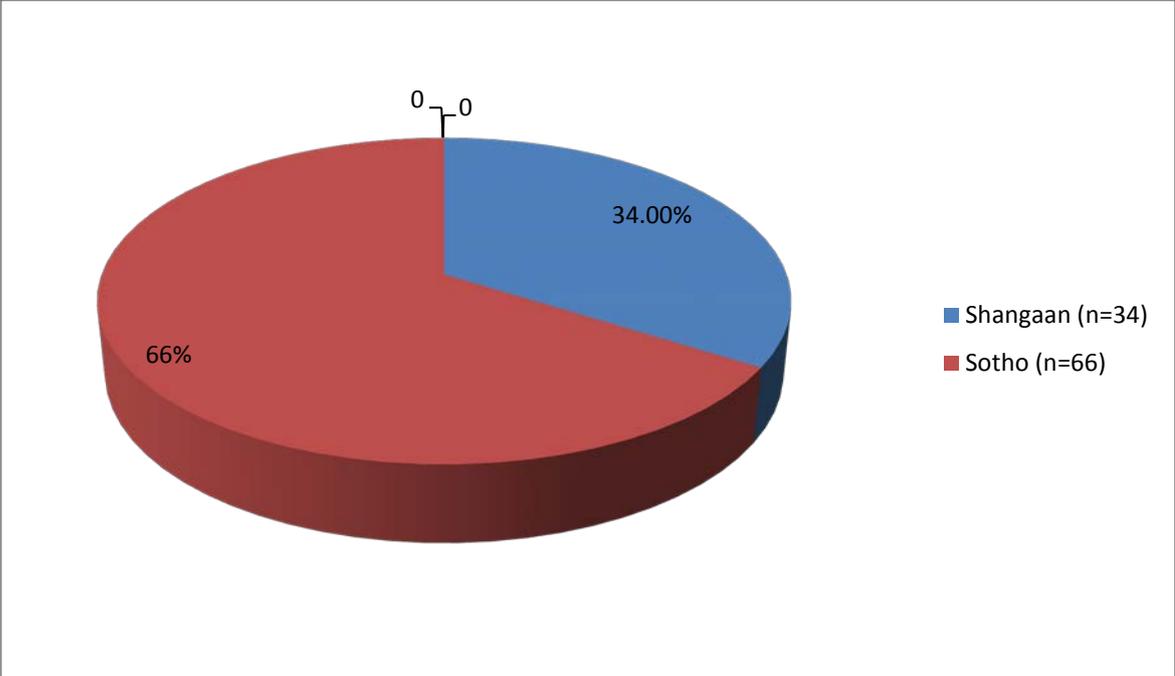


Figure 4.4
Respondents’ home language (N=100)

Of the respondents 66% (n=66) were Sotho-speaking and 34% (n=34) Tsonga- or Shangaan-speaking. These findings are consistent with the findings by Grobler et al (2007:36), who in their study of beliefs of grade six learners regarding adolescent pregnancy and sex; found that 78% (n=78) of learners came from a Sotho-speaking community.

4.3.1.5 Respondents' cultural perception of pregnancy

Figure 4.5 shows the respondents' cultural perception of pregnancy.

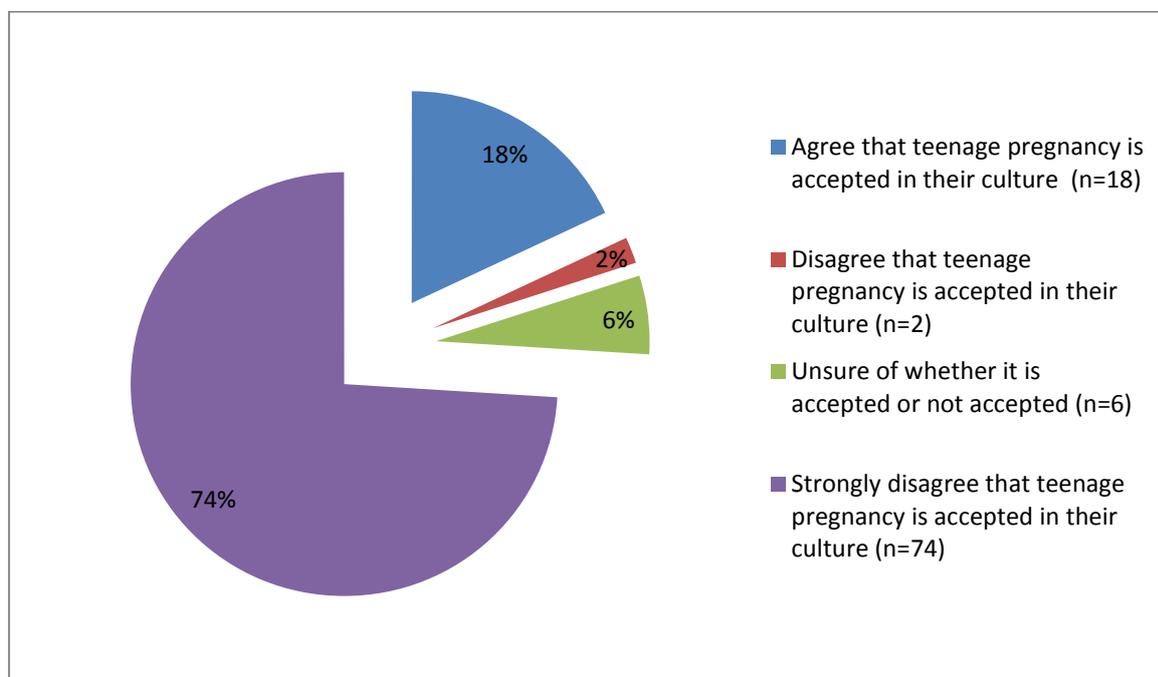


Figure 4.5
Respondents' cultural perception of pregnancy as an indicator of maturity (N=100)

According to the findings as indicated in figure 4.5 74% (n=74) of the respondents strongly disagreed with the perception that teenage pregnancy is accepted as an indication of maturity.

Mkhwanazi (2010:347) found that all teenage mothers said the pregnancy was unexpected and unplanned and that they initially reacted with sadness and apprehension but later accepted the fact of their pregnancy. Mkhwanazi's (2010:347)

findings tally with those of the researcher stated above. Of the respondents, 18% (n=18) agreed that teenage pregnancy is perceived as an indication of maturity, 2% (n=2) disagreed, and 6% (n=6) were unsure.

The findings of Mkhwanazi (2010:347) contrast with the results of this study as they found that, culturally, childbearing provided a way for a teenage girl to show that she is fertile and to demonstrate successful womanhood. The findings of this study are also inconsistent with the findings of Kirchengast (2009:5) who found that in many traditional societies, early marriages of teenagers are common and socially desired and that after marriage there is strong cultural and family pressure to reproduce as soon as possible.

The findings in Kirchengast (2009:5) correspond to the Theory of Planned Behaviour as described by Bowling (2009:41), which states that intention to adhere to certain behaviour is influenced by subjective norms e.g. the influence of family and peers, attitudes, expectations of future health and ability, self-efficacy and perceived control over the situation.

The findings in this study indicate that a large percentage of respondents strongly disagree that pregnancy is accepted as an indicator of maturity. Only a small percentage felt otherwise.

4.3.1.6 Respondents' school attendance

Figure 4.6 depicts the respondents' school attendance.

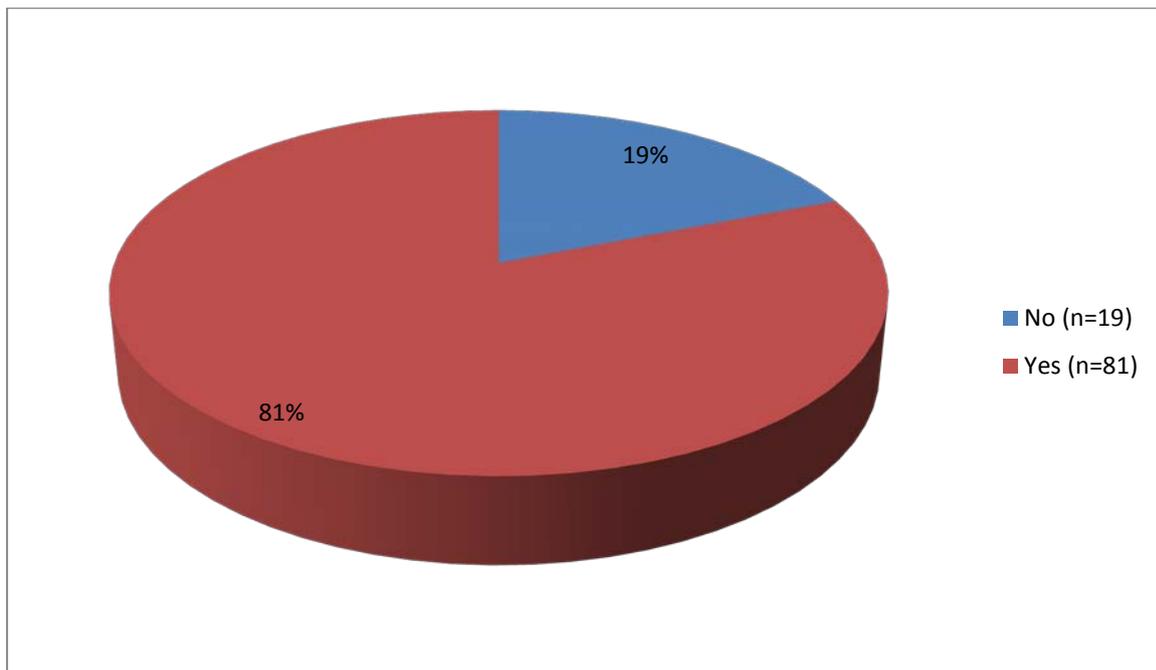


Figure 4.6
Respondents' school attendance (N=100)

Of the respondents 81% (n=81) of the respondents were attending school during the study and only 19% (n=19) were not at school. These findings indicate that pregnancy may not be the primary reason for girls dropping out of school within a district hospital under study in the Ehlanzeni district of the Mpumalanga Province, as indicated in the Human Sciences Research Council report (2009c:107) that pregnant teenagers should continue with school attendance even if the student is pregnant. According to Hindin and Fatusi (2009:58), teenage pregnancy and birth may lead to dropout and expulsion, since the school policy in some developing countries is unfriendly to pregnant teenagers. The findings by Hindin and Fatusi (2009:58) are comparable to those of a study done by Lall (2007:220) on the exclusion from school of pregnant learners, teenage pregnancy and the denial of education. This study indicates that there is growing evidence of unofficial and self-exclusion from school by teenage girls due to lack of support.

It was also found in the same study conducted by Lall, that pregnant teenagers and the denial of education indicate that most young women will leave school if they are told that being a teenage parent while at school is not good, or difficult. The findings of the above researchers contrast with those of this study as the latter indicate that 81% (n=81) of the respondents were attending school during their pregnancy. This confirms

that some schools around the hospital under study at Ehlanzeni district take into consideration the government’s policies of putting in place schemes to help pregnant teenagers and teenage mothers to remain in the school environment.

4.3.1.7 Highest level passed by respondents

Figure 4.7 depicts the highest level passed by the respondents.

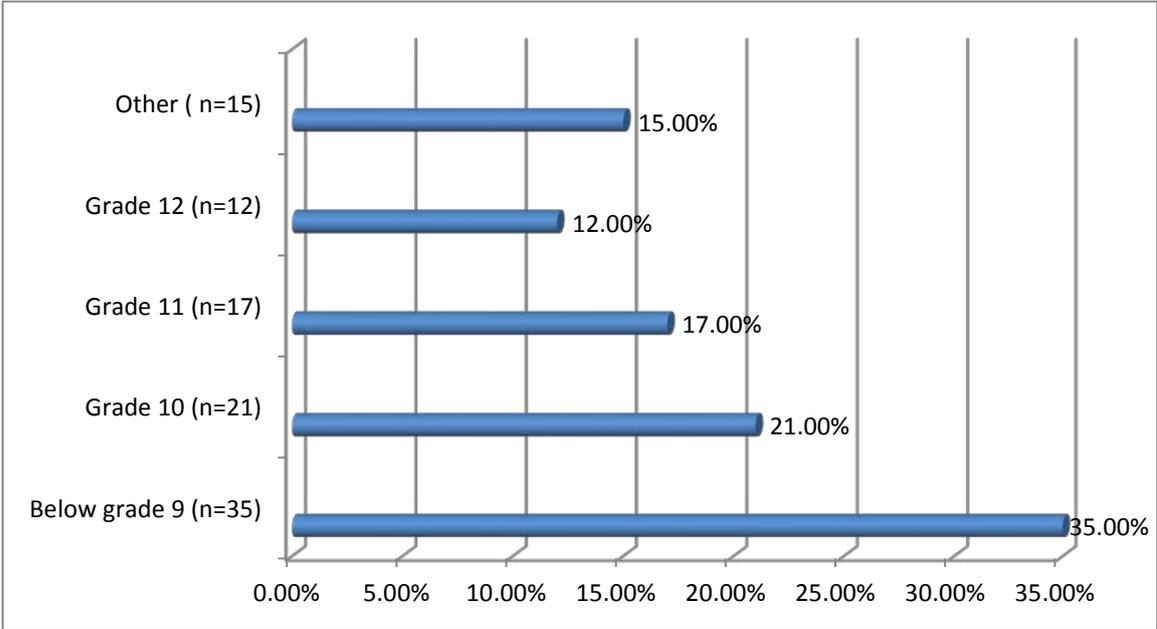


Figure 4.7
Highest grade passed by respondents (N=100)

The findings show that, 35% (n=35) were in grade nine or lower during the study, 21% (n=21) were in grade 10, 17% (n=17) were in grade 11 and 12% (n=12) were in grade 12. The findings of this study contrast with the findings in a study conducted by Bhana, Morrell, Shefer and Ngabaza (2010:872) who state that 34% of the 18-19-year-old group who dropped out of school and who went back afterwards did complete their studies. In a case control study about risk factors for teenage pregnancy among adolescent girls in Ecuador’s Amazon basin, Goicolea et al (2009:225) found that 41.3% dropped out of school due to teenage pregnancy and did not return. According to the present study, 15% of the pregnant teenagers classified under ‘other’, were not attending school at the time of the study, and this percentage includes those who had passed grade 12.

4.3.1.8 Communication between respondents and teachers

Figure 4.8 depicts the communication between the respondents and their teachers.

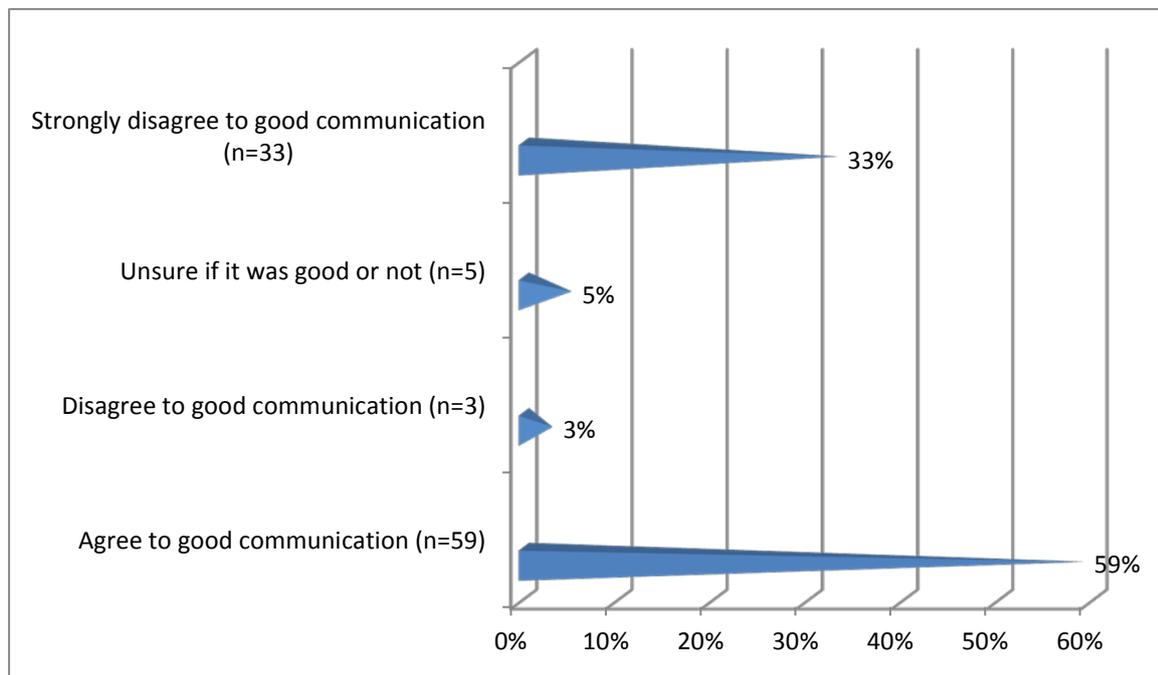


Figure 4.8

Communication between respondents and teachers (N=100)

The findings indicate that 59% (n=59) agreed that communication between them and their teachers was good, 3% (n=3) disagreed, 5% (n=5) were unsure, and 33% (n=33) strongly disagreed that communication with teachers was good. The findings of this study regarding communication of respondents with teachers are consistent with those of Bhana et al (2010:872) who, in their study of South African teachers' responses to teenage pregnancy and teenage mothers in schools, indicated that some teachers, who were found to be under difficult structural constraints (including constraints related to HIV/AIDS, poverty, social and economic stresses) were nevertheless able to show care and support for pregnant teenagers and teenage mothers. It is stated in the same study that the social context and support structures, both in and out of school, are important resources in the task of successfully negotiating schooling.

4.3.1.9 People with whom respondents spend time before being pregnant

Figure 4.9 illustrate the people with whom the respondents spent time before pregnancy.

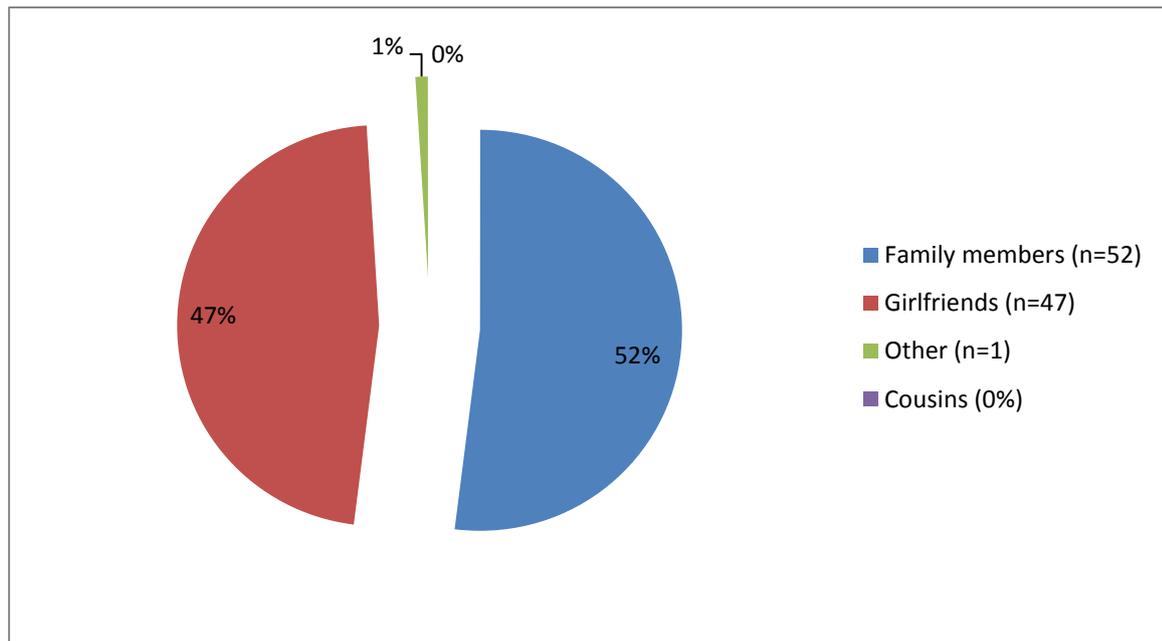


Figure 4.9

People with whom respondents spend time before being pregnant (N=100)

Figure 4.9 shows that 52% (n=52) of the respondents spent time with family members, 47% (n=47) spent time with girlfriends, 0% (n=0) rated for cousins and 1% (n=1) with other people. Although the results of this study revealed only that the pregnant teenagers spent much of their time with family and girlfriends, a study by Burns and Porter (2007:225) indicate that teenagers were sometimes alienated from family members and felt lonely to such an extent that they sought refuge from their loneliness by connecting with boyfriends. It is stated in the same study that teenagers want to be close to a person who will be there for them in tough times, they wanted to form a couple with someone, a real couple, so that they could feel safe and connected. According to the findings above, respondents spent most of their time with family and girlfriends.

4.3.1.10 Topics of communication with peers before pregnancy

Figure 4.10 shows the topic of conversation between the respondents and their peers before pregnancy.

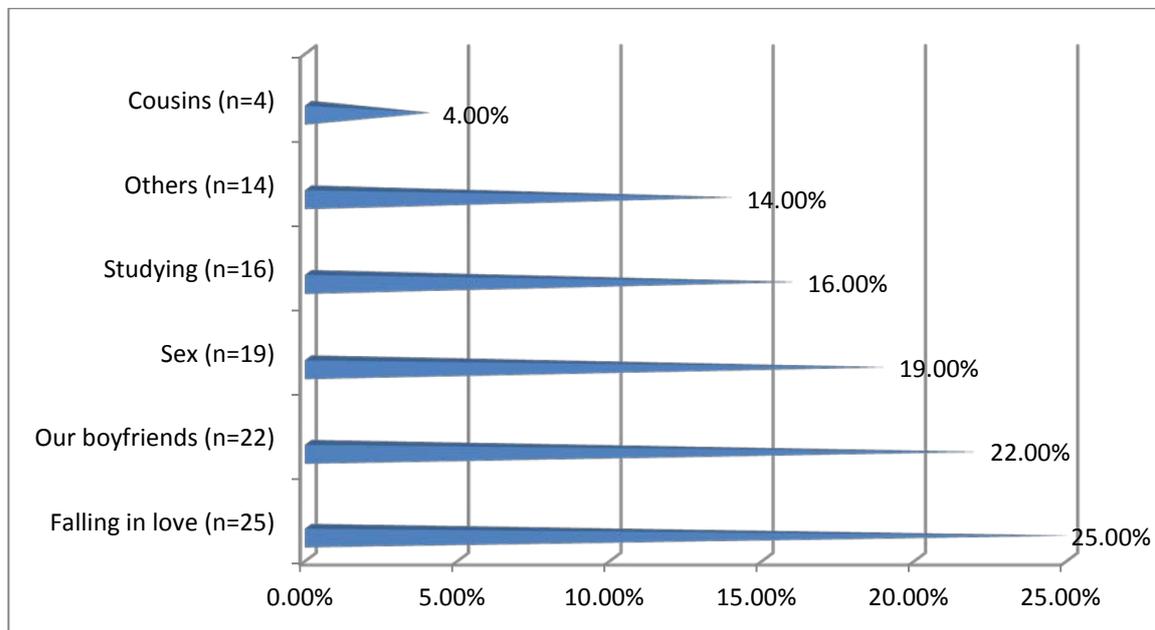


Figure 4.10
Topics of communication with peers (N=100)

Figure 4.10 shows communication between respondents and their peers. The findings indicate that 25% (n=25) talked about falling in love, 22% (n=22) about boyfriends, 19% (n=19) about sexual intercourse, 16% (n=16) about studying, 4% (n=4) about their cousins and 14% (n=14) about other topics such as family, household chores. According to Maluleke (2007:9), teenagers do talk about sexual experiences with their peers and even exaggerate in order to impress.

4.3.1.11 Respondents' experimentation with drugs before pregnancy

Figure 4.11 shows respondents experimentation with drugs before pregnancy.

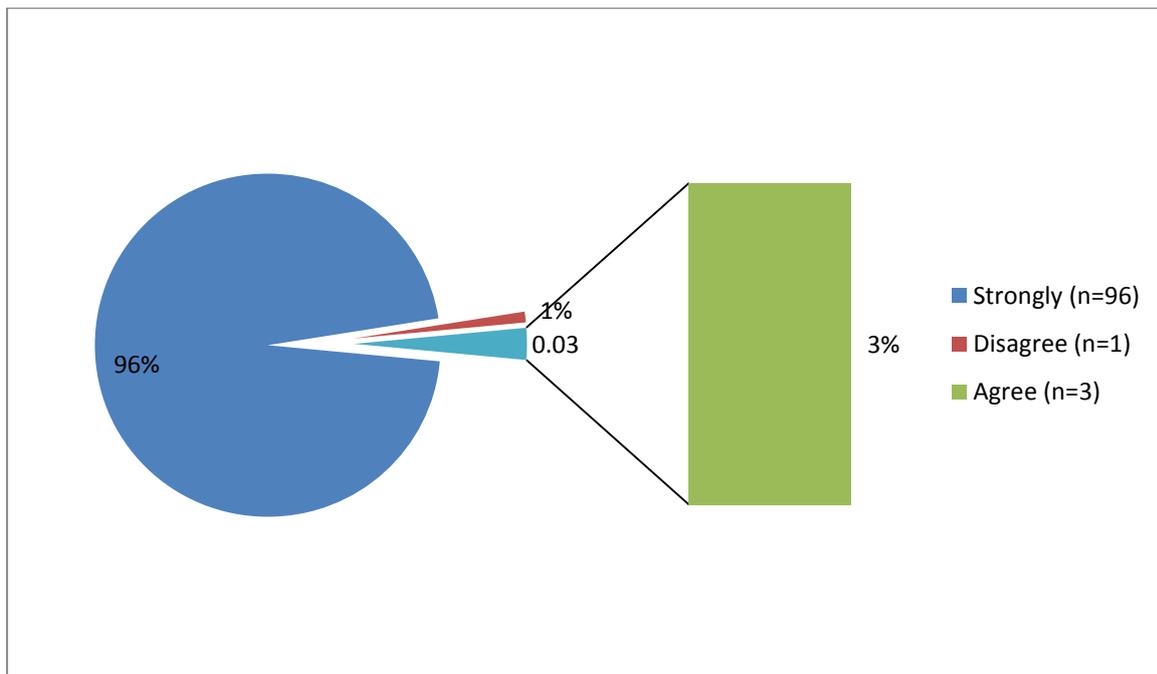


Figure 4.11

Respondents' experimentation with drugs before pregnancy (N=100)

Figure 4.11 indicated that 96% (n=96) strongly disagree that they had experimented with drugs, 1% (n=1) denied having used drugs and 3% (n=3) indicated that they have used drugs. These results indicate that there is little relationship between teenage pregnancy and drugs. The findings by Zapata, Hillis, Marchbanks, Curtis and Lowry (2008:642) in their study of methamphetamine use are independently associated with recent risky sexual behaviour and adolescent pregnancy. The study found that youth substance use in general, including use of cigarettes, alcohol, marijuana and other substances, was associated with initiation into sexual activity and non-use of contraception during the adolescents' last sexual intercourse.

4.3.1.12 Respondents family relations

Figure 4.12 indicates respondents' family relations.

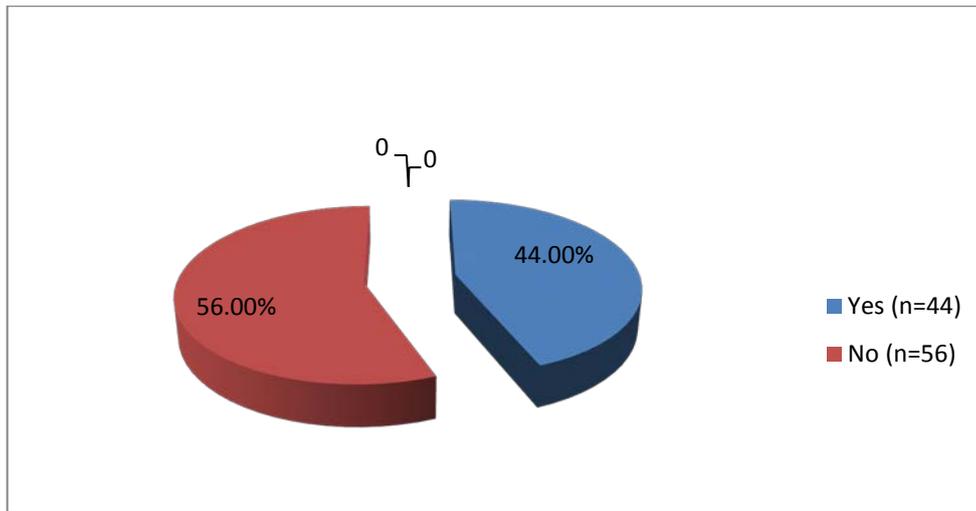


Figure 4.12
Respondents' family relations (N=100)

Figure 4.12 indicates that 44% (n=44) of the respondents live with both biological parents and 56% (n=56) do not live with their parents. A study by Goicolea et al (2009:225) show that teenage girls who have fallen pregnant tend not to have lived with two parents during some stage of their lives and some have lived for a year or longer without either mother or father.

According to Palermo and Peterman (2009:158) evidence from Sub-Saharan African studies about family planning indicated that female teenagers in Sub-Saharan Africa who have lost one or both parents are generally no more likely than their non-orphaned counterparts to marry before the age of 18.

4.3.1.12.1 People who live with the respondents

Figure 4.13 depicts people who live with respondents.

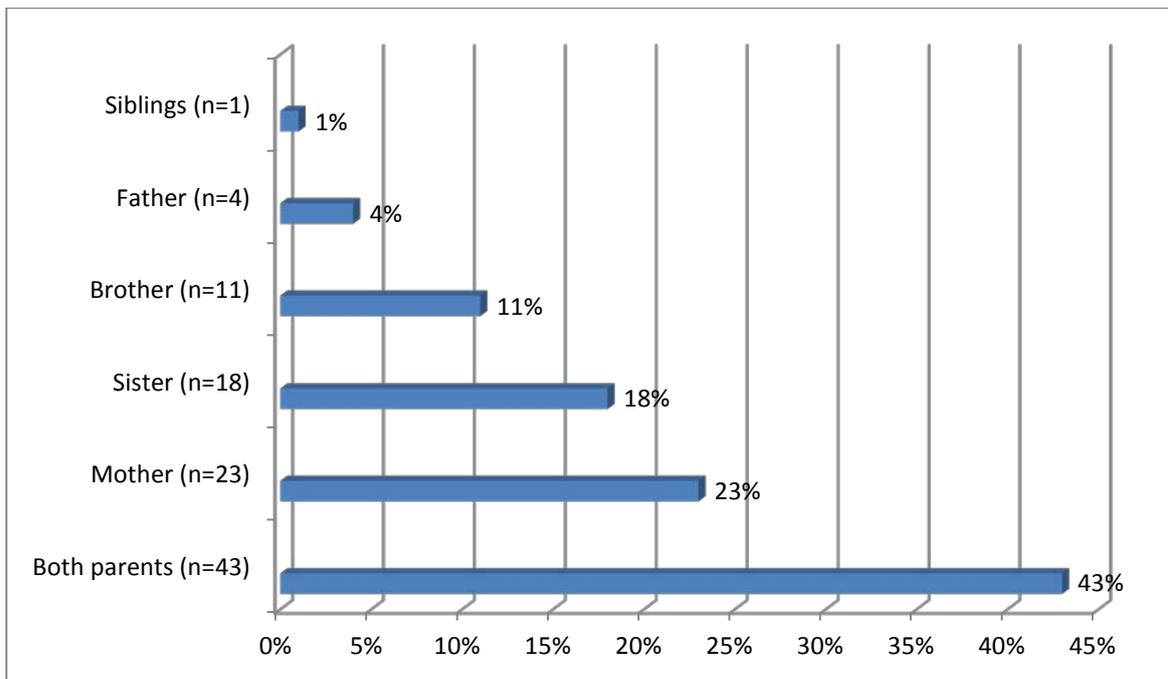


Figure 4.13
People who live with the respondents (N=100)

The study indicate 43% (n=43) of respondents living with both parents are likely to become pregnant. These findings contrast with the study done by Gaudie et al (2010:2) who found that antecedents of teenage pregnancy from a 14-year follow-up study using data linkage found that girls living in either step/blended or one-parent families were more likely to become pregnant as teenagers than those living with their original families.

Of the respondents 23% (n=23) live with the mother, 18% (n=18) live with sisters, 11% (n=11) with their brothers, 4% (n=4) with their father and 1% (n=1) with their siblings. According to the findings of the study done by Parlermo and Peterman (2009:158) about the risks facing orphans regarding early marriage, early sexual debut and teen pregnancy, it was found that in four countries female orphans had an increased chance of an early sexual debut, and in two countries, an increased chance of an early pregnancy.

4.3.1.12.2 People with whom respondents shared their thoughts

Figure 4.14 illustrates people with whom respondents share their thoughts.

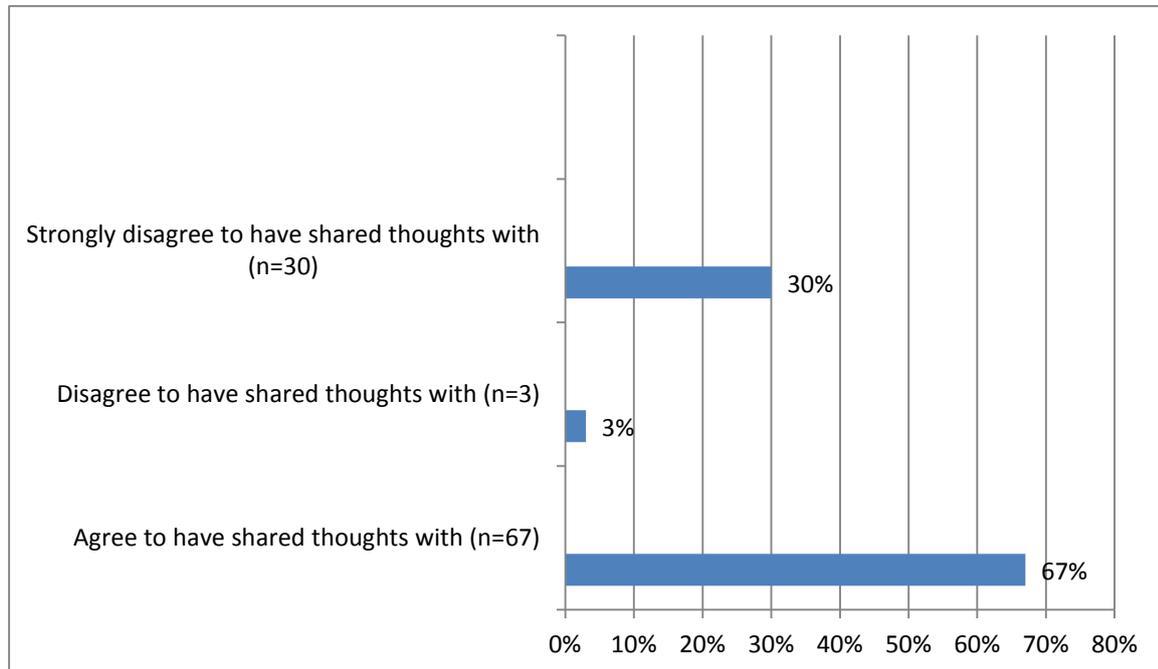


Figure 4.14

People with whom respondents shared their thoughts (N=100)

Figure 4.14 shows that 30% (n=30) of the respondents strongly disagreed with the statement that they shared their thoughts about relationships and feelings with the people they lived with, 3% (n=3) disagreed and 67% (n=67) agreed that they shared thoughts about relationships and feelings. According to Maja (2007b:43), poor communication between parents and their children about sexuality issues may be a contributory factor to teenage pregnancy. It was also found in this study that 30% (n=30) of the respondents did not share thoughts with those they live with and that this may contribute to teenage pregnancy. Grobler et al (2007:37) state that parents tend to abdicate their responsibility of seeing to the sex education of their children as they are unable to share information about sexuality with them.

4.3.1.13 Respondents' living conditions

Figure 4.15 shows respondents living conditions.

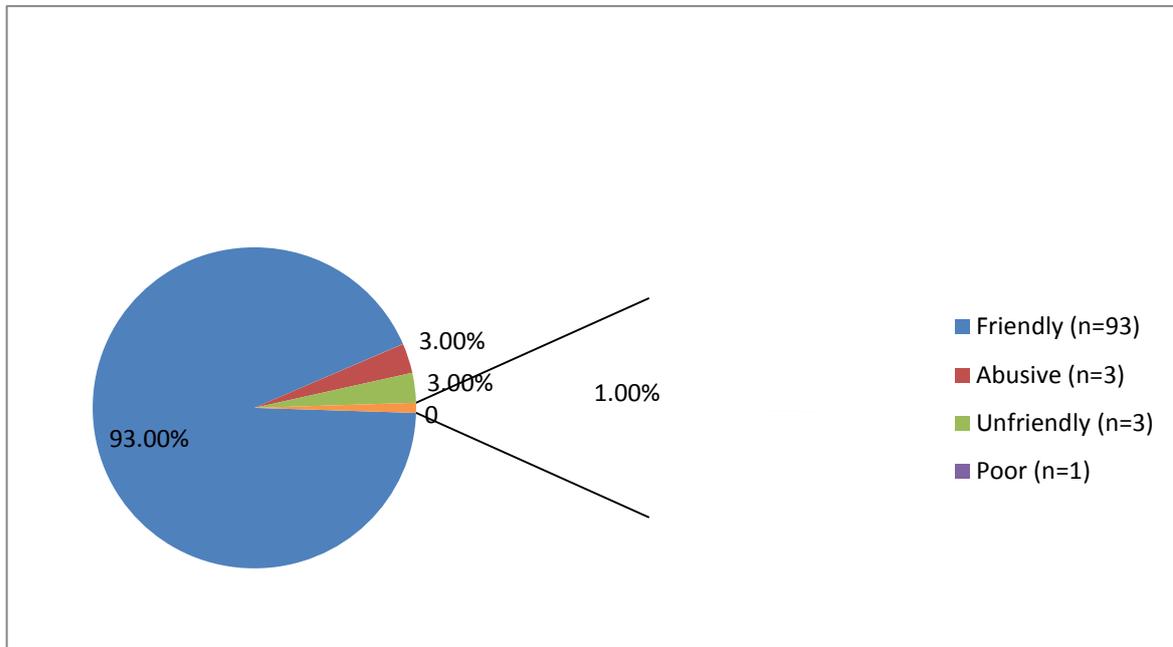


Figure 4.15
Respondents' living conditions (N=100)

Figure 4.15 shows that 93% (n=93) of the respondents live in a friendly environment, 3% (n=3) live in an abusive environment, 3% (n=3) live in an unfriendly environment and 1% (n=1) live without finances. A study done by Noll, Shenk and Putnam (2009:373) indicates that the experience of childhood sexual abuse has caused a significant increase in the risk of girls becoming pregnant during adolescence.

The above study is consistent with the findings by Goicolea et al (2009:223) who state that adolescent girls are also significantly more likely to become pregnant if they live in a very poor household where no parental control is present than in the conditions experienced by the control group. The findings by Francisco, Hicks, Powell, Styles, Tabor and Hulton (2008: 241) are that adolescents who report a history of sexual abuse, compared to those who do not report such a history, were significantly more likely to initiate sexual activity.

4.3.1.14 Respondents' household income distribution

Figure 4.16 indicates the combined household income distribution of the people living with respondents.

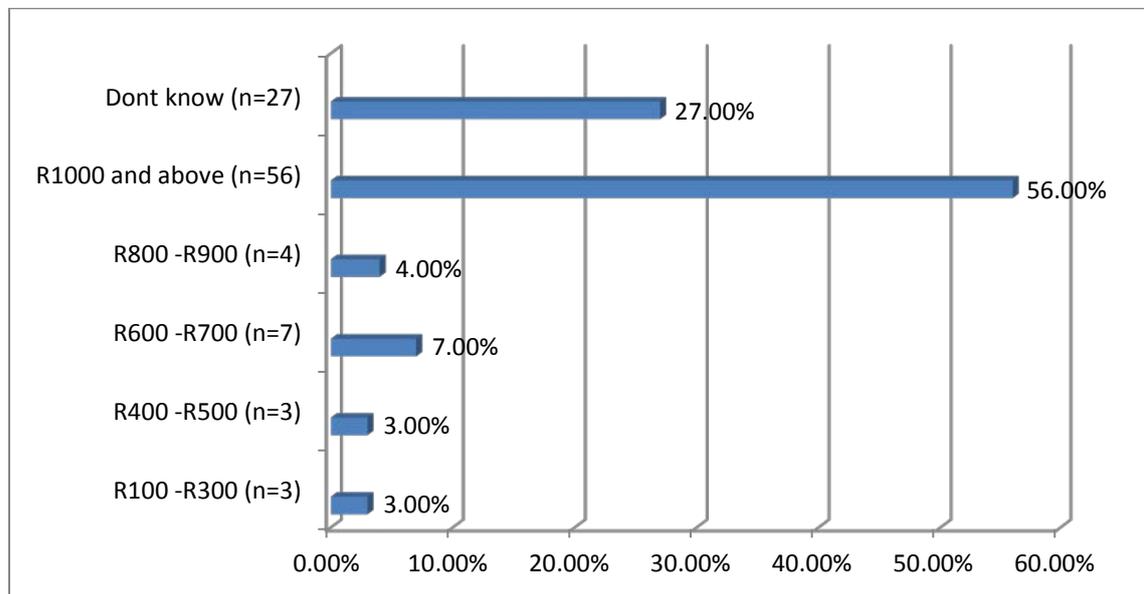


Figure 4.16

Respondents' combined household income distribution (N=100)

The combined income of the respondents between R100 and R300 was 3% (n=3), between R400 and R500 in another 3% (n=3) of the respondents. 7% (n=7) of respondents were between R600 and R700, while 4% (n=4) of respondents had household income of between R800–R900. 56% (n=56) of respondents had household income of R1000 and above, while 27% (n=27) of the respondents did not know the combined household income.

4.3.1.15 Respondents' contributions to the household income

Figure 4.17 depicts respondents' contributions to the household income.

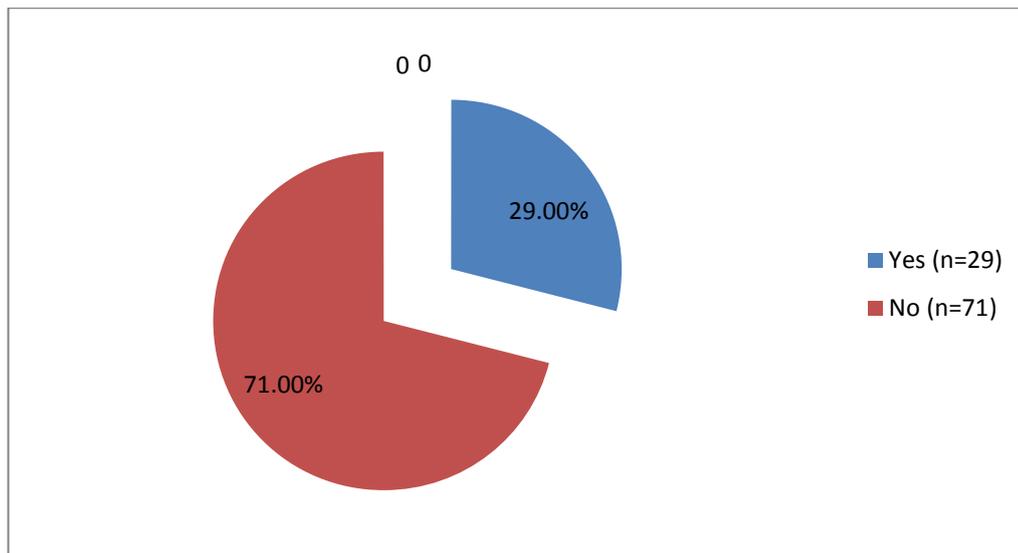


Figure 4.17
Respondents' contributions to the household income (N=100)

According to Grobler et al (2007:37), 75% (n=75) of teenagers who were sexually active before the age of 13 years old are receiving social grants if they qualify in accordance with South Africa's Department of Social Services guidelines. According to Grobler et al (2007:37), when teenagers were asked about their belief regarding the adequacy of a child support grant, namely whether it is sufficient or insufficient to raise a baby, 71% (n=71) believed it is not sufficient and 29% (n=29) believed it would be sufficient. Moultrie and McGrath (2007:442) report that the study commissioned by the Department of Social Development found no evidence of perverse incentives for childbearing associated with the child support grant.

These findings are cited in the report by South Africa (2009a:1), who found in their study that there was no empirical evidence of a link between teenage fertility and child support grants or that grants were being claimed but were not used for the welfare of the child. This is an interesting finding as this study also found no link between teenage pregnancy and social grants, as 71% (n=71) of the respondents did not receive any grants but were nevertheless pregnant.

4.3.1.16 Respondents' sources of income

Figure 4.18 shows the sources of respondents' income.

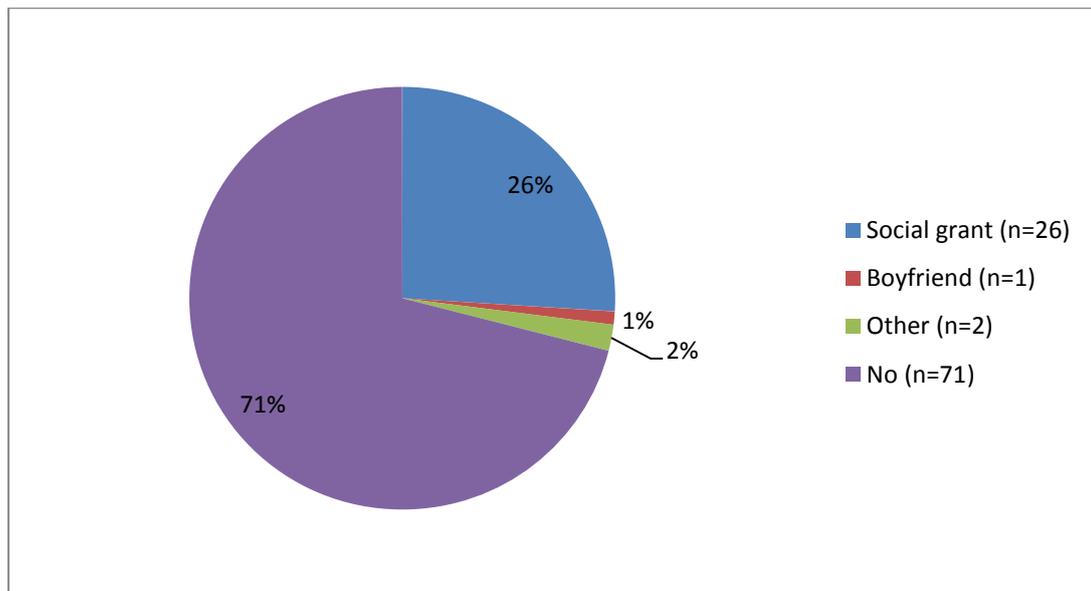


Figure 4.18
Respondents' sources of income (N=100)

The researcher found that 26% (n=26) contributed to the household income via child support grants. The inclusion criterion of respondents to this study was all teenagers who were younger than 19 years regardless of parity; thus it included teenagers who first became pregnant below the age of 14 years and were found to be pregnant again (they were therefore already receiving child support grants) as well as grants given to orphans in accordance with the Social assistance Act no 13 in (South Africa 2009b:10). Findings in this study tally with those of Grobler et al (2007:37) that 26% (n=26) of teenagers depend on support grants. These findings may have influenced the teenagers' perception of susceptibility to teenage pregnancy as they are already supporting themselves and think they can also take care of their children as they are already receiving a social support grant. The current study indicates that only 1% (n=1) contributed through money given by their boyfriend and 2% (n=2) contributed from other sources.

4.3.2 Section B: Individual perceptions, knowledge, awareness and practices relating to sexual intercourse and pregnancy

The individual perceptions of the respondents are given in this section. It deals with the knowledge, awareness of, and practices regarding sexual intercourse and pregnancy.

4.3.2.1 Age on commencing sexual intercourse

Figure 4.19 indicates the age of respondents' commencement of sexual intercourse.

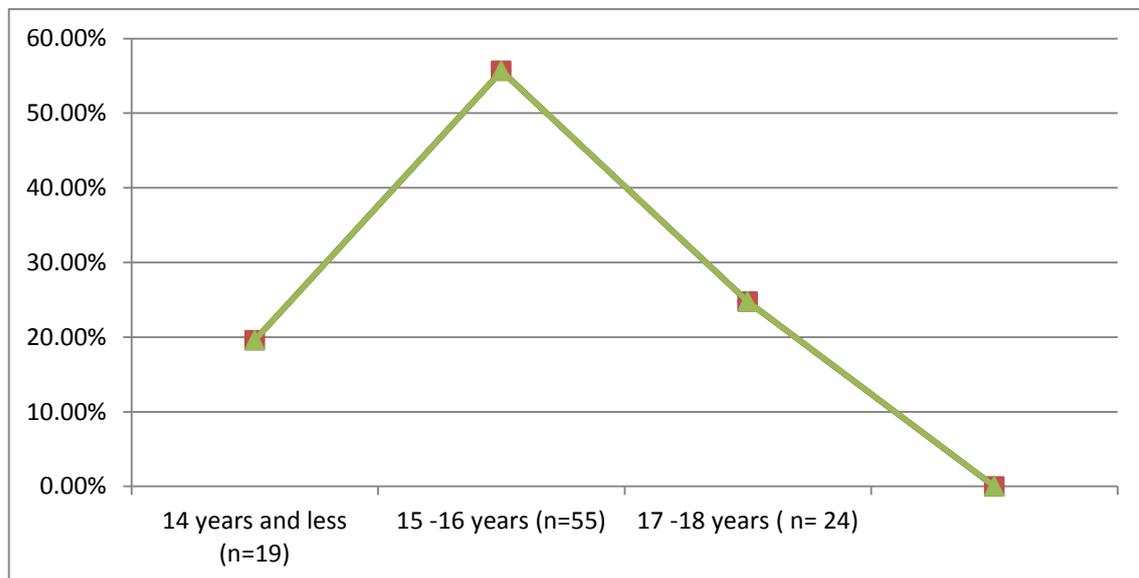


Figure 4.19

Respondents' age on commencing sexual intercourse (N=100)

Figure 4.19 indicates that 19% (n=19) of the participants started to have sexual intercourse when they were 14 years old or younger, 56% (n=56) between 15-16 years and 25% (n=25) started to have sexual intercourse when they were 17-18 years old. According to a study done by Krishnamoorthy et al (2008:100), data suggest that in Scotland 15% of 14-year-olds and 35 to 38% of 15-year-old females were sexually active with a mean age of first intercourse of 14 years and median age of 16 years old. Hindin and Fatusi (2009: 59) state that in Latin America and the Caribbean, half of the teenagers were between 18 and 19 years old when they had their first sexual experience as compared to 14 years and younger found in this study.

4.3.2.2 Respondents' reasons for engaging in sexual intercourse for the first time

Table 4.1 indicates reasons for respondents having sexual intercourse for the first time.

Table 4.1 Reasons for the respondents having sexual intercourse for the first time (N=100)

Reasons for having sexual intercourse	Frequency	Percentage
2.1.2.1 To enjoy sexual intercourse	36	36%
2.1.2.2 Please the boyfriend	22	22%
2.1.2.3 Made them feel secure and loved	13	13%
2.1.2.4 Fear of rejection by boy-friend	10	10%
2.1.2.5 Forced by boyfriend	9	9%
2.1.2.6 Peer pressure	5	5%
2.1.2.7 Others, please state	4	4%
2.1.2.8 It is un-cool to be a virgin	1	1%
2.1.2.9 Family pressure	0	0%
Total	100	100%

According to the HBM, perceived susceptibility means the teenagers' beliefs about their vulnerability to teenage pregnancy which will persuade them to take action to prevent pregnancy. Bowling (2009:41) indicates that the theory of reasoned action assumes that the intention to engage in certain behaviour is determined by the person's beliefs about the consequences of the behaviour and by subjective norms. Below are the findings about the respondents' perceived reasons for engaging in sexual intercourse for the first time:

Of the respondents 36% (n=36) engaged in sexual intercourse to enjoy the experience, 22% (n=22) permitted sexual intercourse to please their boyfriends, 13% (n=13) had sex because it made them feel secure and loved, 10% (n=10) feared rejection by their boyfriends if they refused, 9% (n=9) were forced by the boyfriend, 5% (n=5) were influenced by peer pressure, 4% (n=3) stated that they had sexual intercourse for other reasons like is natural to have a boyfriend and only 1% (n=1) said they thought its uncool to be a virgin.

The findings of this study are comparable to those of Burns and Porter (2007:225) who found that other reasons for the teenager to engage in sexual intercourse are to make a safe place for themselves in a chaotic and uncertain world and to establish closeness with someone warm and loving, a person who will be there for them in tough times. It is

also indicated in the same study that in some cases, having sexual intercourse was the teenagers' way of making a romantic life for themselves.

According to the WHO (2008:6), forced sexual intercourse may range from unwanted touching to forced marriage to rape. According to Bowling (2009:41), the theory of Reasoned Action was not applicable to the 4% (n=4) of teenagers who expressed no valid reason for engaging in sexual intercourse: according to this theory, behaviour is determined by the person's beliefs about the consequences of the behaviour and by subjective norms. Only 1% (n=1) of the respondents stated that it is "uncool to be a virgin" in their view, meaning they do not support the notion that they should maintain their virginity. Respondents rated 0% (n=0) for family pressure as playing a role in their engagement in sexual intercourse for the first time.

According to the above findings, respondents did not perceive themselves as vulnerable to teenage pregnancy, as indicated by their attitudes towards teenage pregnancy as a threat, and were not ready to prevent teenage pregnancy. The 9% (n=9) who were forced by their boyfriends to have sexual intercourse, which resulted in teenage pregnancy, are an exception. It is cited in Burns and Porter (2007:217) that many teenagers engage in sexual intercourse for fear that they may lose their partner or fear of being alone and insecure.

4.3.2.3 Respondents' knowledge about sexuality education before their first encounter

Figure 4.20 shows information on sexuality education received by respondents.

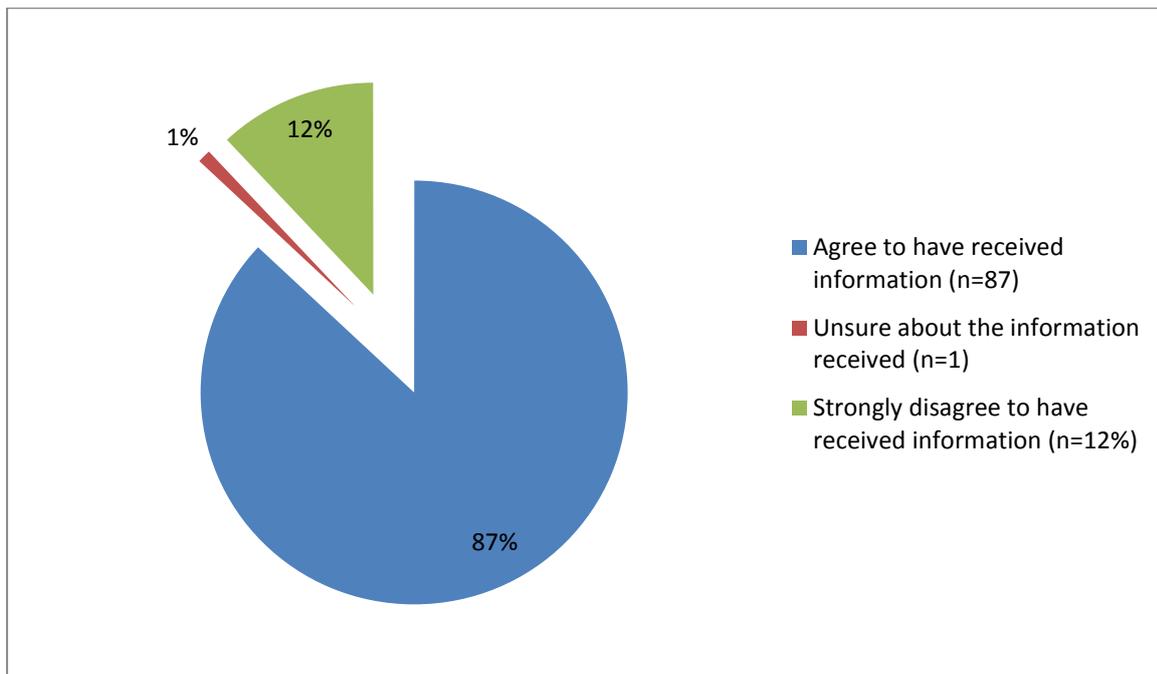


Figure 4.20

Respondents received information of sexuality education before their first encounter (N=100)

According to Polit and Beck (2008:148), the HBM postulates that people commit to engaging in behaviour from which they anticipate deriving valued benefits and that perceived competence or self-efficacy relating to a given behaviour increases the likelihood of commitment to action and actual performance of the behaviour. Knowledge of sexual intercourse and its consequences will cause the teenager to undertake the behaviour for reasons that would bring benefits.

Figure 4.20 shows that 87% (n=87) of the respondents agreed that they had received information on sexual intercourse before their first sexual encounter; only 1% (n=1) were unsure about whether they had received it and 12% (n=12) indicated that they received no such information before their first sexual encounter. According to the findings, if the respondents agree that they received information on sexual intercourse before their first sexual encounter, this means they were taught about methods of preventing teenage pregnancy; according to Blackburn (2009:6), abstinence should form part of comprehensive sex education about the start of sexual activity. Findings by Hindin and Fatusi (2009:59) indicate that teenagers do have knowledge of sexual intercourse before they engage in sexual activities but are more concerned about how safe are condoms than the risks of unintended pregnancy.

4.3.2.4 Respondents' age on receiving information about sexuality education

Figure 4.21 indicates respondents' age when receiving information on sexuality education.

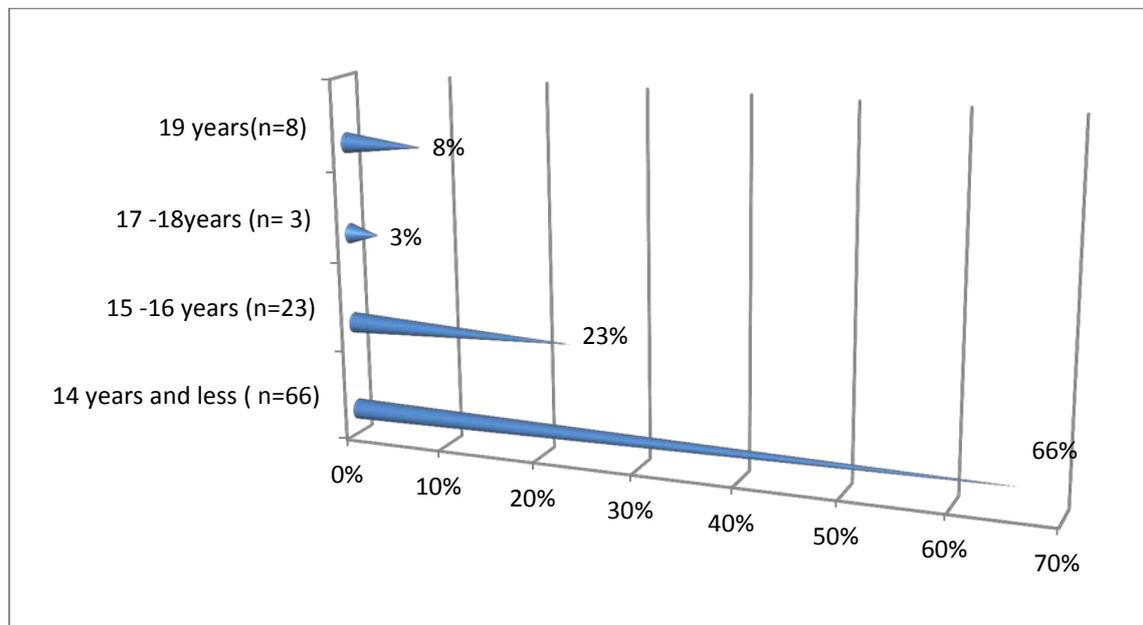


Figure 4.21

Respondents' age when receiving information on sexuality education (N=100)

Polit and Beck (2008:150) explain that the HBM postulates that even when one recognises personal susceptibility, action will not take place unless the individual perceives the severity to be high enough to have serious organic or social implications. Teenage pregnancies were not perceived as a threat, since the above findings indicate that 66% of the respondents received sexuality education before the first encounter but became pregnant nevertheless. According to the HBM, health behaviour, using a wellness orientation, serves to empower teenagers to take action to prevent teenage pregnancy.

Figure 4.21 indicates that 66% (n=66) of the respondents received sexuality education when they were 14 years or younger, 23% (n=23) at 15-16 years old, 3% (n=3) at 17-18 years of age and, lastly, 8% (n=8) were 19 years old. According to these findings, receiving information about sexuality had no impact on the prevention of teenage pregnancy, since the majority of teenagers were informed at an early stage of 14 years and below.

4.3.2.5 Respondents' sources of information about sexuality

Table 4.2 indicates respondents source of information received on sexuality.

Table 4.2 Sources of information about sexuality (N=100)

Source of information	Frequency	Percentage
2.1.5.1 Teachers	32	32%
2.1.5.2 Parents	17	17%
2.1.5.3 Radio	14	14%
2.1.5.4 Health workers	12	12%
2.1.5.5 Magazine	12	12%
2.1.5.6 Television	9	9%
2.1.5.7 Friends	4	4%
Total	100	100%

Table 4.2 shows the respondents' source of information about sexual intercourse. The total percentage of respondents who received information from teachers was 32% (n=32), while 17% (n=17) received information from parents. These findings differ from those of Grobler et al (2007:36) who found that 50% respondents receive information about sexual intercourse from parents (as compared to the 17% (n=17) found in this study). A further 14% (n=14) received information from the radio, 12% (n=12) from health care workers, 12% (n=12) from magazines, 9% (n=9) from television, 4% (n=4) from friends and none from other sources.

4.3.2.6 Type of information received by respondents about sexuality

Table 4.3 shows the type of information received by the respondents about sexuality.

Table 4.3 Type of information received about sexuality (N=100)

Information received about sexuality	Frequency	Percentage
Consequences of unsafe sex	20%	20%
Sexually transmitted infections	17%	17%
Contraception	16%	16%
Consequences of teenage pregnancy	15	15%
Teenage pregnancy prevention	14	14%
Safe sex	10	10%
Abstinence	5	5%
Other, please state	2	2%
Consequences of abortion	1	1%
Total	100	100%

Of the respondents 20% (n=20) indicated that they were advised about the consequences of unsafe sex, 17% (n=17) about sexually transmitted infections, 16% (n=16) about contraception, 15% (n=15) about the consequences of teenage pregnancy, 14% (n=14) about teenage pregnancy prevention, 10% (n=10) about safe sex, 5% (n=5) about abstinence from sexual intercourse, 2% (n=2) about others such as contraception, 1% (n=1) about the consequences of abortion.

The findings of a study conducted by Lall (2007:234) are in contrast with the results of this study in that teenagers reported that they had not received any information on sexual intercourse and contraception. It is indicated in the same study that teenagers said that they were not taught about where to get contraception and that they were embarrassed to ask for condoms in the shops. Teenagers were only told not to have sexual intercourse but without any further explanations.

In a study conducted by Lall (2007:234) about exclusion from school due to pregnancy and the denial of education it is indicated that inadequate sex education was given in many schools and no information was provided to learners about contraception, the emotions and feelings about sexual experiences, pregnancies and abortions or about where to obtain oral contraceptives. These findings are described in Santelli et al (2007:155) who found that the promotion of abstinence is a worthwhile goal, particularly among younger teenagers, but that only 6% (n=6) of the teenagers were informed about abstinence and only 10% (n=10) were advised about safe sex.

Maluleke (2007:14), in a study about youth perceptions of sexuality in the Limpopo Province of South Africa, revealed a varied understanding of the concept of sexuality. According to the author's findings, the discussion of sexuality was mainly related to heterosexual activity which is kept private and seen as a personal matter and not openly discussed between parents and siblings. According to Bandura's Social Cognitive Theory, self-efficacy is one of the four factors that influences cognitive appraisal, which is a person's belief in his/her own capacity to carry out particular behaviour e.g. using contraceptives to prevent teenage pregnancy (Polit & Beck 2008:149). This means that empowering teenagers via sexuality education will enable them to make an informed decision in preventing the threat of teenage pregnancy. The above findings show that only 5% were aware of the role of abstinence which might have influenced their self-efficacy if they had decided to abstain from sex.

4.3.2.7 Respondents' knowledge about the consequences of sexual intercourse

According to the HBM, individuals will change their behaviour if they believe that it could have detrimental consequences. Thus, unless teenagers understand the personal impact (clinical or social) of becoming pregnant and the benefits of preventing it, action to avoid becoming pregnant will not be taken (Daddario 2007:364).

Table 4.4 illustrates the percentage of the total responses on knowledge of consequences of sexual intercourse.

Table 4.4 Respondents' knowledge about the consequences of sexual intercourse (N=100)

Consequences of sexual intercourse	Frequency	Percentage
Pregnancy	20	20%
Sexually transmitted infections e.g. syphilis	20	20%
Contracting HIV	20	20%
Loss of virginity	10	10%
Illegitimate children	9	9%
Having to drop out of school	7	7%
Early marriage	7	7%
Being a mother at an early age	7	7%
Total	100	100%

Of the respondents, 20% (n=20) indicated that they were aware of pregnancy as a consequence of sexual intercourse; 20% (n=20) were aware of sexually transmitted infections such as syphilis, 20% (n=20) were aware of contracting HIV; 10% (n=10) were aware that they would lose their virginity; 9% (n=9) were aware of the possibility of having an illegitimate child; 7% (n=7) were aware of having to leave school if they were pregnant; 7% (n=7) were aware of the possibility of an early marriage if they were to fall pregnant and 7% (n=7) were aware that they could become a mother at an early age. No participants reported that they were aware of other consequences beside the ones given.

Hindin and Fatusi (2009:59) revealed that despite knowledge of the various consequences of sexual intercourse such as the risk of pregnancy and STIs (including the possibility of contracting HIV), adolescents were more concerned about the safety of condoms than the risks of an unintended pregnancy. It is stated in the same study that adolescents did not consider contraception and were sometimes pressurised to prove their fertility

4.3.2.8 Respondents’ perceptions about falling pregnant as a teenager

Figure 4.22 reflex respondents’ perceptions about becoming pregnant.

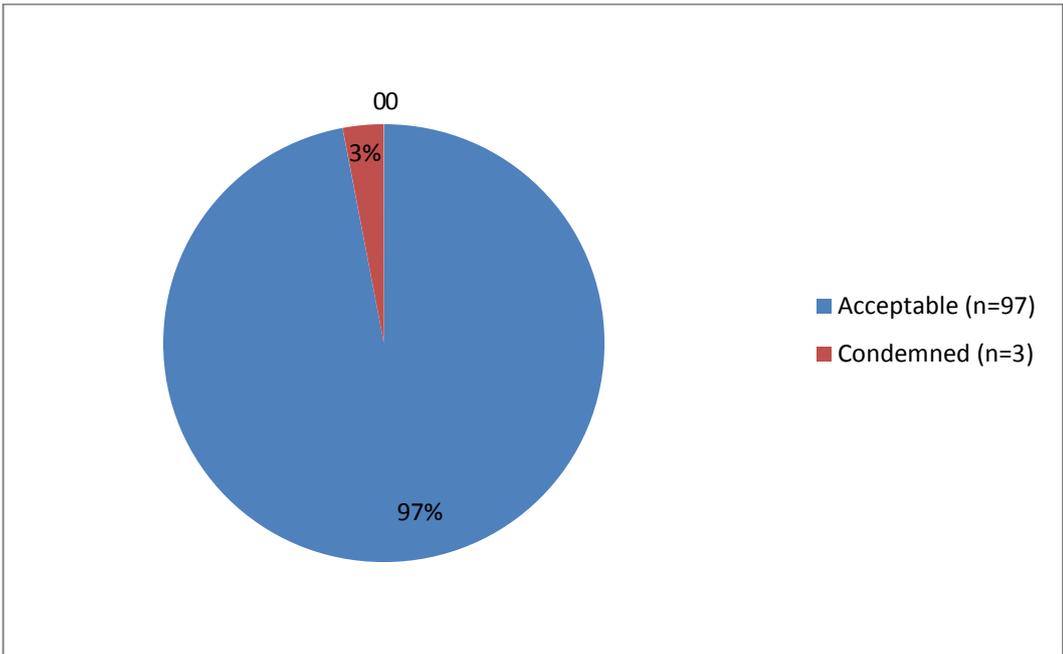


Figure 4.22
Respondents’ perceptions about becoming pregnant (N=100)

Figure 4.22 reflects that 97% (n=97) of the respondents perceived falling pregnant as acceptable while only 3% (n=3) condemned falling pregnant. According to (Mkhwanazi 2010:353), a teenager indicated that the pregnancy was unexpected and was sad and embarrassed. It is indicated in the same study that some teenagers felt ashamed and perceived being pregnant as a mistake.

4.3.2.9 Respondents' received information about teenage pregnancy before becoming pregnancy

Figure 4.23 shows the information received by respondents regarding information received about teenage pregnancy.

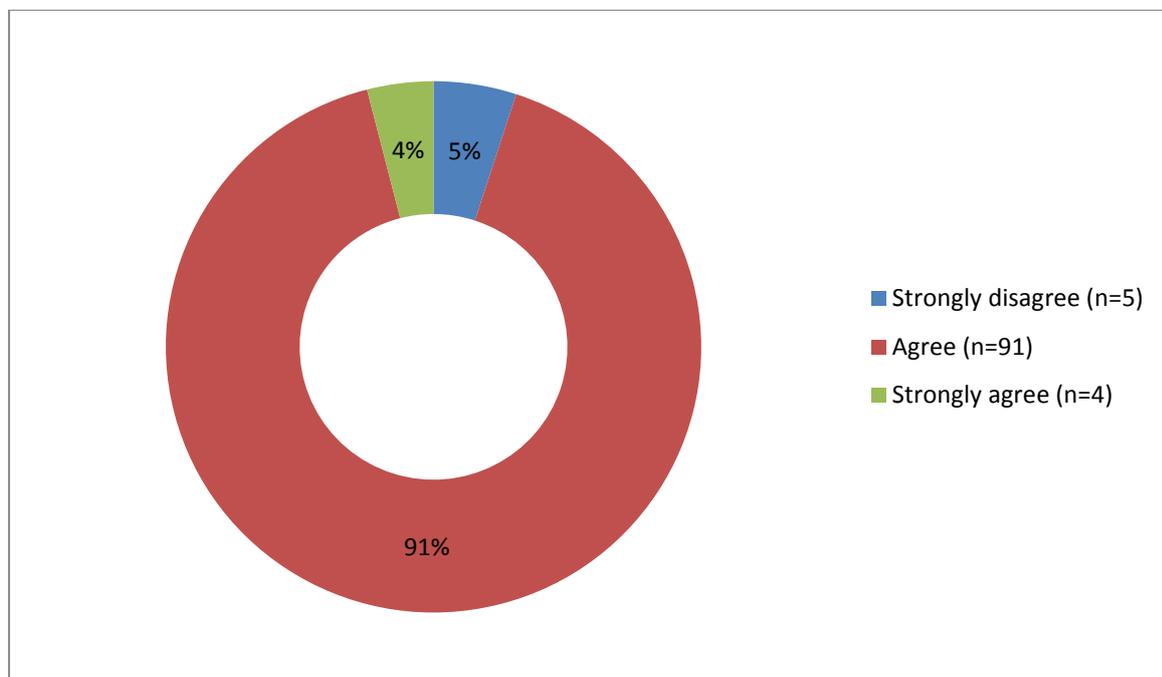


Figure 4.23

Respondents' information about teenage pregnancy (N=100)

Of the respondents, 5% (n=5) strongly disagreed that they had received information regarding teenage pregnancy before pregnancy, 91% (n=91) agreed that they did receive the information and 4% (n=4) strongly agreed that they had been given the information.

4.3.2.10 Information received by respondents before falling pregnant

Table 4.5 reflects the type of information the respondents received about teenage pregnancy before becoming pregnant.

Table 4.5 Information received by respondents before becoming pregnant (N=100)

Information received	Frequency	Percentage
Contracting HIV	19	19%
The prevention of teenage pregnancy	18	18%
That teenage pregnancy may lead to lower socio-economic status	18	18%
Poverty	11	11%
Illegitimate child	10	10%
Dropout of school	10	10%
The consequences of teenage pregnancy	7	7%
Unemployment	4	4%
Other, please state	2	2%
That teenage pregnancy may cause hypertensive disorders of pregnancy such as pre-eclampsia	1	1%
The benefit of having a baby when ready	0	0%
Total	100	100%

Of the respondents, 19% (n=19) received information on the possibility of contracting HIV, 18% (n=18) received information on the prevention of teenage pregnancy while 18% (n=18) indicated that they had been made aware that a teenage pregnancy may lead to a lower socio-economic status. Of the responded, 11% (n=11) were made aware that pregnancy may lead to poverty, 10% (n=10) were informed that the child born out of wedlock will be regarded as illegitimate and 10% (n=10) were informed that pregnancy may result in a drop out of school. Of the respondents 7% (n=7) stated that they were informed about the consequences of teenage pregnancy, 4% (n=4) were informed that a teenage pregnancy may lead to unemployment, 2% (n=2) received other information such as teenage pregnancy may lead to early marriage, than that specified and only 1% (n=1) received information that teenage pregnancy may cause hypertensive disorders associated with pregnancy, such as pre-eclampsia.

According to Lall (2007:234), in a study on exclusion from school, teenage pregnancy and the denial of education indicated that teenagers were given the following message: 'This is the female body, this is the male body, put them together and you have a baby. Respondents in this study indicated that they never received any information about contraception, emotions and feelings about pregnancy and abortions, and they were often simply advised not to have sex, not that if they do have sexual intercourse, they should use contraceptives.

4.3.2.11 Factors that encouraged pregnancy

Table 4.6 reflects the factors that encouraged the respondents to fall pregnant.

Table 4.6 Indicate factors that encouraged teenage pregnancy (N=100)

Factors that encourage pregnancy	Frequency	Percentage
I felt loved by my boyfriend	30	30%
To please my boyfriend	24	24%
Others, please specify	15	15%
Perceived sexual intercourse as a game or adventure	16	16%
Sexual intercourse gives me comfort	6	6%
Peer pressure	5	5%
Was afraid to loose my boyfriend	3	3%
To prove my fertility	1	1%
Poverty in order to receive social grant.	0	0%
All my friends are having sexual intercourse	0	0%
Curiosity	0	0%
Total	100	100%

Of the participants 30% (n=30) indicated that they felt loved by their boyfriends while 24% (n=24) of respondents wanted to please the boyfriend. 16 % (n=16) were encouraged by other reasons than those specified such as pressure from boyfriends and their families, and 15% (n=15) perceived sexual intercourse as a game or an adventure. Of the respondents 6% (n=6) engaged in sexual intercourse for comfort and 5% (n=5) was due to peer pressure, 3% (n=3) was afraid to lose their boyfriend while 1% (n=1) wanted to prove their fertility.

The findings of Minnick and Shandler (2011:242) in their study on changing adolescent perceptions on teenage pregnancy are consistent with some of the findings of this study, as some teenagers knew about teenage pregnancy but did not know how to prevent it. They wanted to have a baby to love, had a partner who wanted a baby, or thought that a baby would bring the partners together (Minnick and Shandler 2011:242).

4.3.3 Section C: Perceptions regarding the use of contraceptives

4.3.3.1 Utilisation of contraceptives by the respondents

Figure 4.24 depicts respondents' utilisation of contraceptives

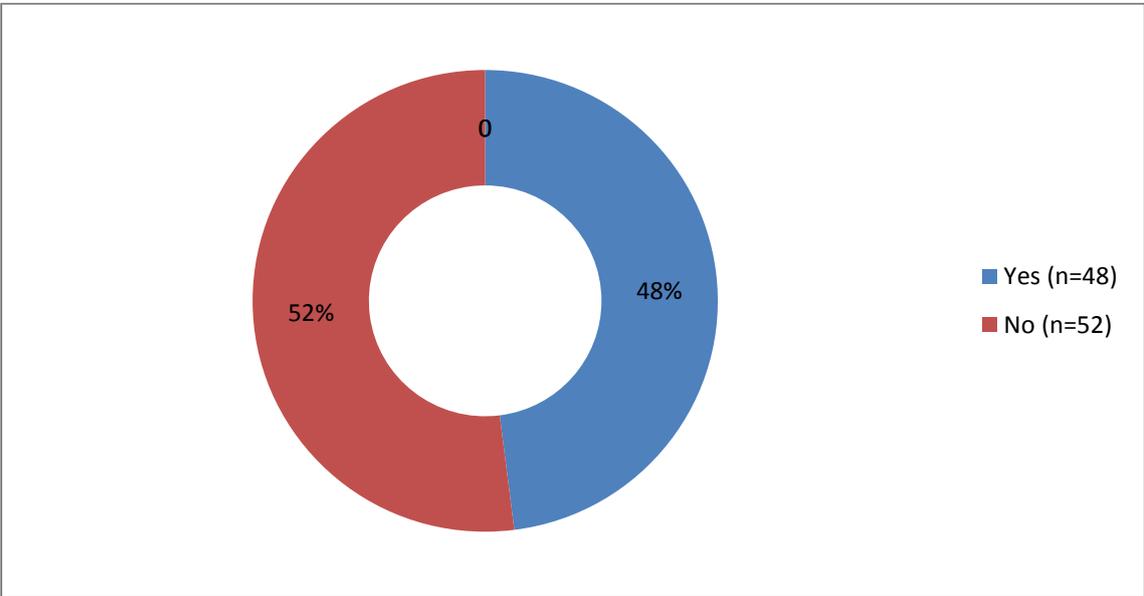


Figure 4.24
Respondents' utilisation of contraceptives (N=100)

According to Daddario (2007:364), a person's perceived risk of contracting a disease, the perceived severity of the threat or disease (in this study a teenage pregnancy), as well as the person's perception of good things that could happen from engaging in certain behaviour, will depend on the primary resource for change which is self-efficacy or confidence in making use of contraceptives to prevent teenage pregnancy and improve health.

Of the respondents in the present study, only 48% (n=48) used contraceptives inconsistently before pregnancy; 52% (n=52) did not use contraception, thus exposing

themselves to the risk of falling pregnant. According to the study done by Mkhwanazi (2010:355) on understanding teenage pregnancy in a post-apartheid South African township, it was found that 56% (n=56) of the respondents lack contraceptive knowledge, which contributed to poor utilisation of contraceptives and thus to teenage pregnancy. Maja (2007b:43) cited Mkhwanazi (2010:355) with regard to the factors impacting on contraceptive use among youth in Northern Tshwane; finding that young people have been reported as having inadequate knowledge about the reproductive function and consequently lack knowledge of contraception.

4.3.3.2 Respondents' reasons for not using contraceptives

Table 4.7 indicates respondents' reasons for not using contraceptives.

Table 4.7 Reasons for not using contraceptives (N=100)

Reasons for not using contraceptives	Frequency	Percentage
Other, please specify	45	45%
I thought I am still young to fall pregnant	24	24%
Did not know about contraception	13	13%
It was too late to use, pregnant already	8	8%
My boyfriend wanted a baby	4	4%
Wanted to prove my fertility	4	4%
The reproductive clinic was far	2	2%
Culturally taboo	1	1%
I was raped	0	0%
Total	100	100%

Maja (2007b:43) states that among the reasons why clients do not use contraceptives is the attitude of the staff; one of the teenagers said that she went to the clinic twice and she was not given the injection she wanted and was forced to use a pill. Amy and Loeber (2007:300), in their study on pregnancy during adolescence, indicate that teenagers stated that they felt they were not vulnerable after repeated sexual intercourse had not led to conception. Some of the findings of this study are consistent with those of Amy and Loeber (2007:300) as 14% (n=14) of the respondents did not have information on contraception before they fell pregnant.

Of the respondents' 45% (n=45) of the respondents mentioned other reasons besides what was asked such as fear of nurses and fear of infertility. Of the respondents 24% (n=24) thought they were still too young to fall pregnant so did not use contraceptives, 13% (n=13) did not know about contraception, 8% (n=8) did not use contraception as it was too late because they were already pregnant, 4% (n=4) indicated that the boyfriend wanted a baby, 4% (n=4) wanted to prove their fertility, and 2% (n=2) said that the reproductive clinic was too far away to enable them to obtain contraceptives. 1% (n=1) stated that culturally it is a taboo to use contraceptives.

4.3.3.3 Respondents' age when starting to use contraceptives

Figure 4.25 shows the age at which the respondents started to use contraceptives.

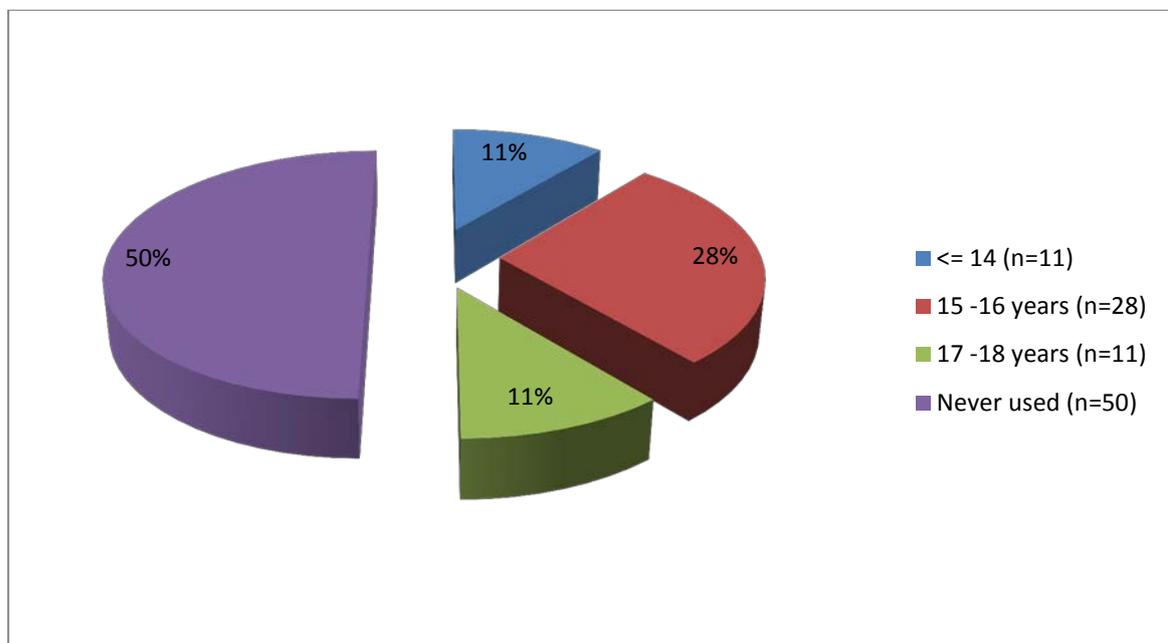


Figure 4.25

Age at which respondents started to use contraceptives (N=100)

Of the respondents 11% (n=11) indicated that they started at 14 years and below, 28% (n=28) started when they were between 15 and 16 years, 11% (n=11) started when they were 17-18 years old, and 50% (n=50) have never used contraceptives.

Krishnamoorthy et al (2008:99), in their study on adolescent females and hormonal contraception, indicate that there has been a significant increase in the number of adolescent females aged >12 years prescribed hormonal contraception by their primary care physicians. The study further explains that the proportion of 10-11 year-olds

prescribed the combined oral contraceptive pill. The findings of Krishnamoorthy et al (2008:99) are consistent with the findings of this study as 14% (n=14) of the respondents stated that they started to use contraceptives at 14 years and younger.

4.3.3.4 Age at which respondents' received information on contraception for the first time

Figure 4.26 indicates the age at which the respondents' received information about contraceptives for the first time.

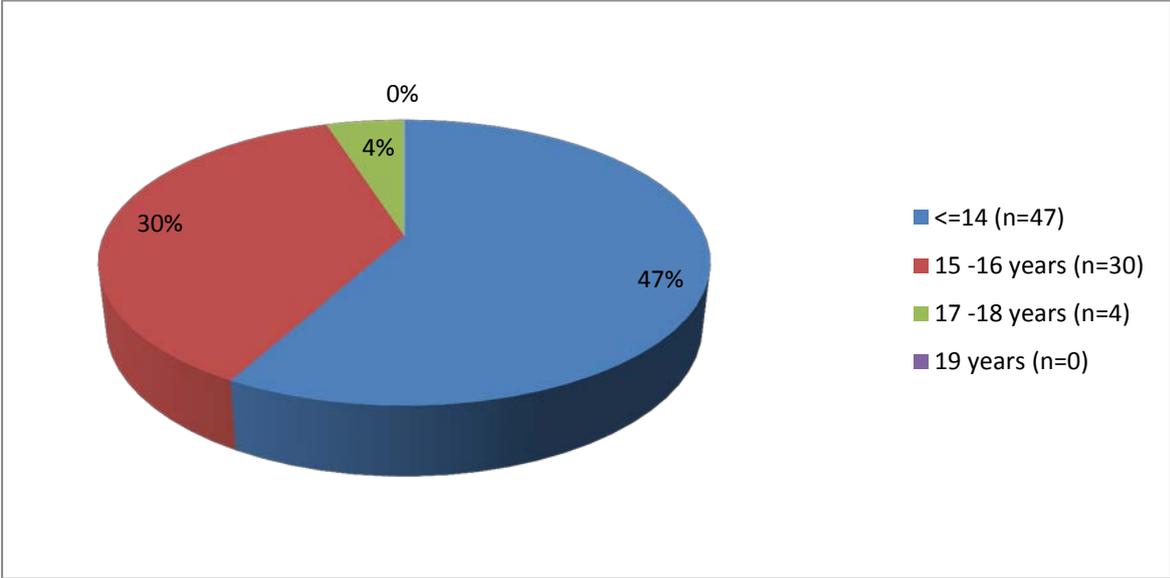


Figure 4.26
Age at which information on contraceptives was received for the first time (N=100)

Of the respondents, 47% were 14 years and younger, 30% (n=30) aged 15-16 years, 4% (n=4) aged 17-18 years and at 19 years all respondents had received the information on contraceptives. 19% (n=19) cases age was not specified.

4.3.3.5 Respondents' choice of contraception

Figure 4.27 indicates the choices respondents had in regard to contraception.

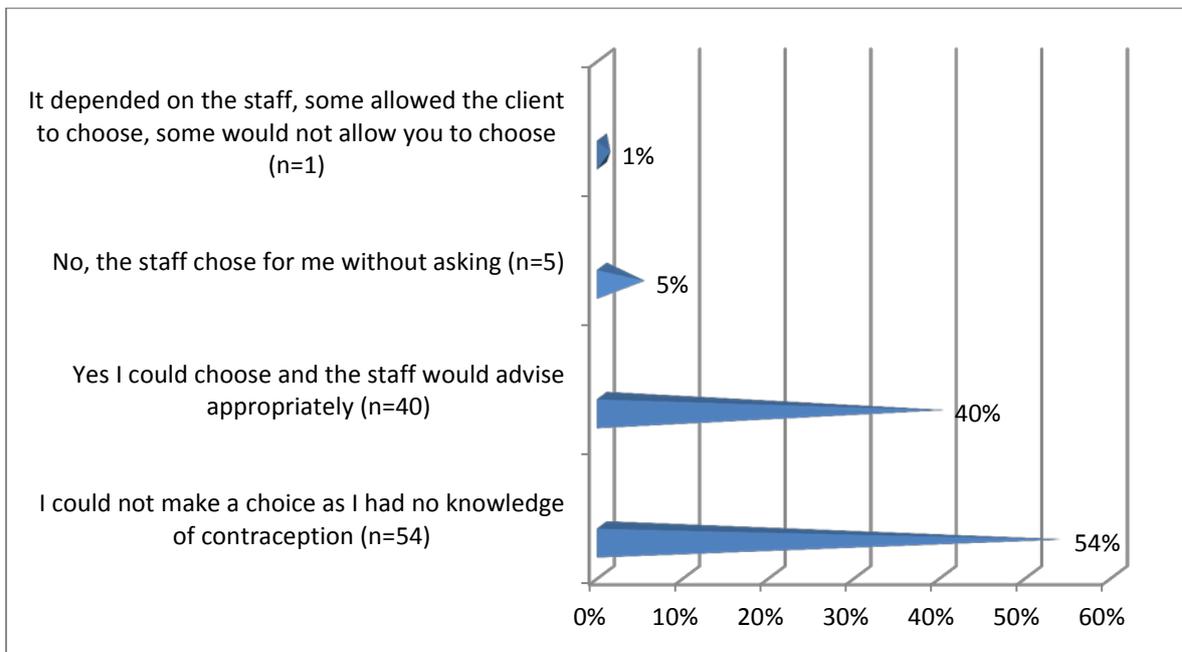


Figure 4.27
Choice on the type of contraception (N=100)

Of the respondents, 54% (n=54) could not specify the choices they had, 40% (n=40) were allowed to choose and were given appropriate advice and 1% (n=1) indicated that some of the staff would choose and some not.

According to this study, 5% (n=5) of the respondents indicated that the staff was choosing for them without asking. This is consistent with the findings of a study conducted by Maja (2007b:45), where one teenager reported that she was told that she thinks she knows too much and the staff simply made the choice for her. Maja (2007b:45) states that among the reasons why clients do use contraceptives is the attitude of the clinic nursing staff; according to the findings in one of the provinces in South Africa, teenagers who attend state clinics were harassed by nurses who were rude, short-tempered and arrogant. In the same study, nurses acknowledged that their comments were usually intended to make the teenager shy and embarrassed. Despite being allowed to choose their own method of contraception, 40% (n=40) of respondents did not use contraceptives as they were already pregnant during the study.

4.3.3.6 Types of contraceptives used by the respondents

Of the respondents 55% (n=55) had the injection, 41% (n=41) were using condoms, 3% (n=3) used other unspecified methods such as traditional methods of contraception.

and only 1% (n=1) was taking oral contraceptives. Goncalves et al (2011:205), in their study about contraceptive medication, fear of infertility and teenage pregnancy in Brazil, found that because many knew that hormones continue to circulate through the body for quite some time, intermittent interrupted contraceptive use was, by and large, not believed to diminish the protection against pregnancy provided by the contraceptive pill. Poor utilisation of different methods is confirmed by the results of this study: 55% (n=55) reported that they had had the injection and 41% (n=41) used condoms but were found to be pregnant during the study.

Table 4.8 indicates the total percentage of contraceptives used by the respondents.

Table 4.8 Types of contraception used by the respondents (N=100)

Contraceptives used	Frequency	Percentage
Injectable contraception	55	55%
Condom	41	41%
Other, please specify	3	3%
Oral contraception	1	1%
Intrauterine contraceptive device	0	0%
Calendar method	0	0%
Coitus interruptus	0	0%
Body temperature method	0	0%
None of the above	0	0%
Total	100	100%

4.3.3.7 Respondents' access to contraception before falling pregnant

Figure 4.28 depicts the accessibility of contraceptives for use by respondents before they fell pregnant.

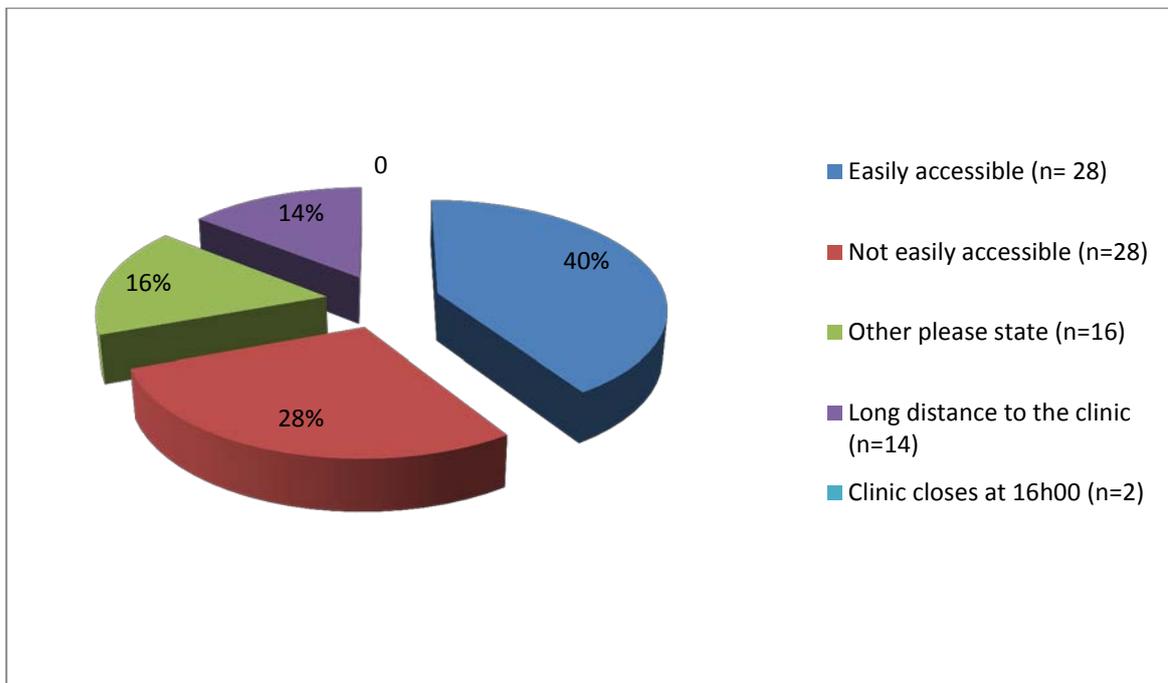


Figure 4.28
Accessibility of contraceptives before pregnancy (N=100)

Of the respondents, 40% (n=40) indicated that contraceptives were easily accessible, 28% (n=28) indicated that contraceptives were not easily accessible. 16% (n=16) did not specify accessibility, 14% (n=14) indicated that the clinic was too far from home to obtain the contraceptives and 2% (n=2) indicated that the clinic closed at 16h00 daily, making access after-hours impossible.

Maja (2007b:44), in a study on the factors impacting on contraceptive use among youth in Northern Tshwane, indicates that failure of services to provide clients with methods of choice or continual contraception because of lack of stock may hamper the effective utilisation of such health service by clients.

4.3.3.8 Respondents' opinions about using a condom

Table 4.9 shows the opinion of respondents regarding using a condom.

Table 4.9 Respondents' opinions on using a condom (N=100)

Respondents' opinions on using a condom	Frequency	Percentage
It is 100% effective in preventing pregnancy	35	35%
It is good as it can prevent sexually transmitted infections in pregnancy	32	32%
It interferes with sexual intercourse	15	15%
Do not have a problem with using condom	8	8%
It shows that you don't trust each other	5	5%
It is against my culture	3	3%
It will burst in the uterus	2	2%
Total	100	100%

Table 4.9 indicates that 35% (n=35) of the respondents indicate that the use of a condom is effective in preventing pregnancy, 32% (n=32) stated that using a condom is a good idea as it can prevent sexual infections, 15% (n=15) indicated that using a condom can interfere with sexual intercourse, 8% (n=8) reported no problems with using condoms, 5% (n=5) stated that using a condom shows that there is no trust between partners, 3% (n=3) said that using a condom is against their culture, and 2% (n=2) stated they feared that the condom might burst in the uterus.

Hindin and Fatusi (2009:60) indicate that a recent review done in both developing and developed nations found that peer-led sex education interventions had a limited impact on condom use, pregnancy and obtaining a new sexual partner. Mkhwanazi (2010:351) found that teenagers who were in love with one another perceived sexual intercourse as an expression of their love and regarded not using condoms as an expression of fidelity.

Santelli et al (2007:152), in their study explaining recent declines in adolescent pregnancy in the USA between 1995 and 2002 were primarily attributable to improved contraceptive use.

4.3.3.9 Respondents' means of using the contraceptive method chosen

Figure 4.29 shows respondents' means of using the contraceptive method chosen.

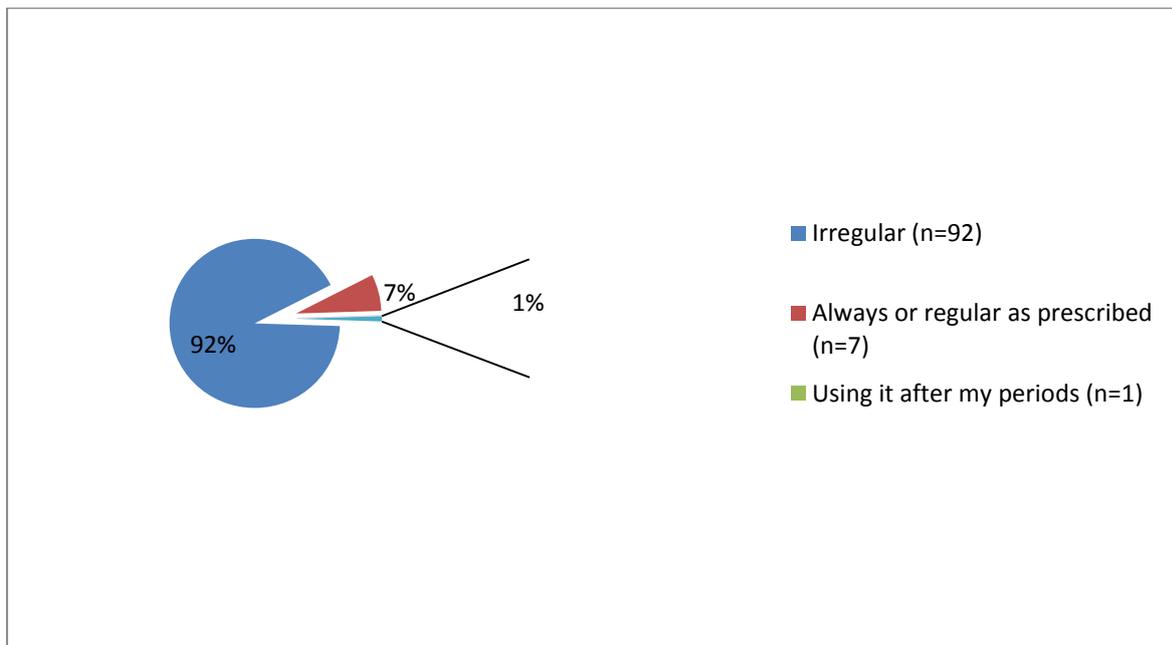


Figure 4.29
Ways of using contraception (N=100)

Of the respondents 92% (n=92) of the respondents used contraceptives on an irregular basis. Seven percent (n=7) of the respondents indicated always using contraception as prescribed, 1% (n=1) indicated they were using contraceptives only after they had had their menstrual period. Santelli et al (2007:154) stated that effective contraceptive use may be responsible for more than a 100% decline in pregnancy risks. Mkhwanazi (2010:352) found that teenagers who were pregnant had either not used contraceptives or had used them incorrectly and failed to prevent becoming pregnant. This was confirmed in the same study by a teenager who stated that she fell pregnant because she did not go back for a follow up to receive her contraception.

4.3.3.10 Respondents' experience with the injection as contraception

Figure 4.30 depicts the experience of respondents when using injectable.

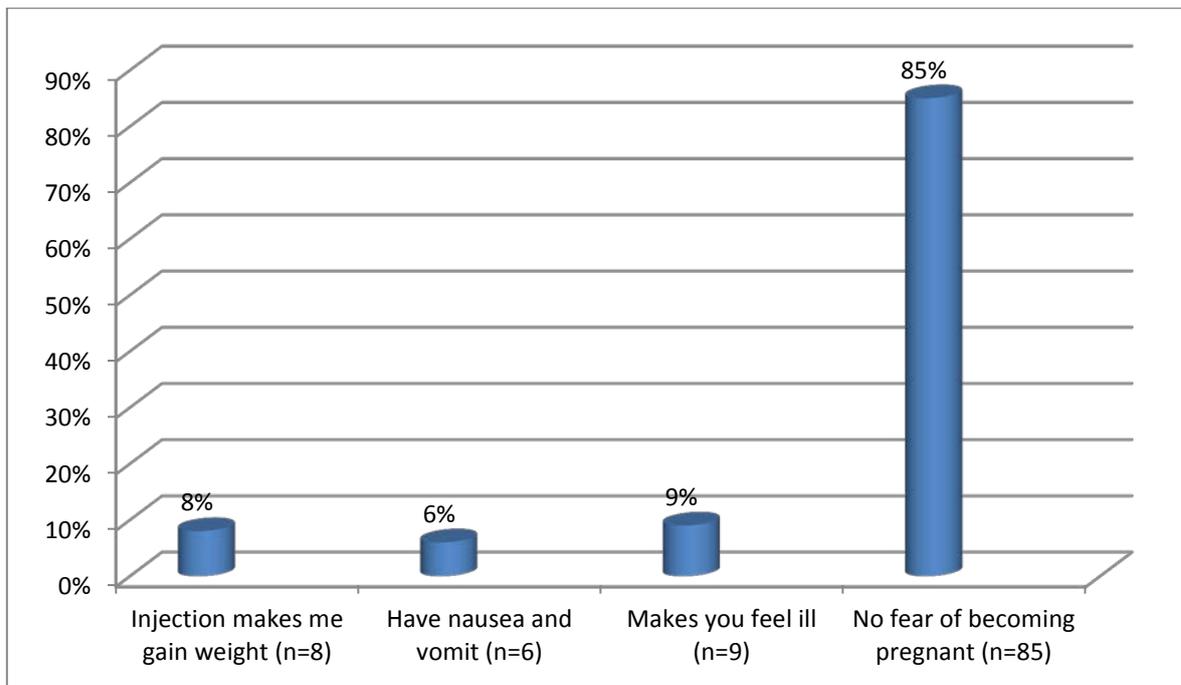


Figure 4.30
Experiences of respondents using an injection (N=100)

Of the respondents 8% (n=8) reported that they had gained weight, 6% (n=6) experienced nausea and vomiting, 9% (n=9) stated that the contraceptive injection made them feel ill and 85% (n=85) reported no side effects of injections. The findings of this study show that even though 85% of teenagers were confident about the effect of injection contraception, they did not use it effectively as they were pregnant during the study.

4.3.3.11 Individuals with whom respondents discussed contraception

Figure 4.31 illustrates individuals with whom use of contraceptives were discussed.

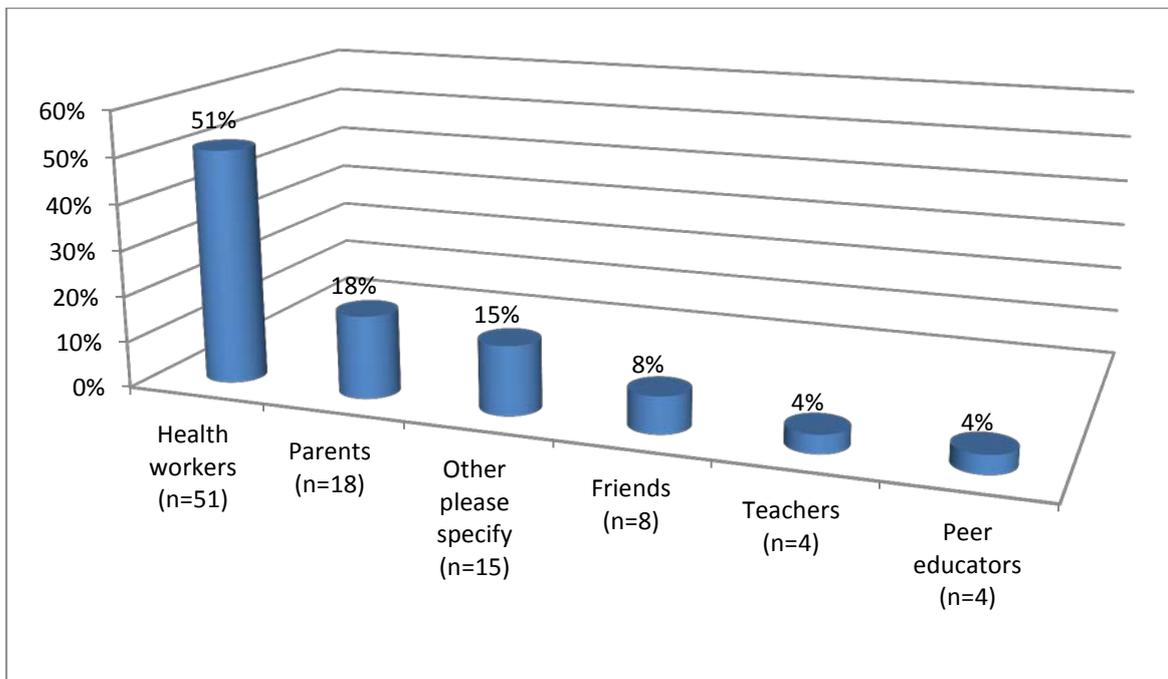


Figure 4.31

Individuals with whom use of contraceptives were discussed (N=100)

Of the respondents 51% (n=51) discussed contraceptive methods with health care workers, 18% (n=18) with parents, 15% (n=15) with other sources such as traditional healers and elders, 8% (n=8) with friends, 4% (n=4) with teachers, and 4% (n=4) with peer educators.

According to these findings, health care workers and parents were the primary adults with whom contraceptives could be discussed.

Mkhwanazi (2010:356) showed that parents do not talk to their children about contraception and nurses ridiculing teenagers when the latter try to access contraceptives in clinics creates a fertile ground for a teenage pregnancy to occur. The researcher in this study found that 8% (n=8) of the respondents could discuss contraception with friends and this is consistent with the study by Mkhwanazi (2010:356) who found that in trying to prevent pregnancy, girls turned to their peers for advice and were often given incorrect information regarding what contraception to use, when to use it and what its effects were.

4.3.3.12 Attitudes of nurses regarding the provision of contraceptives

Figure 4.32 illustrates the perceptions of respondents about the attitudes of the nursing staff concerning the provision of contraceptives.

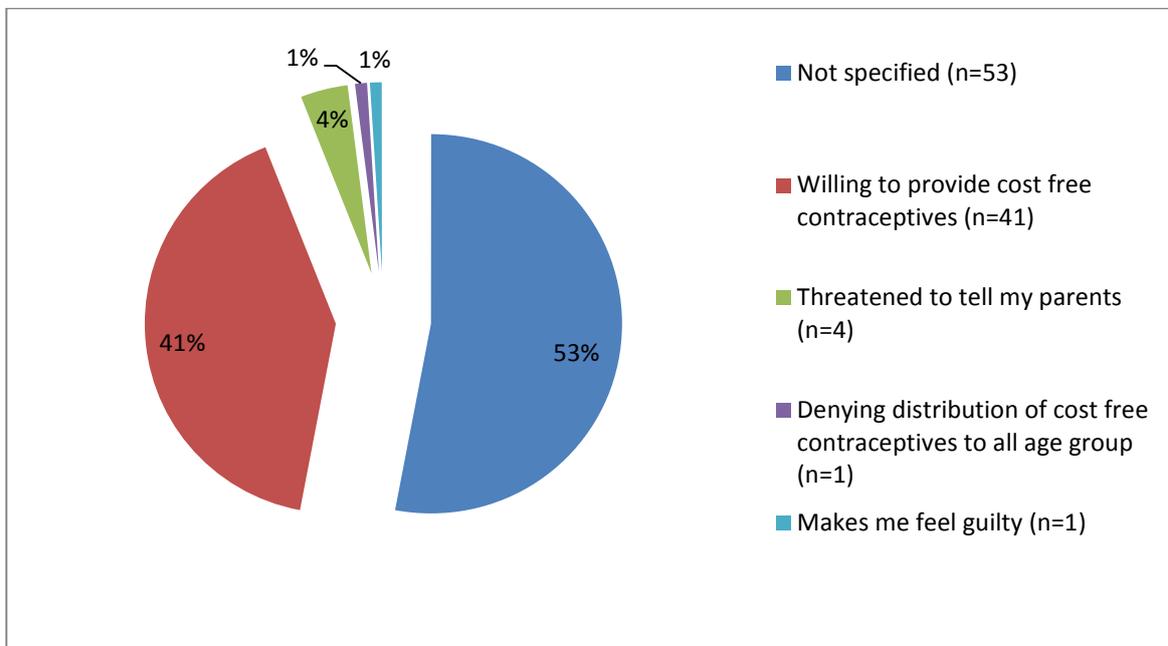


Figure 4.32

Attitudes of nursing staff regarding the provision of contraceptives (N=100)

Of the respondents 53% (n=53) indicated that this question was not specific to them, which is in line with poor utilisation of contraceptives by teenagers; 41% (n=41) stated that nurses were willing to provide cost free contraceptives; 4% (n=4) of the respondents indicated that some of the nursing personnel threatened to tell their parents, 1% (n=1) indicated that nursing personnel refused to provide cost free contraceptives and 1% (n=1) indicated that nurses made her feel guilty about using contraceptives. The findings of this study are comparable to those in the study by Mkhwanazi (2010:536) who indicated that some teenagers were ridiculed by nurses when trying to access contraceptives at the clinics.

4.3.3.13 Respondents' use of emergency contraception

Figure 4.33 shows the respondents' use of emergency contraception.

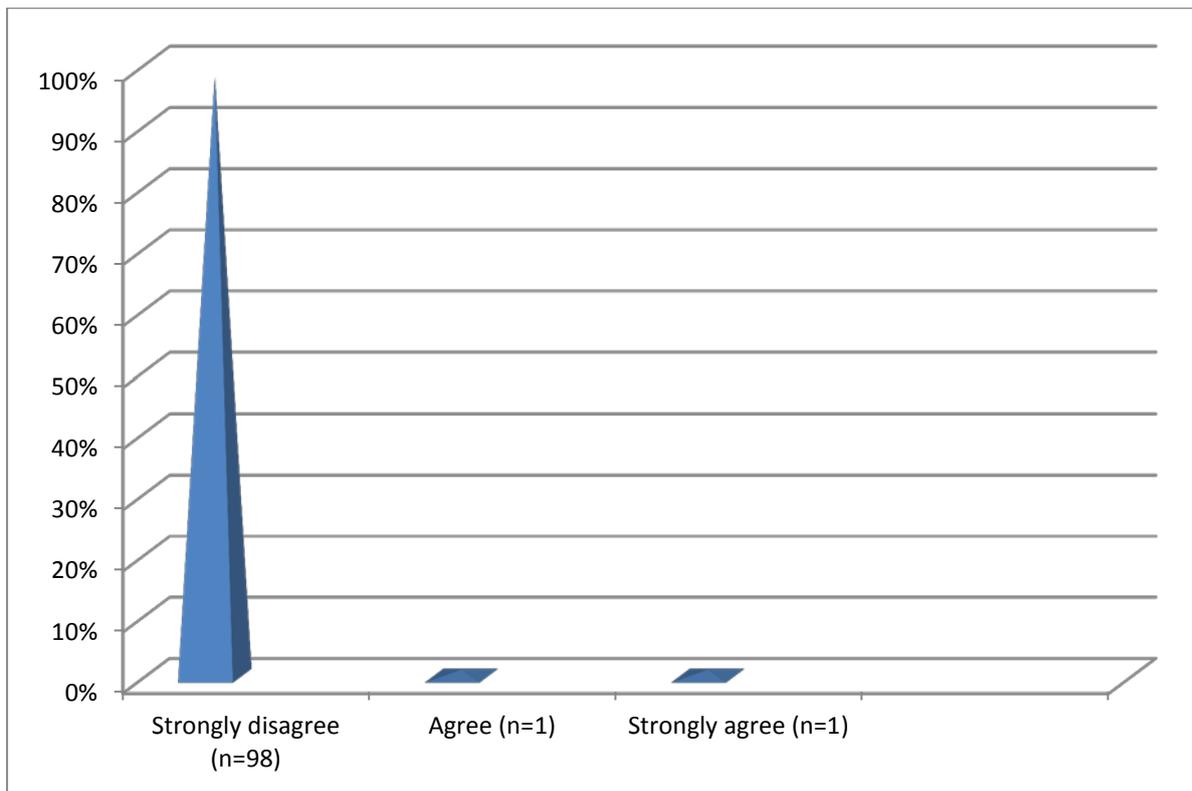


Figure 4.33

Respondents' use of emergency contraception (N=100)

Of the respondents 98% (n=98) strongly disagreed with the statement that they had used emergency contraception, 1% (n=1) agreed that they had and another 1% (n=1) strongly agreed that they had used emergency contraception. This finding shows that most respondents did not make use of emergency contraception.

4.3.3.14 Respondents' knowledge about termination of pregnancy

Figure 4.34 shows the respondents' knowledge about termination of pregnancy.

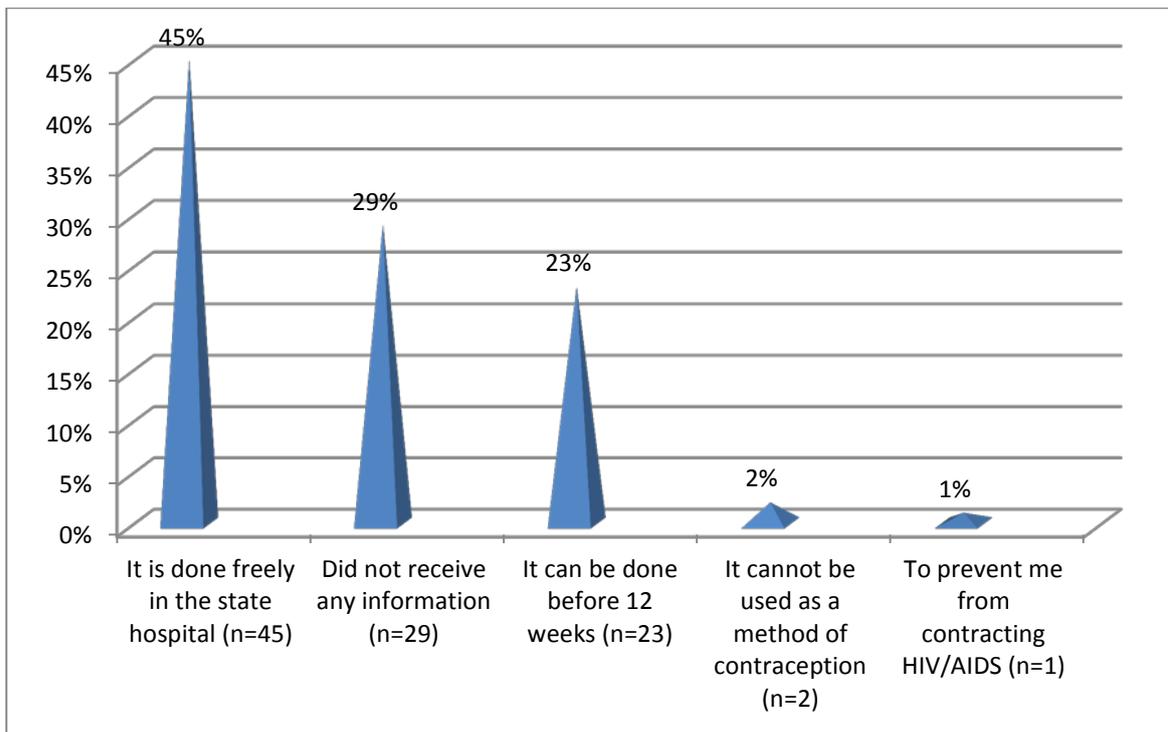


Figure 4.34
Knowledge of termination of pregnancy (N=100)

Of the respondents 45% (n=45) indicated that they know that termination is done in the hospitals while 29% (n=29) did not receive any information regarding the termination of pregnancy. The findings indicate that only 2% (n=2) knew that it cannot be used as a method of contraception but 23% (n=23) knew that it can be done before 12 weeks and is only 1% (n=1) who believe that using emergency contraception will prevent HIV. South Africa (2008:2) indicated that termination of pregnancy by teenagers had increased over time.

It is indicated in this study that although termination of pregnancy was legalised in South Africa in 1996, teenagers did not make use of this service. These findings of the current study indicate that 45% (n=45) of the respondents have knowledge about the services to terminate the pregnancy but failed to utilise it while 29% (n=29) reported that they were not aware of the service.

Table 4.10 illustrates the knowledge about terminate pregnancy.

Table 4.10 Knowledge about termination of pregnancy (N=100)

Knowledge of termination of pregnancy	Frequency	Percentage
It is offered cost freely in a state hospital	45	45%
Did not receive any information	29	29%
It can be done before 12 weeks	23	23%
It cannot be used as a method of contraception	2	2%
To prevent me from contracting HIV	1	1%
Can use it at any time if I am too lazy to go and collect my regular contraceptives	0	0%
As a form of family planning	0	0%
Total	100	100%

Of the respondents 45% (n=45) knew that it is done free of charge in a state hospital, 29% (n=29) did not have this information. 23% (n=23) knew it can be done before 12 weeks, only 2% (n=2) knew that it cannot be used as a method of contraception. 1% (n=1) of the respondents does not believe that termination of pregnancy can prevent HIV. 100% (n=100) disagree that it can be used at any time if they are too lazy to go and collect regular contraceptives and none used it as a form of family planning.

4.3.3.15 Respondents' age of awareness about termination of pregnancy

Table 4.11 Age of respondents' awareness about termination of pregnancy (N=100)

Table 4.11 illustrates the knowledge about the choice to terminate pregnancy.

Awareness of termination of pregnancy	Frequency	Percentage
14 years and younger	25	25%
15-16 years	75	75%
17-18 years	0	0%
19 years	0	0%
Total	100	100%

Table 4.11 indicates the age distribution of pregnant teenagers who were unaware of the possibility of terminating their pregnancy. Of the respondents, 25% (n=25) of those 14 years and younger indicated that they were unaware of the possibility of termination

of pregnancy and 75% (n=75) of respondents between 15-16 years knew about termination of pregnancy

4.3.4 Section D: Perceived severity (seriousness) of pregnancy

4.3.4.1 Respondents' knowledge about the consequences of unprotected sexual intercourse leading to pregnancy

Figure 4.35 shows the percentage of respondents who had knowledge about the consequences of engaging in unprotected sex.

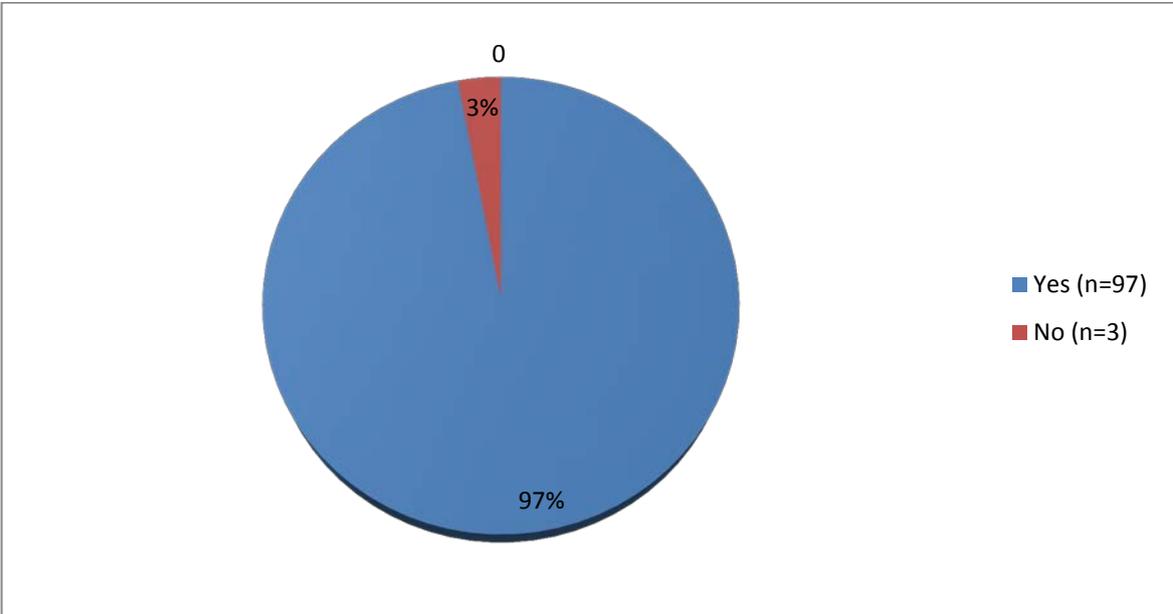


Figure 4.35

Knowledge about the consequences of unprotected sexual intercourse (N=100)

Of the respondents, 97% (n=97) knew that unprotected sexual intercourse could lead to pregnancy but continued to have unprotected sexual intercourse. Only 3% (n=3) indicated that they were unaware that having unprotected sexual intercourse once can lead to pregnancy because they thought sexual intercourse causes pregnancy only when engaged in repeatedly.

According to Grobler et al (2007:36), teenagers who perceive that their mothers disapprove of them being sexually active or who talk to their daughters about condom use before their first sexual intercourse are less likely to become sexually active.

The results of this study show that 97% (n=97) of the respondents knew that unprotected sexual intercourse will lead to pregnancy. As stated in Grobler et al (2007:37), parents and teachers do warn teenagers to refrain from sexual activity before they fall pregnant.

4.3.4.2 Respondents' awareness of the effects of teenage pregnancy before falling pregnant

Figure 4.36 reflects the respondents' awareness of the effects of teenage pregnancy.

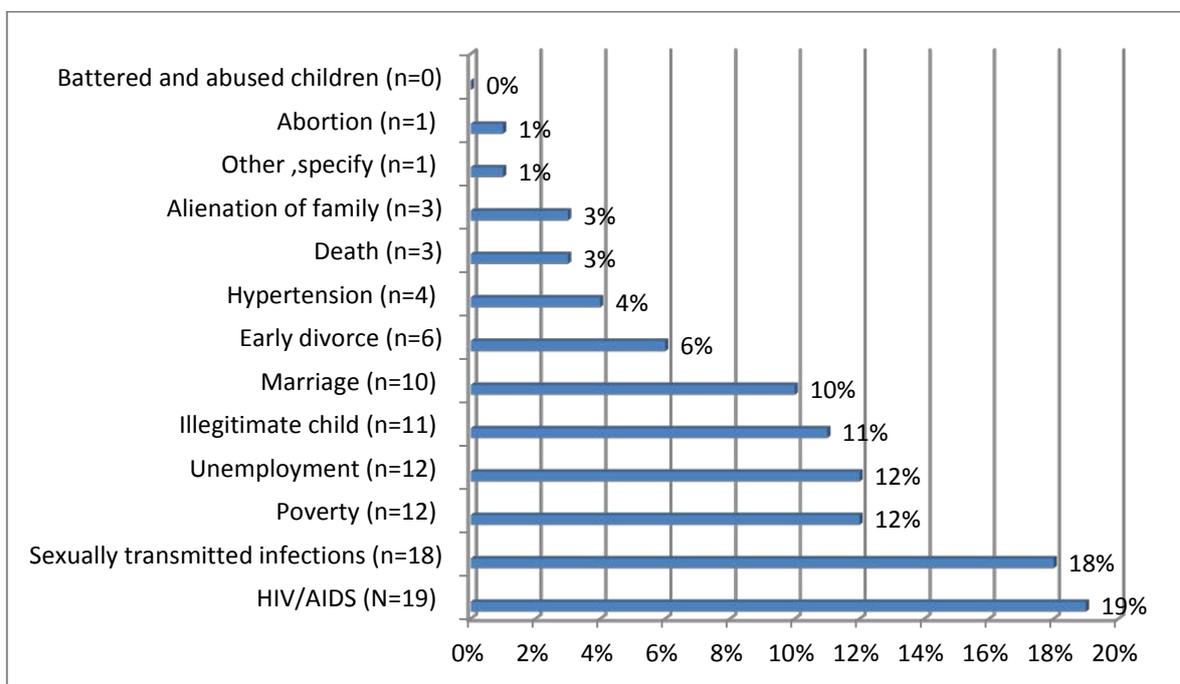


Figure 4.36

Awareness of the effects of teenage pregnancy – percentages (N=100)

Figure 4.36 reflects the respondents' awareness of the effects of teenage pregnancy. Of the respondents, 19% (n=19) were aware of HIV as an effect of teenage pregnancy and 18% (n=18) were aware of sexually transmitted infections, 12% (n=12) were aware that teenage pregnancy may cause poverty, 12% (n=12) were aware of unemployment as an effect of teenage pregnancy. Only 11% (n=11) were aware that one of the results of a teenage pregnancy would be an illegitimate child, but unaware of the longer-term effects upon the foetus/baby such as low birth-weight, battered and abused children which was 1% (n=1) or the possibility of having an abnormal baby.

Table 4.12 indicates the frequency of the respondents' awareness of the effects of pregnancy before falling pregnant.

Table 4.12 Awareness of the effects of teenage pregnancy (N=100)

Effects of teenage pregnancy	Frequency	Percentage
HIV	19	19%
Sexually transmitted infections	18	18%
Poverty	12	12%
Unemployment	12	12%
Illegitimate child	11	11%
Marriage	10	10%
Early divorce	6	6%
Hypertension	4	4%
Death	3	3%
Alienation from family	3	3%
Other, please specify	1	3%
Abortion	1	3%
Battered and abused children	0	0%
Stigmatisation	0	0%
Abnormal baby	0	0%
Low birth weight	0	0%
Alienation from religious community	0	0%
Total	100	100%

According to the findings indicated in table 4.12 the respondents were aware of the effects of teenage pregnancy, especially of the possibility of contracting HIV and other STIs. Fantasia (2008:86) found that, many teenagers reported that they did not believe that they were at risk of becoming pregnant or of contracting STIs and laboured under the misconception that they were not personally susceptible to pregnancy or health risks. It is stated in the same study that teenage girls underestimate their personal vulnerability to hazards such as pregnancy and seemed to believe that negative outcomes just would not happen to them.

These findings tally with the findings by the WHO (2008:4) that teenage boys continue to practise unsafe sex in Kenya despite considerable awareness of sexual risks, modes of transmission of infection and the protective value of condoms. The WHO (2008:4) further states that adolescents continue to exhibit risk behaviour despite knowledge of the severity of the risks. Moultrie and McGrath (2007:443) emphasise that becoming

pregnant requires unprotected sex, meaning exposure to HIV and other STIs. According to Mahavarkar, Madhu and Mule (2008:606), extremes in age are described as a risk factor for pregnancy-related hypertensive problems and teenage mothers were twice as much at risk of developing pre-eclampsia and its associated problems.

4.3.5 Section E: Barriers to the use of safeguards that could prevent pregnancy

Table 4.13 lists the barriers to the safeguarding the prevention of teenagers from falling pregnant.

Table 4.13 Barriers (safeguards) that might have prevented pregnancy (N=100)

Barriers to the use of safeguards	Frequency	Percentage
My boyfriend refused to use the male condom	29	29%
My boyfriend did not let me use the female condom	17	17%
I thought my boyfriend will feel I don't love him if he insisted on him using a condom	11	11%
I did not have information about family planning	10	10%
I was ignorant of the	9	9%
I wanted a baby to access the social grant	7	7%
I felt I will lose my fertility if I used contraceptives	6	6%
The clinic was far from home	4	4%
The health worker refused to assist me because I was younger than 18 years old	3	3%
The healthcare workers were not friendly	2	2%
There are no services provided during the weekend	1	1%
Other, please specify	1	1%
Total	100	100%

Of the respondents, 29% (n=29) reported that their boyfriends refused to use a condom, and 17% (n=17) did not allow their girl-friends to use a female condom. 11% (n=11) of the respondents thought their boyfriends will think they don't love them if they insist on condom use. Of the respondents, 10% (n=10) did not have information on family planning. 9% (n=9) of the respondents indicated that they were ignorant of the consequences and 7% (n=7) wanted to have a baby in order to access the social grant. This is a barrier as it led them to fail to prevent pregnancy.

The findings are consistent with the findings by Maluleke (2007:13) which indicate that access to the child support grant was mentioned as a contributory factor to young girls getting some money to support themselves.

Of the respondents, 6% (n=6) thought they will lose their fertility and only 4% (n=4) indicated that the clinic was far from home.

This is supported in the study by Maluleke (2007:12) who states that most parents gave very little information due to shyness, cultural taboos or lack of sufficient knowledge about the subject.

The most prominent barriers are refusal by the boyfriend for him or her to use a condom and the girl's need to please her boyfriend. The other reasons seem to play a minor role. The findings indicate a lack of assertiveness on the part of teenage girls who gave in to the refusal of condom use by the boyfriend.

Imamura et al (2007:631), in their study on factors associated with teenage pregnancy in the European Union countries, found that the distance to youth family planning clinics may be associated with a higher conception rate. Although the findings of this study revealed that only a small percentage of respondents failed to use contraceptives effectively to prevent pregnancy due to the distance to the clinics and specialised clinics, this factor does play a role as a barrier to the prevention of teenage pregnancies.

4.3.6 Measures the family planning provider can take to improve the service in preventing teenage pregnancy

Table 4.14 shows the frequency of respondents' views about what the family planning provider can do to improve the service. Of the respondents, 22% (n=22) suggested more education be provided about reproductive health matters. In this study, teenagers indicated that they were given basic sex education like this is the female body, 'this is the male body, put them together and you have a baby (Lall 2007:234). 20% (n=20) of the respondents indicated that parents should be motivated to talk to both girls and boys about the long-lasting effects of teenage pregnancy. Of the respondents, 12% (n=12) of the respondents indicated that urging the government to activate school health services

may improve the family planning services. This is consistent with what is indicated by Lall (2007:231) that the government hold the Local Education Authority responsible for both pregnancy prevention education and the education of pregnant teenagers and teenage mothers. It is only 12% (n=12) of the respondents who supported that sexual active boys should be encouraged to use a condom during sexual intercourse. Of the respondents, 10% (n=10) indicated that girls should be able to say no to boys until they are ready to do so.

Table 4.14 shows the frequency of respondents' views about what the family planning provider can do to improve the service.

Table 4.14 Measures that will improve the family planning services and assist in preventing teenage pregnancy (N=100)

Measures to improve family planning	Frequency	Percentage
To provide education about reproductive health matters	22	22%
Motivate parents to talk to both girls and boys about the long-lasting effects of teenage pregnancy	20	20%
Urge the government to activate school health services	12	12%
Encourage sexually active boys to use condoms during sexual intercourse to prevent teenage pregnancy	11	11%
To motivate girls to be able to say no to boys until mature enough to be responsible	10	10%
Discourage boys not to sleep with girls before marriage	9	9%
Reproductive services to be offered 24 hours a day	3	3%
To display condoms in all supermarkets, schools	3	3%
The staff should have enough information to assist teenagers	3	3%
To initiate health education classes	3	3%
To have enough stock of contraceptives at the clinics	2	2%
Staff to be approachable	1	1%
Not to be judgemental towards teenagers	1	1%
No need to improve the service	0	0%
Refer to a social worker	0	0%
Show understanding	0	0%
Total	100	100%

Of the respondents 9% (n=9) indicated that discouraging boys to sleep with girls before marriage can improve the family planning service. Of the respondents, only 10% (n=10) indicated that displaying condoms in all supermarkets and schools can improve the family planning service, 3% (n=3) indicated that the staff should have enough

information to assist teenagers as well as to initiate health education classes to improve the family planning service. 2% (n=2) of the respondents indicated that having enough stock cannot help to improve the family planning service. The most important issues that 22% (n=22) respondents highlighted regarding the family planning service's role in preventing teenage pregnancies is a need for education on reproductive health matters and the involvement of parents in informing their children about the long-lasting effects of teenage pregnancy. Lederman (2008:142) indicates that preventive education programmes include the goal of increasing or improving parent-child communication about sexual and reproductive health. It is stated in the same study that efforts should be directed toward increasing adolescent access to school-based, clinic-based, and Web-based programs that provide direct education and assistance to young people.

4.3.7 Section F: Cues to action

4.3.7.1 Factors that motivated the respondents to take action to prevent teenage pregnancy

Figure 4.37 depicts factors that motivated the respondents to take action to prevent teenage pregnancy.

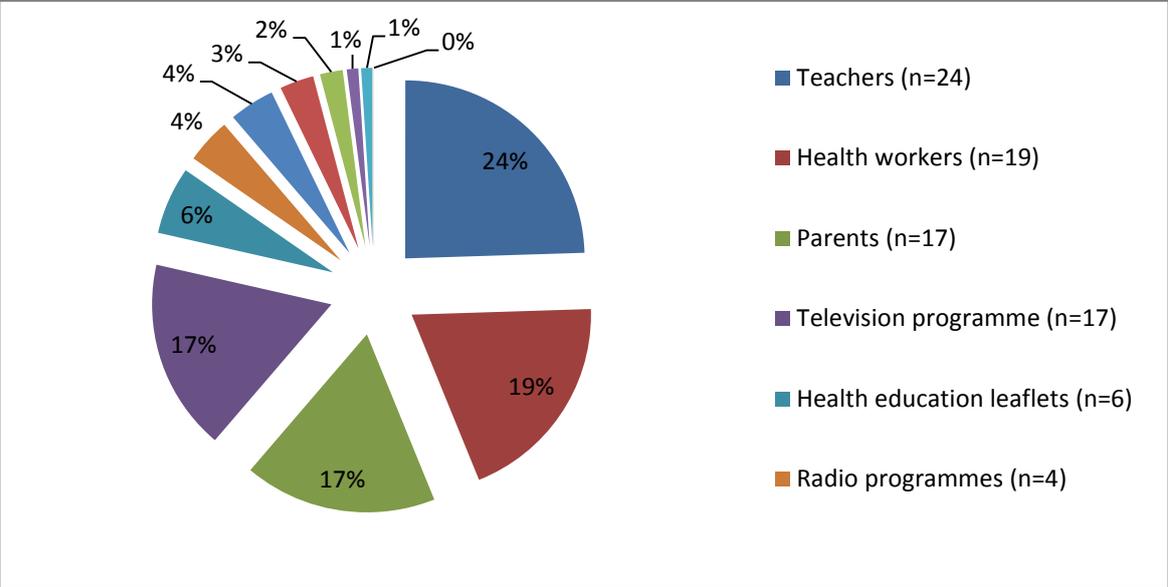


Figure 4.37
Factors that motivated respondents regarding the prevention of teenage pregnancy (N=100)

Of the respondents, 24% (n=24) indicated that they were motivated by their teachers not to fall pregnant as a teenager, 19% (n=19) were advised by the health workers, 17% (n=17) indicated that they received information from parents and television program, 6% (n=6) from health education leaflets and 4% (n=4) from radio programmes and friends. Studies done by Maluleke (2007:11) indicate that media can be used to promote healthy sexual behaviour depending on the type of standards and norms that the particular media observes.

Table 4.15 Persons/programmes that motivated respondents regarding prevention of teenage pregnancy (N=100)

Advisors on prevention of teenage pregnancy	Frequency	Percentage %
Teachers	24	24%
Health workers	19	19%
Parents	17	17%
Television programme	17	17%
Health education leaflets	6	6%
Radio programmes	4	4%
Friends	4	4%
Health posters on sexual transmitted infections	3	3%
Church	2	2%
Newspaper reports on teenage pregnancy	0	0%
Others, please specify	1	1%
Total	100	100%

Table 4.15 indicates the frequency distribution of those that advised the respondents regarding the prevention of teenage pregnancy. Of these, 24% (n=24) were teachers, 19% (n=19) health care workers, 17% (n=17) parents and 17% (n=17) television programmes. The other sources have also been considered but to a lesser degree than the above. Minnick and Shandler (2011:241) indicate that a programme referred to as “teen choices” was established in which former teenage parent clients of parent child centre become peer educators to other teenagers. It is believed that these young parents can best reach and educate their peers on the challenges of the parenthood in adolescence. It is indicated by Lederman et al (2008:141) that although students reported talking less to parents and more to friends about sex, protection against pregnancy, and HIV, their level of comfort in talking to parents about these topics remained constant. Grobler et al (2007:36) found that although parents do warn adolescents to refrain from sexual activity, the required guidance and discipline is often

delegated to overburdened teachers. This is confirmed by the results, which indicate that 24% (n=24) of the advice is given by teachers.

According to the findings of these results, only 4% (n=4) of friends advised the respondents on the above topics when compared to the findings by Lederman (2008:141) where more talking was done to friends. According to the current study, teachers, parents and health workers are regarded by the teenagers as persons who could influence teenage behaviour, something that television programmes can achieve as well. Maluleke (2007:10) indicates that some teenagers were concerned about the way sexuality was discussed over the radio as it may contribute to encouraging teenagers to be sexual active.

4.4 CONCLUSION

In this chapter the data analysis and the findings were discussed and presented in the form of figures and tables and the discussions were backed by references to literature on the subject.

Chapter 5 concludes the study; limitations are stated and recommendations made.

CHAPTER 5

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION

In the previous chapters, the research study was described, the literature search was discussed according to the Health Belief Model and the results and the findings of the study were supported by referring to literature. This chapter concludes the study, addresses the limitations and makes recommendations for future research.

5.2 SUMMARY

In this section, the conclusions of the research are summarised. It starts with an overview of the research process.

5.2.1 The research process

The United Nations member states have agreed to achieve eight millennium development goals and 21 targets by the year 2015. Millennium development goal number 5 strives to improve maternal health. Target 5a of this goal is to take steps to ensure the rights of all to the enjoyment of the optimum attainable standard of physical and mental health including sexual and reproductive health, while target (5b) addresses reproductive maternal and child health, including the provision of family planning (Setswe:2011:15).

The literature reviewed indicated a lack of specific reproductive health information, ineffective use of contraceptive services, individual perceptions related to reproductive health services and the long-term effects of pregnancy, and culture as the leading contributory factors to teenage pregnancy. The literature reviewed showed that teenagers globally were not enjoying adequate reproductive health or utilising the available reproductive health services to promote physical and mental health.

The purpose of the study was to explore and describe the contributing factors to the high teenage pregnancy rate within a district hospital in the Ehlanzeni district of the Mpumalanga district. The research objectives which guided the study were to describe the factors which may have contributed to the high teenage pregnancy rate and to propose strategies that will promote reproductive health care for the benefit of all people, including teenagers.

It is assumed in this study that there were factors behind the escalating rate of teenage pregnancy which can be laid bare by research. The study is regarded as significant to health care practitioners as it will provide information that will help them to develop other strategies or intensify the existing ones to reduce the rate of teenage pregnancy. The study undertaken in the hospital concerned may also benefit Ehlanzeni district and the Mpumalanga province as a whole, since the area where the study was conducted has been declared a deep rural (nodal) zone.

The researcher used a quantitative research design which is of a non-experimental, explorative and descriptive nature to explore and describe factors that contributed to the high teenage pregnancy rate in the hospital under study.

The population for the study comprised all pregnant teenagers attending antenatal care within the hospital under study and those who were admitted in the antenatal ward. The target population comprised 100 pregnant teenagers attending antenatal care and those who were admitted during November and December 2011.

The sample for the study comprised pregnant teenagers who were between 14 years and younger and 19 years old. The sampling was done through probability sampling using the convenient sampling technique to collect data.

The researcher collected data from pregnant teenagers who were attending antenatal care and those who were admitted during November and December 2011. The sample size was 100 pregnant teenagers. Teenagers referred from the feeder clinics were not included in the study. The elements of the study were used as the sample and comprised only 100 elements. Thus it was too small for a sample to be drawn from it.

The self-designed structured interview schedule was validated before the interviews were conducted. The tool was evaluated for external, internal, content and face validity.. The pre-testing of the self-designed structured interview schedule was validated before the interviews were conducted. The tool was evaluated for external, internal, content and face validity. By conducting a pre-test on 10 pregnant teenagers who were not part of the study, in order to ensure consistency. Data were collected by using a self-designed structured interview schedule on a face-to-face basis. The interview was carried out in a natural setting that the teenagers were used to and comfortable with. Permission was given by the hospital management and the head of the obstetric unit to conduct the interviews.

Since the interviews were conducted with human beings, the following ethical principles were followed: the principle of respect for human dignity, justice and confidentiality (by not allowing a third person to be present), and the principle of privacy, since the researcher conducted the interview herself without assistance to safeguard the respondents' privacy (see Chapter 3).

5.2.2 Findings

The study was aimed at the identification of factors contributing to the high teenage pregnancy rate within the district hospital under study in the Ehlanzeni district of the Mpumalanga province. The HBM was used to identify these contributory factors. The total population of 100 pregnant teenagers was used.

5.2.2.1 Section A: Biographical data

This section assessed the biographical data of the respondents to determine how these may have influenced the teenager to become pregnant.

- **Teenage pregnancy in relation to age**

The findings show that 27% respondents of 14 years and younger may be sexually active, and members of this age group were found to be pregnant during the study. It was found that 50% respondents between 15 and 18 years were more vulnerable to teenage pregnancy than younger girls.

- **Respondents' marital status**

The findings indicate that of the respondents studied, only 16% were married and 84% were unmarried. The findings differ with those of Goicolea et al (2009:226) which state that statistically marriage is associated with teenage pregnancy.

- **Respondents' religion**

The study revealed that 67% of the respondents professed to be Christians. The findings indicate that religion had little impact on the prevention of teenage pregnancy as 67% of the respondents indicated that they are Christians but pregnant as Christianity does not accept sex before marriage.

- **Respondents' language group**

The findings indicate a great difference in the prevalence of teenage pregnancy between the two languages studied. The Sotho-speaking teenagers were associated with a high teenage pregnancy rate as 67% were Sotho-speaking and only 33% Tsonga speaking. This gives a ratio of 2:1.

- **Respondents' cultural perceptions of pregnancy**

The findings revealed that 74% of the teenagers disagreed that pregnancy showed maturity and is acceptable according to their culture. Only a small percentage 18% agreed that pregnancy is acceptable.

- **Respondents' school attendance**

The study showed that pregnancy did not affect the teenager's school attendance as 81% of the teenagers reported that they were attending school during the study, 19% of the teenagers dropped out, including those who had passed grade 12.

- **Respondents highest grade passed**

Regarding the highest grade passed, 35%, reported that they were in grade nine and below. This means that most of them became pregnant in the lower grades at high school, while 21% were in grade 10 and 12% of the teenagers fell pregnant while they were in grade 12 when they were about to exit to the tertiary level of education.

- **Respondents' communication with teachers**

The findings indicated that 59% of the teenagers reported good communication with their teachers. Only 33% of the teenagers reported poor communication between themselves and their teachers.

- **People with whom the respondents spend time**

The findings showed that 52% of respondents spent more time with their family, 47% with girlfriends and 1% with other people.

- **Topics of conversation with peers**

The topics teenagers discussed with their peers appeared to have an impact on their pregnancies: 25% talked about falling in love, 22% about boyfriends and 19% about sexual intercourse.

- **Respondents' experimentation with drugs**

The findings of this study indicate that 96% of the respondents disagree to have used drugs before falling pregnant and only 3% agreed to have used drugs.

- **Respondents' family relations**

The findings showed that living with only one parent or the absence of both parents had a negative impact on the prevention of teenage pregnancy in comparison with the situation of those who were living with both parents. Some 11% were left in the care of

their brothers. Findings indicated 18% of respondents who lived with their sisters were found to be at risk of an early sexual debut and early pregnancy.

- **People who live with the respondents**

The findings indicate that 43% of the respondents live with both parents, 23% live with the mother, 18% live with the sister, 11% live with their brothers. Only 1% who live with their siblings such as uncle, grandparents.

- **People with whom the respondents shared their thoughts**

According to the findings, 67% admitted that they shared their thoughts with the people they lived with and 30% said that they did not, 3% disagreed that they shared their thoughts with others at all.

- **Respondents' living conditions**

The findings show that 93% of the respondents live in a friendly environment and 3% in an abusive environment while 3% live in an unfriendly environment. Of the respondents 1% indicated to live in a poor environment.

- **Respondents' household income distribution**

Although 44% of teenagers indicated a very low combined income, which may have contributed to teenage pregnancy, 56% indicated that the combined household income was R1000 or above.

- **Respondents' household income contributions**

The findings of the study indicated that some teenagers, namely 26%, were already contributing to the household: orphans receive grants in South Africa as do those who fall pregnant while already receiving a social grant i.e. if they are 14 years or younger. These grants may have influenced teenagers to fall pregnant because their poor socio-economic status may not have acted as a deterrent to them. Of the respondents' 71% indicated that they did not contribute anything to the family income.

5.2.2.2 Section B: Individual perceptions: Knowledge, awareness of, and practices relating to sexual intercourse and pregnancy

This section assessed the respondents' knowledge, awareness of, and practices relating to sexual intercourse and pregnancy. Behavioural change will occur only if respondents perceive the presence of a threat in their lives and this perception will only come through knowledge.

- **Age on commencing sexual intercourse**

The findings indicated that 19% of respondents as young as 14 years and younger were sexually active and pregnant. At this age teenagers are too young to understand the consequences of their actions and to them a baby is not made on one day. 56% commenced sexual intercourse when they were 15–16 years old and 25% respondents commenced at the age of 17–18 years.

- **Reasons for respondents for having sexual intercourse for the first time**

The findings showed that 36% of teenagers engaged in sexual intercourse because they wanted to enjoy sex and 22% wanted to please their boyfriends. 13% indicated that they feel secure and loved as a result of their engaging in sexual intercourse. Some 10% feared rejection by boyfriends while 9% of the respondents engaged in sexual intercourse as a result of being forced by boyfriend. Some teenagers indicated that they obtained information from the radio 14% (n=14). It was found that only 12% obtained information from health workers, magazines contributed in only 12% of cases; Friends were found to contribute only 4% of the information about sexuality while 9% said that their information came from television.

- **The type of information received by respondents about sexuality.**

Only 20% of teenagers indicated that they had been advised about the consequences of unsafe sex. Some 17% of the respondents indicated that they had been advised about sexually transmitted infections, 16% received advice on contraception and 15% were made aware of the consequences of teenage pregnancy, while 14% received

information about the teenage pregnancy prevention. The findings indicated a small percentage of 10% who were informed about abstinence. 2% teenagers indicated that there were told where they could obtain contraceptives, but were only told not to have sexual intercourse.

- **Respondents' knowledge about the consequences of sexual intercourse**

The majority of the respondents, 20% were aware of pregnancy as a consequence of sexual intercourse. It was found that 20% were aware of sexually transmitted infections. The study showed that 20% of the teenagers were aware of the possibility of contracting HIV and only 10% were aware of loss of virginity. Only 7% of teenagers considered the possibility of dropping out of school. According to the findings, 7% of the respondents were aware that pregnancy may lead to an early marriage. Of the respondents it was indicated that 7% were unaware of the possibility of becoming mothers at an early age.

- **Respondents' perceptions about falling pregnant**

The findings revealed that 97% of the respondents accepted being pregnant while only 3% did not.

- **Respondents' information about teenage pregnancy**

The findings showed that 91% of the respondents received information regarding teenage pregnancy before they fell pregnant while 5% did not and 4% strongly agreed that they had received the information regarding teenage pregnancy.

- **Type of information received by respondents before falling pregnant**

The findings indicated that 18% were advised about the prevention of pregnancy. 19% received information about contracting HIV; the findings also indicated that 18% were advised that teenage pregnancy may lead to lower socio economic status while 11% did receive the advice about poverty that may be caused by teenage pregnancy. 10% of the respondents were aware of illegitimate child as a consequence of teenage pregnancy while 10% were aware that this could befall them. It is indicated that 4% were not warned that an unplanned teenage pregnancy could lead to unemployment.

- **Factors that encouraged pregnancy**

The findings indicated that 30% of pregnant teenagers felt loved by their boyfriends, 24% of respondents wanted to please their boyfriends by falling pregnant. Of the respondents 15% gave other reasons such as they thought they could not fall pregnant as they were not having sexual intercourse daily. 16% perceived sexual intercourse as a game or adventure. The findings also reveal that they wanted to prove their fertility which is 1% of the respondents.

5.2.2.3 Section C: Perceptions regarding the use of contraception

This section assessed the perceptions of respondents in using contraception in preventing pregnancy.

- **Utilisation of contraceptives by respondents**

The findings indicated that only 48% used contraceptives while 52% did not.

- **Respondents' reasons for not using contraceptives**

The findings showed that most of the respondents 45% did not have any specific reason for not using contraceptives. 24% thought they were still too young to fall pregnant. 13% had no knowledge of contraceptives. The findings showed that the reproductive health care clinics (family planning clinics) were accessible to some respondents who failed to use contraceptives.

- **Age at which respondents began to use contraceptives**

The findings showed that 11% of respondents started to use contraceptives at 14 years and younger while 28% started between 15 and 16 years old and 11% between 17 and 18 years old. As many as 50% of the respondents indicated that they never used contraceptives.

- **Age at which respondents received information about contraception for the first time**

The findings indicate that 47% were 14 years and younger when they first received the information, while 30% received the information at the age of 15-16 years. Only 4% received the information at the age of 17-18 years.

- **Respondents' choice of contraception**

The findings showed that 40% of the respondents were allowed to choose the type of contraception they wished to use and received appropriate advice; 5% of the respondents were given no choice but were simply given contraceptives; 54% of the respondents indicated the unspecified option which is an indication that they did not use contraceptives at all.

- **Types of contraceptives used by the respondents**

The results showed that 55% of the respondents received a contraceptive injection while 41% used condoms. Oral contraceptives were the least used form of contraception as only 1% of the respondents used them. The findings indicate that 3% used other methods such as abstinence.

- **Respondents' access to contraception before falling pregnant**

The findings showed that 40% of the respondents said that contraceptives were accessible while 28% said they were not. Only 14% reported that they have to walk a long distance to the clinic.

- **Respondents' opinion about using a condom**

The findings showed that 35% believe that a condom is effective in preventing pregnancy. 32% of the respondents indicated that they believed that using condoms was a good thing, since as it can prevent sexually transmitted diseases. Only 15% indicated that condoms do interfere with sexual intercourse. Of the respondents 5% believed that

using a condom means they do not trust their boyfriends. Thus poor utilisation of condoms had a negative impact in the prevention of teenage pregnancy.

- **Respondents' means of using the contraceptive method chosen**

The findings revealed that 92% were not using contraceptives regularly while regular users accounted for only 7% and 1% indicated that they used the contraception only after they had their periods.

- **Respondents' experience with the injection as contraception**

The respondents indicated that 8% reported weight gain, 6% suffered from nausea and vomiting, 9% felt ill and 85% reported no side effects from the injection.

- **Individuals with whom respondents discussed contraception**

Of the respondents 51% discussed contraception with health care workers, while 18% discussed it with parents. 8% discussed with friends about contraception. Only 4% felt free to talk to teachers about the matter.

- **The attitudes of nursing personnel concerning the provision of contraceptives**

The findings showed that 41% of the nursing personnel were willing to provide contraception willingly; only 1% of the respondents said that the nursing personnel refused to provide contraceptives, while 4% of the nursing personnel threatened to tell the parents of the respondents that the latter were using contraceptives, 53% of the respondents indicated that the question was not applicable to them as they were not using contraceptives and 1% said the staff' comments made them feel guilty when using contraceptives.

- **Reasons for not using emergency contraception**

The findings indicated that 95% of the respondents did not have information about emergency contraception; only 5% did have this information. All the respondents 100% stated that the staff did not refuse to supply emergency contraceptives.

- **Respondents' use of emergency contraceptives**

The findings revealed that 98% of the respondents did not use emergency contraceptives and that this may have influenced teenagers negatively in the sense that they remained pregnant.

- **Knowledge about termination of pregnancy**

The findings showed that 45% the respondents knew that terminations are done free of charge in a state hospital. It was found that 29% did not receive information about the termination of pregnancy. As many as 23% knew that termination should be done before 12 weeks of pregnancy. 0% of the respondents believed that emergency contraception can be used as a method of contraception.

- **Respondents' awareness about termination of pregnancy**

The findings indicated that 25% of respondents aged 14 years and under knew about termination of pregnancy and 75% were not aware of the service. This might be the cause of underutilisation of the service by this age group.

5.2.2.4 Section D: Perceived seriousness/severity of pregnancy

This section assessed the respondents' perceptions about the seriousness of teenage pregnancy.

- **Respondents' knowledge about the consequences of unprotected sexual intercourse**

The findings indicated that 97% of the respondents knew that unprotected sex will lead to pregnancy while 3% did not. Knowledge of the seriousness of pregnancy did not deter teenagers taking the risk of falling pregnant.

- **Awareness of the consequences of teenage pregnancy**

The findings indicated that 19% of the respondents knew about the possibility of contracting HIV and that they could develop AIDS later. Of the respondents, 18% were aware of sexually transmitted diseases that may accompany pregnancy. Some 12% reported that they were aware of poverty as a possible consequence of early pregnancy, 12% were aware of unemployment as a consequence of teenage pregnancy. Of the respondents, 11% were aware that the baby may be illegitimate, 10% were aware that teenage pregnancy may lead to early marriage. The findings showed that although pregnant teenagers were aware of other effects of pregnancy as mentioned above, they were not aware that pregnancy may have consequences such as hypertension, death, alienation from the family, as well as battered or abused children.

5.2.2.5 Section E: Barriers to safeguards that might have prevented pregnancy

This section assessed the respondent's perception of what seemed to be a barrier to safeguards that would have prevented teenage pregnancy.

Findings showed that 29% of the respondents revealed that their boyfriends refused to use a condom. 17% of the respondents indicated that their boyfriends refused that they (the girls) should use a condom. 6% of the respondents felt that their boyfriends will think they do not love him if they insisted on condom. In 10% of the respondents it was indicated that there was a lack of knowledge about contraceptives. Although 9% indicated that they were ignorant of the consequences of pregnancy. The belief that one would lose one's fertility was found to be a barrier to the utilisation of contraceptives by 6% of the respondents. Some 7% indicated that they wanted a baby to access social grants.

- **Measures the family planning provider can take to improve the service in order to prevent teenage pregnancy**

The findings indicated that 22% of respondents felt that family planning services could be improved by providing more health education about reproductive health. Of the respondents 20% felt that parents should be motivated to talk to teenagers of both sexes about sexuality. A further 12% of respondents also suggested that the government be urged to establish a school health service. 10% of the respondents also indicated that girls should be motivated to say no to boys while 11% suggested that boys be encouraged not have sexual intercourse or at least to use a condom. 3% of the respondents suggested that the reproductive health service should be offered 24 hours a day to provide rape victims with emergency contraception. They suggested that health workers be better trained in order to give relevant advice. 3% of the respondents suggested that condoms be displayed in supermarkets, schools and other public places for accessibility.

5.2.2.6 Cues to action

The researcher assessed whether strategies to activate readiness for change were offered and by whom.

- **Respondents' advisers regarding prevention of teenage pregnancy**

The findings revealed that 24% of the respondents were advised how to prevent pregnancy by teachers at school, 19% of the respondents received advice from health workers. Parents were said to have given advice to 17% of the respondents, television contributed to 17% and health education leaflets also provided advice, according to 6% of the respondents. Variables such as church, newspapers, radio programmes, and friends made a slight contribution to the prevention of teenage pregnancies.

5.3 CONCLUSIONS

The conclusions of this study will be discussed under five components of the HBM namely:

- Biographical information
- Individual perceptions: knowledge, awareness and practices
- Perceived severity
- Barriers to safeguards that might have prevented pregnancy
- Cues to action

5.3.1 Biographical information

The researcher identified the following biographical factors associated with teenage pregnancy:

Although most of the teenagers professed that they were Christians, Christianity did not have any impact in preventing teenage pregnancy. Language was found to be related to pregnancy as 66% of pregnant teenagers were Sotho -speaking and 34% Tsonga-speaking. Culture was not found to play a role in pregnancy.

5.3.2 Individual perceptions: Knowledge, awareness of, and practice relating to sexual intercourse

The age at which sexual intercourse commenced was found to be relevant, since most teenagers' commenced sexual intercourse as young as 14 years or even younger, before they are able to understand the consequences. Among the reasons given for engaging in sexual intercourse, 36% respondents stated that they wanted to enjoy sexual intercourse. According to findings of this study 66% respondents received sexuality education when they were 14 years and less. At which sexuality education was received and knowledge of the consequences of sexual intercourse did not have an impact on the prevention of teenage pregnancy.

5.3.3 Perceptions regarding the use of contraceptives

The following findings were made about the reasons why contraceptives were not used optimally:

- Poor knowledge and poor utilisation of contraceptives was found to be associated with teenage pregnancy, as most teenagers were not using contraceptives as instructed, i.e. regularly.
- The age at which information about contraception was received and the age at which contraceptives were first used was also found to be associated with teenage pregnancy, as some teenagers thought they were still too young to fall pregnant and they could not make use of the information to persuade them to use contraceptives seriously.
- Poor use was found in condoms, as teenagers thought they interfere with sexual enjoyment.
- The side-effects of contraceptives were perceived negatively.
- There is poor communication between parents and respondents regarding contraceptives.
- There is a lack of knowledge about emergency contraception.
- Insufficient knowledge about choices regarding the termination of pregnancy was found to be associated with pregnancy, as the study results indicate insufficient knowledge about emergency contraception and termination of pregnancy.

5.3.4 Perceived seriousness/severity of pregnancy

A lack of knowledge about the consequences of teenage pregnancy is associated with pregnancy, as teenagers did not realise the seriousness of the consequences until they became pregnant.

5.3.5 Barriers to safeguards that might have prevented pregnancy

Among the barriers to the prevention of pregnancy indicated by the teenagers were the following: the boyfriend's refusal to use a condom or to allow the girlfriend to use a condom; lack of sufficient information about the reproductive system; the desire to please the boyfriend; and ignorance about the consequences of pregnancy.

5.3.6 Cues to action

The study reveals that cues to action such as poor academic progress and poor socioeconomic status did not have an impact on the prevention of pregnancy. Poor parental advice, poor advice from health workers, a lack of peer group teaching, the lack of sex education in churches and a lack of school health services were found to be associated with teenage pregnancy.

5.4 LIMITATIONS OF THIS STUDY

The study suffered an actual limitation in the form of a non-probability sampling. The study was conducted in only one district hospital at Ehlanzeni district of the Mpumalanga Province. More information would have been generated if other sampling methods such as probability sampling could have been used. Some respondents were shy to tell the truth about their sexuality and this may have affected the authenticity of the information. The collection of data was difficult as the researcher acted alone and used an interview as *modus operandi*.

5.5 RECOMMENDATIONS

5.5.1 Recommendations for parents

Parents should be motivated to play their role in the sexual orientation of both girls and boys at an early stage as this education should be done in the family home. Parents should be empowered to give direct in-depth knowledge of sex education, should advice teenagers clearly about what is happening when a girl has sexual intercourse. Teenagers should be exposed to a sibling where possible who is having a child to see all the responsibilities of a mother. Teenagers should be advised to value their body and not to be submissive to boys. Girls should be taught to be assertive, that it is not wrong to say “no for sex” to boys.

Teenagers should not be exposed to an environment that will promote an early sexual debut i.e. leaving them alone with other teenagers to supervise them. Parents should give themselves time with the teenager to improve their relationship. Sex education should be started as early as 10 years old or before the menarche. Parents should

monitor their daughters' monthly periods in order to emphasise its importance. Fathers should be encouraged to play a role in raising a girl child so she can learn to trust him rather than turning to another man before the time is ripe.

Parents should provide the same information to both teenage girls and boys. The importance of preserving virginity should be stressed by parents and they should explain the reward for what that brings. Parents should be aware of what their teenagers do, where and with whom, and ensure that there is proper supervision. Parents should be able to interact with their children. Parents should encourage their children to participate in sport.

5.5.2 Recommendations for health workers

Contraceptives must be prescribed on the basis of informed choice, and information should be given regarding the way contraceptives should be used. Health care workers should not deny teenagers contraceptives because of their age. Health workers should provide thorough counselling about the side-effects of contraceptives so that the teenagers can continue using them with full knowledge of what they are doing. Reproductive health clinics should be user-friendly to encourage the teenagers to utilise the reproductive services. In-service education should be re-enforced.

Privacy of information should be ensured to instil confidence in the teenager. Health authorities must always ensure that adequate supplies of contraceptives are available, to prevent any shortage that may lead to pregnancy. Teenagers must be informed about the possibility of using available mobile family planning services since these may be more accessible geographically. The language barrier should be eliminated in health education by using a language that can be understood by the teenagers for better utilisation of the information. A more positive attitude by health care workers and demonstration of empathy, acceptance and understanding will motivate teenagers to ask questions to enhance their understanding of pregnancy and precautions thereof.

5.5.3 Recommendations for the Department of Education

Accessibility of information on reproductive health through health education programmes must be ensured. Sexuality education should be started as early as grade

5, since one 12-year-old girl was found to be pregnant. The schools should involve health care workers as part of their education plan at school with regard to their sexual behaviour. In-depth information about sex education should be provided by liaising with the Health Department. The impact that pregnancy has on the academic progress of teenagers should be emphasised by school teachers. The involvement of the parents of both boys and girls is needed to provide supervision, since both families will be affected if the girl falls pregnant. If possible, there should be a full-time mobile clinic that is accessible from Monday to Friday at a convenient time. Life -skills teachers should be empowered with reproductive health knowledge to be able to communicate the relevant information.

5.5.4 Recommendations for the Department of Health

The Department should ensure that school health services are rendered on a regular basis; that mobile clinics are enough for the area, so that both local and more distant schools can be reached; that health care workers are knowledgeable with regard to all sexual health issues and be encouraged to attend workshops regarding new developments in reproductive health matters; and that sufficient supplies of different kinds of contraceptives are always available in institutions in both urban and rural areas.

5.5.5 Recommendations for further research

The following recommendations are made in relation to further research related to this topic.

This study may be done in the same area using random sampling for the generalisation of findings to the whole district and province. Further research may be done to assess the effectiveness of health promotion in the prevention of teenage pregnancy. Research may be conducted about the utilisation of contraceptives at the Mpumalanga Province.

Furthermore, research could be conducted on health behaviour of teenagers by both the Health and Education Department.

A study of the current nursing curricula of the nurses in Mpumalanga can be conducted in order to investigate whether the information regarding sexual health is current and updated.

5.6 CONCLUSION

The research project was summarised and discussed in this chapter, including the limitations and recommendations.

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P. O Box 545
ACORNHOEK

8 JULY 2011

The Chief Executive Officer
Tintswalo Hospital
Private Bag X 407
ACORNHOEK

Dear Sir/Madam

REQUEST TO CONDUCT RESEARCH IN THE HOSPITAL

This letter serves to request for your permission to conduct research into: **The contributory factors of high teenage pregnancy rate in a district hospital in Mpumalanga Province.**

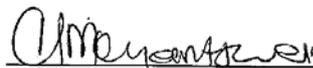
I am presently registered with the University of South Africa and pursuing a Master's degree in Health Studies with specialisation in Advanced Midwifery and Neonatal Nursing Science by distance learning. This research is done to fulfill the requirement of the degree.

The teenagers will be interviewed during data collection and the data derived from the interview will be used by the researcher in the research report. The quality of the data will be checked by the Quality Assurance manager of the hospital who will be requested by the researcher on completion of data collection.

The researcher assures the management that ethical issues shall by all means be adhered to through the execution of the research. Confidentiality and privacy will be maintained and the identity of the clients will not be linked to the information.

I hope that my request shall meet your favourable consideration.

Yours faithfully



Ms Mkhantwa S.G (Student number: 3071-515-6)
LECTURER

ANNEXURE F

CONTRIBUTORY FACTORS TO THE HIGH TEENAGE PREGNANCY RATE WITHIN A DISTRICT HOSPITAL IN THE
EHLANZENI DISTRICT OF THE MPUMALANGA PROVINCE

FOR OFFICE USE

STRUCTURED INTERVIEW SCHEDULE

1	2	3

Data collection number

1 SECTION A: PERSONAL INFORMATION

Choose the appropriate answer and write it on the box provided.

1.1 Biographic profile of respondents

1.1.1 How old are you?

		ANSWER
1.1.1.1	14 years and below	1
1.1.1.2	15-16 years	2
1.1.1.3	17-18 years	3
1.1.1.4	19 years	4

	4
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1.2 What is your marital status?

		ANSWER
1.2.1	Never married	1
1.2.2	Married	2

	5
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1.3 What is your religion?

		ANSWER
1.3.1	Christian	1
1.3.2	Non Christian	2
1.3.3	Other, please state	3

	6
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1.4 What is your home language?

		ANSWER
1.4.1	Sotho	1
1.4.2	Shangaan	2
1.4.3	Other, please state	3

	7
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1.5 According to your culture, teenage pregnancy is accepted as an indicator of maturity.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

	8
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1.6 School information

1.6.1 Are you currently attending school?

		ANSWER	
1.6.1.1		1	Yes
1.6.2.2		2	No

	9
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1.6.2 If yes, what is the highest level passed?

		ANSWER
1.6.2.1	Below Grade 9	1
1.6.2.2	Grade 10	2
1.6.2.3	Grade 11	3
1.6.2.4	Grade 12	4
1.6.2.5	Other, please state	5

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1.7 Relationships

1.7.1 There is good communication between me and my teachers.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

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1.7.2 Who are the people you spend time with before being pregnant?

		ANSWER
1.7.2.1	Boyfriends	1
1.7.2.2	Girlfriends	2
1.7.2.3	Family members	3
1.7.2.4	Cousins	4
17.2.5	Other, please state	5

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1.8 What do you usually talk about in the peer group?

You may choose more than one answer.

		ANSWER
1.8.1	Studying books	1
1.8.2	Falling in love	2
1.8.3	Sex	3
1.8.4	Our boyfriends	4
1.8.5	Cousins	5
1.8.6	Other, please state	6

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1.9 Habits

1.9.1 I have experimented with drugs.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

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1.10 Family relations

1.10.1 Are you living with both your parents?

		ANSWER	
1.10.1.1		1	Yes
1.10.1.2		2	No

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1.10.2 If no, whom are you living with?

You may choose more than one answer.

		ANSWER
1.10.2.1	Mother	1
1.10.2.2	Father	2
1.10.2.3	Sister	3
1.10.2.4	Brother	4
1.10.2.5	Both parents	5
1.10.2.6	On my own	6
1.10.2.7	With my siblings	7
1.10.2.8	Other, please state	8

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1.10.3 Are you able to share thoughts about relationships and feelings with those

Choose the most appropriate answer.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

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1.10.4 Under which conditions are you living?

Choose the most appropriate answer.

		ANSWER
1.10.4.1	Friendly	1
1.10.4.2	Abusive	2
1.10.4.3	Unfriendly	3
1.10.4.4	Poor	4
1.10.4.5	Without finances	5
1.10.4.6	Other, please state	6

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1.11 Socio-economic status

What is the combined amount of main income of the people you are living with?

1.11.1

		ANSWER
1.11.1.1	R100-R300	1
1.11.1.2	R400-R500	2
1.11.1.3	R600-R700	3
1.11.1.4	R800-R900	4
1.11.1.5	R1000 and above	5
1.11.1.6	Don't know	6

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1.11.2 Do you contribute to the income of the household?

		ANSWER	
1.11.2.1		1	Yes
1.11.2.2		2	No

	36
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1.11.3 If yes, what is the main source of your income?

You may choose more than one answer.

		ANSWER
1.11.3.1	Working	1
1.11.3.2	Social grant	2
1.11.3.3	Boyfriend	3
1.11.3.4	Husband	4
1.11.3.5	Other, please state	5

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2 SECTION B: INDIVIDUAL PERCEPTION: KNOWLEDGE, AWARENESS AND PRACTICES RELATING TO SEXUAL INTERCOURSE AND PREGNANCY

2.1 Sexual intercourse

2.1.1 At what age did you start having sexual intercourse?

		ANSWER
2.1.1.1	14 years and below	1
2.1.1.2	15-16 years	2
2.1.1.3	17-18 years	3
2.1.1.4	19 years	4

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2.1.2 What were the reasons for having sexual intercourse for the first time?

You may choose more than one answer.

		ANSWER
2.1.2.1	Peer pressure	1
2.1.2.2	Please the boyfriend	2
2.1.2.3	Forced by boyfriend	3
2.1.2.4	Fear of rejection by boyfriend	4
2.1.2.5	Family pressure	5
2.1.2.6	Its uncool to be a virgin	6
2.1.2.7	To enjoy sexual intercourse	7
2.1.2.8	Felt secure and loved	8
2.1.2.9	Other, please state	9

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2.1.3 I did receive sexuality education before my first encounter

Choose the most appropriate answer.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

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2.1.4 If agree, at what age did you receive sexuality education?

	ANSWER
2.1.4.1 14 years and below	1
2.1.4.2 15-16 years	2
2.1.4.3 17-18 years	3
2.1.4.4 19 years	4

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2.1.5 What was your source of information on sexuality?

You may choose more than one answer.

	ANSWER
2.1.5.1 Mother	1
2.1.5.2 Father	2
2.1.5.3 Sister	3
2.1.5.4 Brother	4
2.1.5.5 Both parents	5
2.1.5.6 On my own	6
2.1.5.7 With my siblings	7
2.1.5.8 Other, please state	8

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2.1.6 Indicate which information you did receive about sexuality?

You may choose more than one answer.

	ANSWER
2.1.6.1 Consequences of unsafe sex	1
2.1.6.2 Consequences of teenage pregnancy	2
2.1.6.3 Sexually transmitted infections	3
2.1.6.4 Safe sex	4
2.1.6.5 Abstinence	5
2.1.6.6 Teenage pregnancy prevention	6
2.1.6.7 Contraception	7
2.1.6.8 Consequences of abortion	8
2.1.6.9 Other, please state	9

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2.1.7 Which of the following consequences of sexual intercourse are you aware of?

You may choose more than one answer.

	ANSWER
2.1.7.1 Pregnancy	1
2.1.7.2 Sexual transmitted infections e.g. syphilis	2
2.1.7.3 Forced by boyfriend	3
2.1.7.4 Contracting HIV/ AIDS	4

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2.1.7.5	Being a mother at an early stage	5
2.1.7.6	Having to leave school	6
2.1.7.7	Early marriage	7
2.1.7.8	Illegitimate children	8
2.1.7.9	Loss of virginity	9
2.1.7.10	other,please state	10

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2.2 Pregnancy

2.2.1 How did you perceive falling pregnant as a teenager?

You may choose more than one answer.

		ANSWER
2.2.1.1	Acceptable	1
2.2.1.2	Condemned	2
2.2.1.3	Unacceptable	3
2.2.1.4	Embarrassing	4
2.2.1.5	Scared	5
2.2.1.6	Lonely	6
2.2.1.7	Isolated	7
2.2.1.8	Stigmatised	8
2.2.1.9	Other, please state	9

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2.2.2 Did you receive any information regarding teenage pregnancy before becoming pregnant?

Choose the most appropriate answer.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

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2.2.3 If agree, what kind of information did you receive?

You may choose more than one answer.

2.2.3.1	The prevention of teenage pregnancy
2.2.3.2	The consequence of teenage pregnancy such as:
2.2.3.2.1	Poverty
2.2.3.2.2	Illegitimate child
2.2.3.2.3	Dropout of school
2.2.3.2.4	Unemployment
2.2.3.2.5	Contracting HIV/AIDS
2.2.3.3	That teenage pregnancy may cause hypertensive disorders of pregnancy such as pre-eclampsia
2.2.3.4	The benefit of having a baby when ready
2.2.3.5	Other, please state

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2.2.4 What encouraged you to become pregnant?

You may choose more than one answer.

2.2.4.1	Poverty in order to receive a grant
2.2.4.2	To prove my fertility
2.2.4.3	Was afraid to lose my boyfriend
2.2.4.4	To please my boyfriend
2.2.4.5	Sexual intercourse gives me comfort
2.2.4.6	I felt loved by the boyfriend
2.2.4.7	Peer pressure
2.2.4.8	All my friends are having sexual intercourse
2.2.4.9	Curiosity
2.2.4.10	Perceive sexual intercourse as a game or adventure
2.2.4.11	Part of my culture - must prove my fertility
2.2.4.12	Other, please state

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3 SECTION C: PERCEPTIONS REGARDING THE USE OF CONTRACEPTIVES

3.1 Contraception

3.1.1 Were you using contraceptive when you become pregnant

		ANSWER	
3.1.1.1		1	Yes
3.1.1.2		2	No

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3.1.2 If no, what are the reasons for not using contraceptives?

You may choose more than one answer.

3.1.2.1	Did not know about contraception
3.1.2.2	The reproductive clinic was far
3.1.2.3	Nurses refused to give me contraceptives
3.1.2.4	I thought I am still young to fall pregnant
3.1.2.5	My boyfriend wanted a baby
3.1.2.6	Wanted to prove my fertility
3.1.2.7	It was too late - pregnant already
3.1.2.8	Culturally taboo
3.1.2.9	I was raped
3.1.2.10	Other, please specify

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3.1.3 If yes, at what age did you start using contraceptives?

3.1.3.1	14 years and below
3.1.3.2	15-16 years
3.1.3.3	17-18 years
3.1.3.4	19 years

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3.1.4 When did you receive information about contraception for the first time?

3.1.4.1	14 years and below
3.1.4.2	15-16 years
3.1.4.3	17-18 years
3.1.4.4	19 years

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3.1.5 Were you allowed to choose the type of contraceptive you want to use?

3.1.5.1	No the staff was choosing for me without asking
3.1.5.2	Yes, I could choose and staff will advice appropriately
3.1.5.3	It depended on the staff, some allowed the client to choose, and some will not allow you to choose
3.1.5.4	I could not make a choice as I have no knowledge of contraception
3.1.5.5	Ohter, please state

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3.1.6 What type of contraceptives did you use?

3.1.6.1	Injection
3.1.6.1	Pills
3.1.6.2	Intraterine contraceptive device
3.1.6.3	Condom
3.1.6.4	Calendar method
3.1.6.5	Coitus interrupters
3.1.6.6	Body temperature method
3.1.6.7	Other, please state

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3.1.7 Were contraceptives accessible to you for use before you fall pregnant?

You may choose more than one answer.

3.1.7.1	Easily accessible
3.1.7.2	Not easily accessible
3.1.7.3	Clinic closes at 16:00 daily
3.1.7.4	Long distance to the clinic
3.1.7.5	Other, please state

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3.1.8 What is your opinion about using a condom?

You may choose more than one answer.

3.1.8.1	Interfere with sexual intercourse
3.1.8.2	It is 100% effective in preventing pregnancy
3.1.8.3	It will burst in tyhe uterus
3.1.8.4	It is good as it can prevent sexual infections and pregnancy
3.1.8.5	It shows that you don't trust each other
3.1.8.6	It is against my culture
3.1.8.7	Do not have a problem to use condoms

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3.1.9 How were you using the contraceptive method chosen?**You may choose only one answer.**

3.1.10.1	Always or regularly when due
3.1.10.2	Using it only after I have seen my periods
3.1.10.3	Only when I knew I'll be meeting my boyfriend
3.1.10.4	Only after menstruation
3.1.10.5	Other, please state

	140
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3.1.11**An injection makes me to have the following experiences when I use it.****You may choose more than one answer.**

3.1.11.1	The injection makes you to:
3.1.11.1.1	Gain more weight
3.1.11.1.2	Have nausea and vomit
3.1.11.1.3	Makes you to feel sick
3.1.11.1.4	Enjoy using injection
3.1.11.1.5	No fear of becoming pregnant
3.1.11.1.6	Trust its reliability in preventing pregnancy
3.1.11.2	Other, please state

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3.1.12**Who do you think you can discuss the use of contraceptives with?****You may choose more than one answer.**

3.1.12.1	Teachers
3.1.12.2	Health workers
3.1.12.3	Parents
3.1.12.4	Peer educators
3.1.12.5	Friends
3.1.12.6	No one
3.1.12.7	Traditional healer
3.1.12.8	Older women in the family
3.1.12.9	Other, please state

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3.1.13**How can you explain the nursing staff attitudes concerning provision of contraceptives?**

3.1.13.1	Willing to provide contraceptives freely
3.1.13.2	Denying free distribution of contraceptives to all age groups
3.1.13.3	Only give what they feel is suitable without consultation
3.1.13.4	Allow the client to choose and advice where necessary
3.1.13.5	Makes me feel guilty
3.1.13.6	Stigmatised me
3.1.13.7	Threatened to tell my parents
3.1.13.8	Other, please state

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3.1.14 I have used emergency contraception.

Agree	Strongly agree	Disagree	Unsure	Strongly disagree
1	2	3	4	5

	159
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3.1.15 What do you understand about termination of pregnancy?

You may choose more than one answer.

3.1.15.1	It is offered cost freely in a state hospital
3.1.15.2	It can be done before 12 weeks
3.1.15.3	It cannot be used as a method of contraception
3.1.15.4	Can use it at any time if lazy to go and collect your regular contraceptives
3.1.15.5	Did not receive any information
3.1.15.6	Other, please state

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3.1.16 At what age were you aware about termination of pregnancy?

3.1.16.1	14 years and younger
3.1.16.2	15 -16 years
3.1.16.3	17 -18 years
3.1.16.4	19 years

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4 SECTION D: PERCEIVED SEVERITY

4.1 Were you aware that unprotected sex will lead to pregnancy?

		ANSWER	
4.1.1		1	Yes
4.1.2		2	No

	170
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4.2 Indicate which of the following effects of teenage pregnancy you were aware of before falling pregnant. Pregnancy can cause:

You may choose more than one answer.

4.2.1	Hypertension
4.2.2	Unemployment
4.2.3	Poverty
4.2.4	Death
4.2.5	Marriage
4.2.6	Illegitimate child
4.2.7	Early divorce
4.2.8	Stigmatisation
4.2.9	An abnormal baby
4.2.10	Alienation of family
4.2.11	Sexual transmitted infections
4.2.12	HIV/AIDS

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5 SECTION E: PERCEIVED BARRIERS

5.1 Which of the following aspects are some of the barriers that might have prevented becoming pregnant?

You may choose more than one answer.

5.1.1	The health workers refused to assist me because I was under 18 years old		183
5.1.2	The health workers were not friendly		184
5.1.3	The clinic was far from home		185
5.1.4	There are no services provided during the weekends		186
5.1.5	My boyfriend refused to use the male condom		187
5.1.6	My boyfriend did not let me use the female condom		188
5.1.7	I wanted a baby to access the social grant		189
5.1.8	I thought my boyfriend will feel I don't love him if I insisted on him using a		190
5.1.9	I thought I will lose my fertility if I used contraceptives		191
5.1.10	I did not have information about family planning		192
5.1.11	I was ignorant of the consequences		193
5.1.12	Ohter, please state		194

5.2 What do you think the family planning provider can do to improve the service to prevent pregnancies in teenagers?

You may choose more than one answer.

5.2.1	To be more educative about reproductive health matters		195
5.2.2	Reproductive services to be offered 24 hours		196
5.2.3	To display condoms in all supermarkets		197
5.2.4	To motivate girls to be able to say not to boys until matured enough to be responsible		198
5.2.5	The staff should have enough information to assist teenagers		199
5.2.6	Discourage boys not to sleep with girls before marriage		200
5.2.7	Encourage sexual active boys to use condom during sexual intercourse to avoid teenage pregnancy		201
5.2.8	No need to improve the service		202
5.2.9	Staff to be approachable		203
5.2.10	To have enough stock of contraceptives at the clinics		204
5.2.11	Not to be judgmental to teenagers		205
5.2.12	To initiage health education classes		206
5.2.13	Refert to social serves		207
5.2.14	Show understanding		208
5.2.15	Urge the government to activate school health services		209
5.2.16	Motivate parents to talk to both girl and boys about the long lasting effects of teenage pregnancy.		210

SECTION F: CUES TO ACTION

5.3 Who of the following advised you about contraceptives?

You may choose more than one answer.

5.3.1	Teachers		211
5.3.2	Health workers		212
5.3.3	Parents		213
5.3.4	Friends		214
5.3.5	Church		215
5.3.6	Media		216
5.3.7	Television programme		217
5.3.8	Newspaper reports on teenage pregnancy		218
5.3.9	Health posters on sexual transmitted infections		219
5.3.10	Health education leaflets		220
5.3.11	Radio programmes		221
5.3.12	Other, please specify		222

THANK YOU

ANNEXURE G

I----- on this ----- day of ----- 2011 hereby consent to be interviewed by Mrs Mkhantswa S.G on the topic **“THE CONTRIBUTORY FACTORS TO HIGH TEENAGE PREGNANCY RATE AT EHLANZENI DISTRICT IN THE MPUMALANGA PROVINCE”**.

- The use of data derived from the interview by the researcher in the research report as she deems appropriate

I also understand that:

- I am free to terminate my involvement or to recall my consent to participate in this research at any time I feel like it.
- Information given up to the point of my termination of participation could, however still be used by the researcher
- Confidentiality will be maintained by the researcher and that the identity will not be linked to information.
- No reimbursement will be made by the researcher for information given or participation in this project
- By signing this agreement I undertake to answer honestly to and not to mislead the researcher
- I will be given the original copy of this agreement on signing it
- I hereby acknowledge that the researcher has
- Discussed with me in detail the purpose of this research project
- Informed me about the contents of this agreement
- Pointed out the implications of signing the agreement
- **In –co signing this agreement, the researcher has undertaken to**
- Maintain confidentiality and privacy regarding the respondents’ identity and information given by the participant
- Arrange in advance a suitable time and place for the interview
- Safeguard the duplicate of this agreement.

INTERVIEWEE:----- RESEARCHER:-----

DATE: ----- DATE:-----

TO WHOM IT MAY CONCERN

This is to confirm that I have edited the dissertation by Mrs S G Mkhantswa entitled 'THE CONTRIBUTORY FACTORS TO THE HIGH TEENAGE PREGNANCY RATE IN A DISTRICT HOSPITAL AT EHLANZENI DISTRICT IN THE MPUMALANGA PROVINCE.'

This was language editing only, as I have no expertise as regards the contents of her work. I did not edit or check the content of the references and stressed to Mrs Mkhantswa that the accuracy of the references and the bibliography was her responsibility. I also asked her to ensure that her headings in the table of contents correlated with those in the text itself.

Gretchen Carpenter

BA LLB (Pret) BA Hons (English) (SA)

Advocate of the High Court, South Africa

Emeritus Professor of Constitutional and Human Rights Law, University of South Africa

Erstwhile assistant editor (1982-2000) and editor-in-chief (2000-2002),

TydskrifvirHedendaagseRomeins-HollandseReg

P O BOX 40601

GARSFONTEIN EAST 0060

carpenter@mweb.co.za