

Contraceptive Use among Young Women in Namibia: Determinants and Policy Implications

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TABLE OF CONTENTS

Abstract.....	v
Acknowledgements.....	vii
Dedication.....	viii
List of acronyms.....	ix
List of tables.....	xi
List of figures.....	xii

Chapter One: Introduction

1.1 Background to research problem.....	1
1.2 Background information of Namibia.....	10
1.3 Statement of the problem.....	15
1.4 Purpose of the study.....	17
1.5 Organisation of the thesis.....	18

Chapter Two: Theoretical framework and Literature review

2.1 Introduction.....	20
2.2 Theoretical and conceptual framework for the determinants of contraceptive use.....	20
2.3 Background information on contraception.....	29
2.4 Contraceptive use in developed and developing countries	36
2.5 Patterns of contraceptive use in Africa.....	47
2.6 Gender and cultural perspectives on contraceptive use....	59
2.7 The role and importance of reproductive health programs	70
2.8 Conclusion.....	76

Chapter Three: Data and Methods of analysis

3.1 Introduction.....	79
3.2 Sources of data.....	79
3.2.1 The Namibia Demographic and Health Survey... Data.....	82

Target population.....	82
Sample design.....	83
Sample frame	
Questionnaires	
Training and Fieldwork	
Response rate	
NDHS data quality assessment and limitations of the study	
3.2.2 Focus groups discussions.....	87
Composition of the groups	
Selecting participants	
Conducting the sessions	
Limitations of focus groups	
3.3 Methods of qualitative analysis.....	90
3.4 Methods of quantitative analysis.....	91
3.4.1 Logistic regression.....	91
3.4.2 Multinomial logistic regression.....	93
3.5 Analytic strategy.....	95
3.6 Operational definitions of variables.....	96
3.7 Summary.....	99

Chapter Four: Results and Discussion

4.1 Introduction.....	100
4.2 Contraceptive use.....	101
4.3 Factors associated with contraceptive use.....	106
Descriptive analysis	
Bivariate and multivariate analyses	
4.4 Determinants of contraceptive methods choice.....	122
Descriptive analysis	
Bivariate and multivariate analyses of method choice	

4.5 Factors associated with condom use.....	131
4.6 Information from focus groups.....	136
4.6.1 Health services utilisation.....	137
4.6.2 Use of contraceptives.....	142
4.6.3 Contraceptive method choice.....	144
4.6.4 Parent-child communication on sexual issues..	149
4.7 Conclusion.....	154

Chapter Five: Findings and Recommendation

5.1 Summary of findings.....	159
5.2 Conclusion and Policy implications.....	167
5.3 Recommendations.....	177

References	183
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Appendices

Appendix 1 Consent form for research on use of contraceptive methods among young women in Namibia (for young women).....	203
Appendix 2 Letter of request to principals/youth officers for conducting focus group discussion.....	204
Appendix 3 Consent form for research on use of contraceptive methods among young women in Namibia (for parents).....	205
Appendix 4 Discussion guide.....	206
Appendix 5 The procedure used to construct a multiple classification analysis table for multinomial logistic regression.....	208
Appendix 6 DHS Questionnaire.....	210

Abstract

The present study examines social, demographic and behavioural factors that influence contraceptive use and method choice among young Namibian women. The study also explores ways to improve the accessibility of health facilities and family planning services for young women. The research is based on both quantitative and qualitative data provided by the 2000 Namibian Demographic and Health Survey and focus group discussions with young women (15-24 years) respectively. The data have been used to analyse the factors affecting contraceptive use and method choice among young women in Namibia. The logistic regression method has been applied to examine the determinants of contraceptive use and method choice. The study examines knowledge of contraceptive methods and sources of supply, decisions leading to contraceptive use and views about service delivery and the availability of contraceptive methods. The study reveals that whilst there is provision, the accessibility of existing reproductive health services for young women is poor in rural areas. There is a lack of support from parents, nurses, and the broader community. Part of the problem here is that older people are not fully aware of the sexual rights of young women, which leads to misunderstandings with regard to sexual and reproductive health issues. Nurses, especially in rural areas, are deemed to be judgmental and reluctant to provide contraceptives to young female scholars. Health facilities are also ranked by young women as user-unfriendly as most of them, as public spaces, lack confidentiality and privacy. These negative experiences of young women impact on their utilization of reproductive and health services and their use of contraceptives.

Levels of contraceptive use among all age groups, including young women, in Namibia are still low. The choice of contraceptive method is restricted to injectables and to some extent, condoms. Uninformed and unsupportive parents are identified as major barriers to young women's sexual health and their ability to use contraception consistently. Apart from this, individual use of contraception is greatly influenced by individual and community characteristics. The education level, marital status, number of children and work status are important individual factors affecting whether and what kind of contraception young women will use. Other issues related to the individual women concern whether she discusses family planning with her partner or parent, and whether she has access to the media and to health facilities. For example, findings from the multivariate analysis showed that increased education was significantly associated with a greater likelihood of using contraception. Unmarried young women were more likely to use condoms than married women. Higher condom use was also reported among young women of 15-19 years old than among 20-24 year olds. Furthermore, young women in urban areas had more positive attitudes towards using contraceptives, as well as more forthcoming friends and parents than those in the rural areas. The findings thus suggest that government strategies, which aim to increase the use of contraceptives amongst young women in Namibia, ought to enhance and improve parent-child communication, engage young women's social networks, and seek to counteract negative assumptions of service providers who could potentially cater for a growing number of young women users and also make a range of choices available.

Abstrak

Die huidige studie ondersoek die sosiaal, demografiese en gedragsfaktore wat die keuse van kontraseptiewe metodes en gebruik, onder jong Namibiese vroue, beïnvloed. Die studie ondersoek ook maniere om die toeganklikheid van gesondheidsfasiliteite en gesinsbeplanningdienste, te verbeter. Die navorsing is gebaseer op beide die kwantitatiewe en kwalitatiewe data, wat voorsien is deur die 2000 Namibiese Demografiese en Gesondheidsopname, en fokusgroep-besprekings met jong vroue (15-24 jaar) onderskeidelik. Die data is gebruik om die faktore wat kontraseptiewe gebruik en metode-keuses onder jong vroue in Namibie te analiseer. Die logistiese regressie metode is toegepas om die determinante van kontraseptiewe gebruik en metode-keuses te ondersoek. Die studie ondersoek die kennis van kontraseptiewe metodes en voorsieningsbronne, besluite wat lei tot kontraseptiewe gebruik en siening met betrekking tot dienslewering en die beskikbaarheid van kontraseptiewe metodes. Die studie dui aan dat, terwyl daar wel voorsiening is, die toeganklikheid van bestaande reprodktiewe gesondheidsdienste vir jong vroue in die platteland, swak is. Daar is 'n tekort in terme van ondersteuning van ouers, verpleegkundiges en die breër gemeenskap. Deel van die probleem is dat ouer mense nie volledig op hoogte is, wat betref die seksuele regte van jong vroue nie. Laasgenoemde lei tot misverstande met betrekking tot seksuele en reprodktiewe gesondheidsaangeleenthede. Verpleegkundiges, veral in die landelike gebiede, is dikwels bevooroordeeld en onwillig om kontraseptiewe aan jong vroulike, studente, te verskaf. Gesondheidsfasiliteite word ook deur jong vroue, as gebruikersonvriendelik beskou, aangesien die meeste openbare fasiliteite, nie vertroulikheid en privaatheid, handhaaf nie. Hierdie negatiewe ervarings van jong vroue het 'n impak op hul benutting van reprodktiewe- en gesondheidsdienste, en die gebruik van kontraseptiewe.

Vlakke van kontraseptiewe gebruik onder alle ouderdomsgroepe, ingesluit jong vroue in Namibie, is steeds laag. Die keuse van kontraseptiewe metodes is beperk tot insputings en tot 'n mate, kondome. Oningeligte en nie-ondersteunende ouers, is geïdentifiseer as groot struikelblokke vir jong vroue se seksuele gesondheid en hul vermoë om deurlopend kontraseptiewe te gebruik. Behalwe dit, word individuele gebruik van kontraseptiewe grootliks beïnvloed deur individuele en gemeenskaps-karaktereienskappe. Die opvoedkundige vlak, huwelikstatus, aantal kinders en werkstatus, is belangrike individuele faktore wat die besluit oor of die jong vrou kontraseptiewe gebruik, en watter, beïnvloed. Ander aspekte wat betrekking het op die individuele vrou, is of sy dit bespreek met haar ouers, of maat, en of sy toegang het tot die media en tot gesondheidsfasiliteite. Bevindinge van die multivariasie analise dui daarop dat verhoogde opvoedkundige vlakke geassosieer word met verhoogde gebruik in kontrasepsie. Ongetroude jong vroue het 'n groter waarskynlikheid dat hul kondome sal gebruik as getroude vroue. Hoer kondoomgebruik is ook aangedui onder vroue tussen 15 – 19 jaar, in vergelyking met die ouderdomsgroep 20-24 jaar. Verder, jong vroue in stedelike gebiede het meer positiewe houdings ten opsigte van kontraseptiewe gebruik, sowel as hul vriende en ouers, as die in die landelike gebiede. Die bevindinge wat strategieë voorstel, wat gemik is op die verhoogde gebruik van kontraseptiewe onder jong vroue in Namibie, fokus op die verbetering van ouer-kind kommunikasie, sosiale netwerke, en poog om negatiewe aannames van diensverskaffers, aan 'n potensieël groeiende aantal jong vroue-gebruikers, te probeer verander en groter keuses beskikbaar te maak.

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Dedication

I dedicate this thesis to my late mother, Monika Ndeviilonga who died just three weeks before I registered for this study and to my only daughter Tuyakula Nelago Ndahambelela who was born in the midst of my study.

List of Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ASFR	Age Specific Fertility Rate
DHS	Demographic and Health Survey
FP	Family Planning
FG	Focus group
FGDs	Focus Group Discussions
FHI	Family Health International
GDP	Gross Domestic Product
HIV	Human Immunodeficiency Virus
ICPD	International Conference on Population and Development
IUDs	Intrauterine Devices
MOHSS	Ministry of Health and Social Services
MOH	Ministry of Health
NDHS	Namibia Demographic and Health Survey
NGOs	Non-Governmental Organisations
NASOMA	National Social Marketing for Condoms
PRB	Population Reference Bureau
PSU	Primary Sampling Units
RH	Reproductive health
SIAPAC	Social Impact Assessment and Policy Analysis Corporation
SIECUS	Sexuality Information and Education Council of the United States
SRH	Sexual Reproductive Health
STD	Sexual Transmitted Disease
STI	Sexual Transmitted Infections
TFR	Total Fertility Rate
TV	Television
UNAIDS	United Nations Joint Programmes on HIV/AIDS

UNAM	University of Namibia
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organisation
YFHS	Youth Friendly Health Services

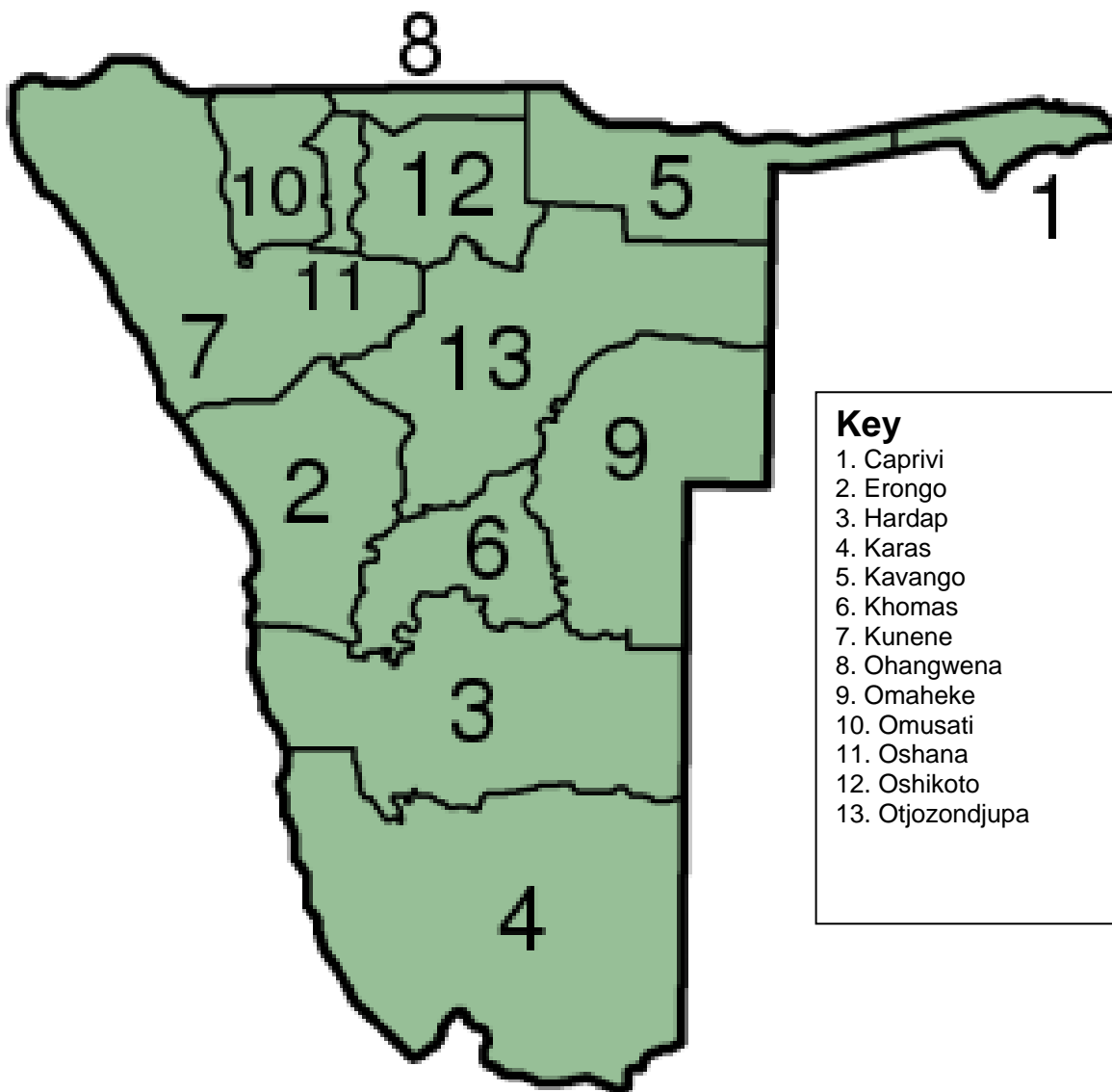
List of Tables

Table 2.1	Total fertility rates and births by regions of the world.....	38
Table 3.1	Age distribution of young women (15-24), Namibia 2000.....	83
Table 3.2	Results of the households and individual interviews, Namibia 2000.....	85
Table 3.3	Age distribution of young women selected for the focus group discussion.....	91
Table 4.1	Percentage of young women by knowledge of contraceptive methods, Namibia 2000.....	102
Table 4.2	Percentage distribution of sexually active young women (15-24 years) who reported using contraceptives by type of method, Namibia 2000.....	105
Table 4.3	Sample distribution of sexually active young women by selected characteristics associated with contraceptive use, Namibia 2000.....	107
Table 4.4	Percentage distribution of sexually active young women using Contraceptive methods and their estimated odd ratios of the likelihood of contraceptive use, by selected background characteristics, Namibia 2000.....	112
Table 4.5	Percentage distribution of method choice by selected socio-demographic and behavioural characteristics, Namibia 2000.....	127
Table 4.6	Predicted probabilities for young women's choice of contraceptive methods by selected variables, Namibia 2000.	130
Table 4.7	Percentage of sexually active young women using condom by selected characteristics, and odd ratios from logistic regression analysis assessing associations between characteristics and condom use, Namibia 2000.....	134
Table 5.1	Tabular representation of research findings.....	166

List of Figures

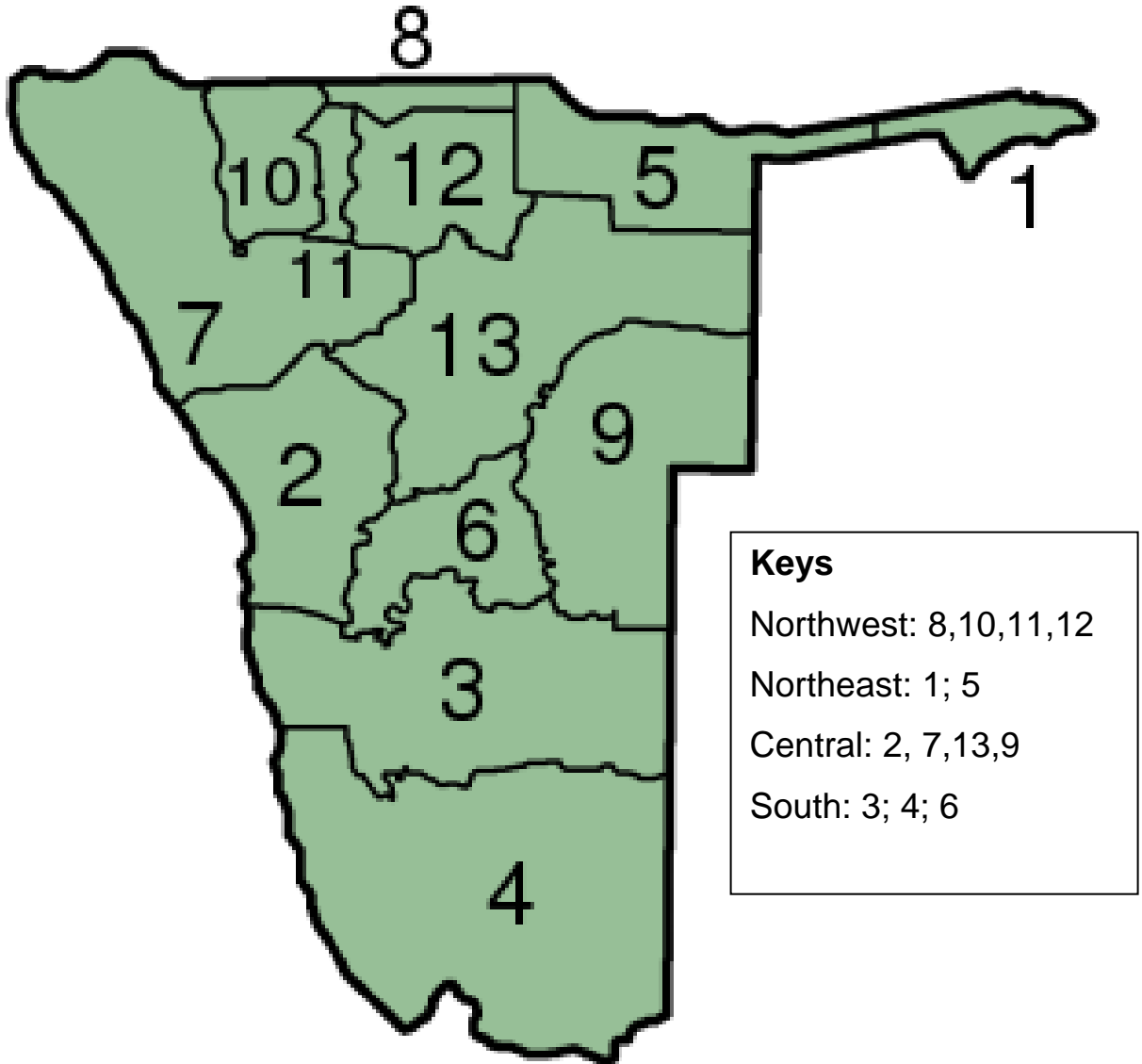
Figure 1	Regional map of Namibia.....	xiii
Figure 2	Map of Namibia showing health directorates.....	xiv
Figure 3	Conceptual frameworks for the determinants of contraceptive use and contraceptive method choice.....	28
Figure 4	Age specific fertility rates per 1000 young women in Namibia	41
Figure 5	Contraceptive use levels among women of childbearing ages by Region.....	49
Figure 6	Choice of contraceptive methods among young women in Namibia.....	123
Figure 7	Method choice for young women in the Northwest.....	124
Figure 8	Method choice for young women in the Central.....	125
Figure 9	Method choice for young women in the South.....	125
Figure 10	Method choice for young women in the Northeast.....	126

Figure 1: Regional Map of Namibia



- Key**
- 1. Caprivi
 - 2. Erongo
 - 3. Hardap
 - 4. Karas
 - 5. Kavango
 - 6. Khomas
 - 7. Kunene
 - 8. Oshana
 - 9. Otjozondjupa
 - 10. Oshikoto
 - 11. Kunene
 - 12. Oshikoto
 - 13. Otjozondjupa

Figure 2: Health Directorates of Namibia





CHAPTER ONE

Introduction

1.1 Background to research problem

Contraception is defined as the practice of methods intended to prevent or space future pregnancy. Contraceptive use in this study will refer to whether or not a young woman reports using contraception. Contraceptive method choice in the context of this research will be referred to as the contraceptive method which a young woman¹ reports using at the time of the collection of data. Contraceptive methods can be divided into two categories: traditional and modern. Modern contraceptives are easily classifiable and include oral contraceptives, intrauterine devices (IUDs), female and male sterilisation, injections, condoms and the diaphragm. Other practices, which have a direct impact on fertility that have been used include prolonged breast feeding and postpartum sexual abstinence, which are probably used by mothers more for recuperating between births, child survival and child spacing rather than for limiting family size. Thus, these methods have not been considered as contraceptive methods although their fertility inhibiting characteristics are well recognised. Traditional methods recognised in this study include withdrawal, periodic abstinence, use of herbs and wearing of traditional beads.

Nearly 1.7 billion people, about one-third of the world's total population, are between the ages of 10 and 24 (Creel & Perry, 2003), with the vast majority living in developing countries. As they mature, young women (aged 15-24 years) are increasingly exposed to reproductive health risks such as sexually transmitted infections (STIs), unintended pregnancy and childbirth (United Nations (UN), 1998). The exposure to these risks has attracted considerable

¹ Young women refer to women aged 15-24 years.



research attention in different societies, in efforts both to understand its extent, causes and to address it as a problem. Studies in developed countries have shown a high incidence of such exposure (Mfono, 1998). Mfono (1998) further reports that Western European countries reacted with strong sex education programmes and adolescent contraceptive services, coupled with mandatory confidentiality. However, the United States lags behind other developed countries in the extent to which teenage fertility has declined (United Nations, 2003). Research in Latin America has also shown that a relatively high proportion of teenagers are exposed to the risk of pregnancy (World Health Organisation (WHO), 1989). Access to sex education and to family planning services is poor among adolescents in this region, and the incidence of teenage childbearing is high. Results from Asia vary, with early marriage and childbirth persisting in rural India despite the government prescribed minimum marriage age of 18 years for females (Singh, 1997). In China, abortions are increasing among teenagers, indicating rising sexual activity within this age-group (Ross et al., 1999). In Africa, studies (Muhwava, 1998; Burgard, 2004) have demonstrated that a large proportion of young women are exposed to the risk of conception, receive poor or no sex and contraceptive education, and experience a high incidence of adolescent childbirth.

The Namibian situation resembles that prevailing in developing societies in Africa and Latin America. Although reports indicate a decline in teenage pregnancy, most of the premarital births still occur among young women aged 15-24 years, the majority of whom are neither economically nor emotionally ready to deal with parental responsibilities. Thus, improving young women's reproductive health is key to improving the situation of women as well as the world's future generations (Creel & Perry, 2003). Young women's reproductive health needs are often overlooked or viewed through a lens of cultural values that limit care. The socio-cultural context in which young



women in Namibia find themselves has changed considerably within the past few generations. As in much of Africa, young women in Namibia are experiencing social turmoil resulting from conflicting values as the country becomes more urban and industrial. The smaller and slower paced communities of the past provided clear guidelines for young women in such aspects of their socialization as recreation, religion, relationship with elders and cultural rituals. In most ethnic groups like “Oshiwambo” group, “Kavango” group and “Caprivi” group, adolescence generally commenced with “Ohango yomeengoma”², a rite of passage that marked emergence from childhood to adulthood (Shapumba et al., 2004). They were allocated a tutor who explained their role in society to them and taught them about sexual behaviour and pregnancy. Such customs conferred peer-group identity and promoted a social and personal sense of belonging. Periodic abstinence, withdrawal and nonpenetrative sex were taught and widely practised as means of preventing pregnancy. Young women were taught about the “wrong time of the moon”, when a girl might get pregnant. Such traditions were by no means universal and some ethnic groups were highly restrictive of females. The “Oshiwambo”, “Kavango” and “Caprivi” groups for example, expected proof of female virginity at marriage, demonstrated by a certain amount of blood on the consummation bed, otherwise the bride would not be respected by in-laws. In addition, unmarried young women were also allowed to engage in a nonpenetrative form of sexual intercourse called “Okugwila”³, which only happened when the two partners were known by both family elders (Mufune, 2003). However, with urbanisation and promotion of modern practices, most sexual socialization rituals are discarded. Educational functions, which formerly rested within the family and community, are increasingly being taken over by local and national governments, churches and community groups. These institutions must now unite diverse ethnic groups and develop a

² “ohango yomeengoma” refers to the Oshiwambo traditional wedding

³ “okugwila” is to spend a night with a fiancée without having sexual intercourse

national message dealing with personal areas such as sexual activity. Conflict often results. Therefore, leaders remain apprehensive and uncomfortable about policies and legislation related to young women, such as those affecting sex education and access to contraceptives. The need for guidelines and programmatic intervention addressing these problems is clear. However, it requires an understanding of the many factors affecting young women's use of contraceptives, and very little analytical investigation of this subject has been done in Namibia.

Several researchers (Abdool et al. 1992; Agyei & Migadde, 1995; Khan & Rahman 1997; Karim et al. 2003) have indicated that sexually active young women need access to family planning information and services to prevent unwanted pregnancies. They also argued that young women need support and encouragement from their peers, adults and the media to use contraception effectively and consistently. However, improving contraceptive use by sexually active young women requires expanding and enhancing existing services as they often do not meet the demands of young women. Young women usually demand confidential, safe and convenient services (Hersh et al. 1998; Juarez 2002; Creel & Perry, 2003). They also demand that the social norms inhibiting young women's contraceptive use should be engaged with, that parents must openly discuss responsible and healthy sexual behaviour with them, that peers must be encouraged to teach each other about the importance of safe, protected sex and that the media must present positive images of healthy sexual behaviour (Brindis & Davis, 1998). At most health facilities in most sub-Saharan African countries, young women are not provided with advice and education on reproductive health matters (May et al. 1990; Marindo et al. 2003). This has contributed to young women's inability to effectively negotiate with either their partners or their parents on sexual and reproductive health issues.

During the past decade, in part as a result of the HIV/AIDS pandemic, young people and their health needs have been the subject of greater attention worldwide. Various international fora such as the 1994 International Conference on Population and Development (ICPD) held in Cairo, Egypt, the 1997 African Forum on Adolescent Reproductive Health held in Addis Ababa, Ethiopia, and the 1999 World Youth Forum held at the Hague, Netherlands, have addressed young peoples' sexual and reproductive health issues. At the Cairo Conference, all countries, including Namibia, which was a signatory, were advised to make accessible, through the primary health care system, reproductive health to all individuals of appropriate age (United Nations, 1994). Reproductive health care in the context of primary health care includes among others: family planning counselling, information, education, communication and services concerning reproductive and sexual health, including prevention of early pregnancies, sex education and the prevention of HIV, AIDS and other STDs. Access to and confidentiality and privacy of these services were also emphasized as well as parental guidance and support. At the Cairo Conference, one of the recommendations given to participating countries was to design reproductive health care programmes to serve the needs of young women in particular, and to involve young women in the leadership, planning, decision-making, management, implementation, organization and evaluation of services.

In addition to the Cairo Conference, countries were requested to develop innovative programmes to make information, counselling and services for reproductive health accessible to young women and men. Furthermore, the Cairo Conference advised governments to promote greater community participation in reproductive health care services by decentralizing the management of public health programmes and by forming partnerships in cooperation with local non-governmental organizations and private health care providers (United Nations, 1994). Five years after the ICPD, the

importance of young peoples' health has been acknowledged, and numerous programmes have been developed to address their reproductive health needs (UNFPA, 1999^a). For example in Namibia, there are currently campaigns and young people's programmes designed to provide information to young women on sexual and reproductive health. These include: media campaigns (radio and television services and advertisements) such as those developed by UNICEF, National Social Marketing for condoms (NASOMA) and the Ministry of Health and Social Services focusing on encouraging condom use among sexually active young people; the "My Future My Choice" campaign of UNICEF which provides sexual and reproductive health information, counselling and services through Multi-purpose youth centres; the "True Love Waits" campaign which is designed to help young people to develop self efficacy and decision making skills to protect themselves from unwanted pregnancies and sexually transmitted infections (STIs) including HIV/AIDS as well as other numerous programmes such as those run by the Catholic AIDS Action that promotes abstinence and monogamy and focuses on reaching young people in religious settings. However, much still needs to be done to ensure sustainability of these programmes and to make sure that initiatives from these programmes receive strong legislative support.

At the national level, many public and private institutions and organizations in sub-Saharan Africa have held numerous seminars, workshops and conferences not only to highlight the sexual and reproductive health issues of young people but also more importantly to devise programmes and strategies to prevent unwanted pregnancies (Tawiah, 2002). It is envisaged that arming young women with adequate knowledge of reproductive health matters will help pave the way to responsible parenthood and also enable them to make responsible decisions that affect their lives. Tawiah (2002) further reports that an estimated 64.1 per cent of the population under 25 years lives in sub-Saharan Africa. This suggests that a very high proportion of young people are

at, or are about, to reach reproductive age and are potential candidates for early parenthood. It is, therefore, quite obvious that neglecting the reproductive health needs of young people who form a significant proportion of the population in sub-Saharan Africa will have long-term adverse effects on the capabilities of our next generation, in particular the women.

A number of studies (Nelson et al. 2000; Ngalinda, 2001; Varga, 2003) have focused on young peoples' sexual behaviour in sub-Saharan Africa. Most of these studies report high levels of sexual activity among young women. They also indicate that young people's first sexual experiences take place in different social contexts from those of previous generations, where it was really important that "a woman is married as a virgin". Increased modernization and education, together with exposure to western media have been cited as having led to a decline in traditional values and, in particular, to have reduced the importance of maintaining virginity until marriage (Jackson & Harrison, 1999; Kinsman et al., 2000). Media programmes, especially in the form of entertainment, have the potential to provide health behaviour messages in a more palatable, culturally appropriate and interesting format than news (Masatu et al., 2003). For example, in Iran, a media campaign to increase contraceptive awareness and practice showed large increases in the number of both pill and condom users (Westoff & Rodriguez, 1995), while in Nigeria, mass media campaigns resulted in a large increase in the family planning clients at clinics.

Sexually active young women worldwide are at high risk of pregnancy, largely because they use ineffective methods or use contraception intermittently. Often those who use effective hormonal methods – the pill and the injectable – as well as condoms, have high discontinuation rates (Pachauri & Santhya, 2003). However, the implant, another hormonal method, which became available in the 1990s, has helped young women to use effective methods

successfully, contributing to recent declines in teenage pregnancy in the United States (Harper et al., 2004). Efforts to help sexually active young women to choose effective methods and to use them consistently are therefore essential to continued reductions in teenage pregnancy rates.

Because hormonal contraceptive methods are available only by prescription, using them requires a physician or clinic visit and thus the choice of these methods for young women resulted in low levels of use. Although a growing body of literature on the influence of parents, male partners and peers has informed understandings of young women's sexual risk behaviour and reproductive outcomes (Temin et al., 1999), information on the role that these key people play in young people's clinic visits for contraception is still limited. In general, parental support, involvement and communication can help young women to avoid sexual risk behaviour and pregnancy. Communication with parents on sexual topics typically occurs with the mother, although discussions about contraceptive method choices between young women and their mothers often occur only after a pregnancy. However, studies on parent-child communication on reproductive health issues, including contraception, did not attract the attention of researchers in the past and there are few comparable studies (Whitaker et al., 1999) on this subject. Most studies (Manlove et al., 2003; Magadi & Curtis, 2003; Chen & Guilkey, 2003) looked at partners' communication, which is of little significance for adolescents, and has more effect for young adults⁴.

Peers on the other hand are an important influence on young women's sexual behaviour, although the association tends to be in the direction of increased, rather than reduced risk behaviour (Dilorio et al., 1999). Peer influence, as well as risk behaviour, may increase during middle adolescence (ages 15-16),

⁴ Young adults refer to young women who are aged 20-24 years; adolescents would refer to those aged 15-19 years. Together, this group would constitute 'young women' (15-24 years).

whereas support from partners may be greater for older young women as they develop more stable relationships. Support from and communication with male partners can help to increase contraceptive use and decrease the likelihood of early pregnancy (Whitaker et al., 1999).

For programmes and service delivery of contraception to young women to be effective, it is important to understand how different factors work to support young women in their efforts to prevent unintended pregnancy. Data on young women's interaction with others when seeking contraception can help to improve contraceptive counselling, as well as inform policy debates on parental involvement in young women's clinic visits for contraception, male involvement in family planning, media campaigns and the use of peer programmes.

Substantial evidence is also found in existing literature that broadening the choice of contraceptive methods increases overall contraceptive prevalence (Magadi & Curtis, 2003; Chen & Guilkey, 2003). The provision of a wide range of contraceptive methods increases the opportunity for individuals to obtain a method that suits their needs. Ross et al. (2001) confirm that prevalence of contraceptive use is highest in countries where access to a wide range of methods is uniformly high. Studies of contraceptive use and contraceptive methods choice among young women in countries in sub-Saharan Africa are few, probably because of the generally low contraceptive prevalence in the region. In addition, researchers have primarily focused on contraceptive use and method choice among married women, leaving the vulnerable unmarried young women unattended. A growing need, though, exists for an examination of contraceptive use and methods choice patterns among young women.

As mentioned earlier, several research studies (Bertrand et al., 2001; Magadi & Curtis, 2003; Rani & Lule, 2004) have looked at the individual and community influence on contraceptive use of young women but there is a dearth of knowledge in research on household influence, especially that of immediate family members on the use of contraceptives among young women. Although programmes that equip young women with sexual and reproductive health information exist in Namibia, parents and other community elders are left behind because there are very few programmes targeting them with regard to how they should communicate with their children on sexual issues.

1.2 Background information on Namibia

Namibia is the most arid country in Sub-Saharan Africa. In the western border of the country lies the Namib desert; to the south, the Kalahari. The central interior of the country is either arid or semi-arid grass or scrub savannas. Only to the north, towards the Angolan border, does mean annual rainfall increase and the land supports a semi-humid and sub-tropical climate.

Although Namibia's total population is only 1.8 million inhabitants, there is immense regional variation in population density. The bulk of the black rural population reside in the north along the perennial rivers which form the country's Northern border. About half the people make their living through agriculture, mainly from Karakul pelts, livestock, and dairy products (Central Statistics Office, 1996). Unemployment is high, and much of the land remains in the hands of several thousand white farmers; this has led to pressure for increased land redistribution, a process that began, albeit gradually, in mid-2004 (National Planning Commission, 2006). The country's few manufactured products are made up mostly of processed food. There is an extensive mining industry, run principally by foreign-owned companies. Namibia is a major



producer of gem-quality diamonds, the country's principal export. Other important minerals are uranium, copper, lead, gold, zinc, silver and tin. Fishing fleets operate in the Atlantic. Unrestricted fishing by commercial companies severely depleted the country's supply of certain types of fish, but stocks are being replenished. The central part of the country is served by roads and rail lines that are linked with those of South Africa, its largest trading partner (Central Statistics Office, 1996).

At the beginning of the century, the Germans colonised the country, setting up a basic infrastructure to access newly discovered diamond and mineral mines. After the First World War, South Africa was given the “guardianship” of South West Africa, as Namibia was called, and encouraged white settlement by giving title to land for commercial farming in the central and southern areas. This setup resulted in a highly inequitable income distribution. According to the Namibian income and expenditure survey report of 2006, the richest 5 per cent of the population control 71 per cent of the Gross Domestic Product (GDP). Approximately 47 per cent of the population is living in poverty, calculated in terms of household expenditure where more than 60 per cent of household income is spent on food (National Planning Commission, 2006). Namibia has an ethnically diverse population that includes the Bantu-speaking Ovambo, Kavango, and Herero; various Nama groups; the Damara; San (Bushmen); and whites of South African, German, and British descent. English is the official language, but most of the population speaks Afrikaans. About 80% of the population is Christian, and the rest follow traditional beliefs.

Namibia inherited a health structure that was segregated along racial lines and based entirely on curative health services. The administrative structure for delivery of health services was based on the Representative Authorities proclamation of 1980 which created a two-tier system, resulting in an unequal

allocation of resources and services. The ethnically based second tier was poorly funded and administrators could not raise the necessary income to provide basic health care services. As a result, there were large inequalities in the delivery of health care services in the country (Ministry of Health and Social Services, 1993^a).

Namibia gained independence in March 1990. Shortly after independence, major changes occurred in all sectors, many of which have been restructured to meet the challenges facing the new nation in the post-apartheid era. The government of Namibia declared its commitment to the equitable distribution of resources and equity of access to basic services for those who are socially and economically disadvantaged (National Planning Commission, 1997). The health facilities in Namibia are currently divided into sub-divisions representing services offered, i.e. family planning, counselling, STD treatment service, antenatal care etc. Although this is regarded as an effective setup, young women do not usually consider this to be user-friendly because of the public marking displayed for each section.

Administratively, the country is divided into 13 regions, namely: the Caprivi, Kavango, Kunene, Omusati, Ohangwena, Oshana and Oshikoto regions in the north, the Omaheke, Otjozondjupa, Erongo and Khomas regions in the central areas and the Hardap and Karas in the south. However, the Ministry of Health and Social Services is operating through its four health directorates, namely: Northwest, constituting of Oshana, Oshikoto, Ohangwena and Omusati regions; Northeast, constituting of the Caprivi and Kavango regions; Central, constituting the Otjozondjupa, Erongo, Kunene regions and South, constituting of Omaheke, Khomas, Hardap and Karas regions.

The Namibian demographic and health survey (NDHS) conducted in 1992, two years after Namibia's independence, was the first ever nation-wide health



survey. It was taken at a stage when a large-scale re-organization of Namibia's health service was still ongoing and most primary health care programmes were only just being established, but showed significant impact. The results revealed that virtually all Namibian women aged between 15-49 years know at least one modern method of family planning and 41% of all women have used a contraceptive method at some stage in their lives. However, only 23% were using a contraceptive method at the time of the survey (Ministry of Health and Social Services, 1993^b).

In 2000, ten years after independence, the Namibian government conducted a second Demographic and Health Survey. The survey provides a comprehensive source of information on a large number of health and demographic indicators at a point in time when the Ministry looks back on the first 10 years of a unified and comprehensive health service for the whole Namibia and its entire people. The survey results show that the contraceptive prevalence rate has increased from 23% of all women using contraceptive methods to 38% (Ministry of Health and Social Services, 2003). The overwhelming majority of current users employ modern contraceptive methods (more than 97%) while the use of traditional methods has fallen by more than half. Age at first marriage has increased since more women wait to complete their studies before they get married. Women in Namibia have been treated preferentially and empowered to occupy key positions in the government since the Beijing Conference in 1995. Education attainment and enrolment among women have also improved. In 2004, 94 percent of young women aged 15-24 years were literate and 65 percent were enrolled in secondary schools (PRB, 2005).

The last population census, which was conducted in 2001, on the other hand, revealed a total population of 1,826 854 with an annual growth rate of 2.6 per cent (Central Statistics Office, 2002). Adolescents and youth comprise about



40% of the population. The total sex ratio was 95 males per 100 females. Life expectancy for males and females was 44 and 41 respectively. Like many other developing countries, Namibia has a relatively young population due to the combination of moderately high birth rate (36 per thousand) and comparatively low death rate (20 per thousand).

According to the NDHS (2000), the average age at first intercourse is 18 years for young women. Unprotected sex puts young women at the risk of unwanted pregnancies, which may contribute to their dropping out of school, marrying early, abandoning babies and having unsafe abortions. Sexually active young women also face the risk of contracting HIV and other sexually transmitted infections. Namibia has one of the highest AIDS prevalence rates in the world (USAID, 2002). HIV infection rates are reported to be high among young people, and women are especially vulnerable. Most young women in Namibia are aware of HIV/AIDS and the risk of pregnancy but still engage in unprotected sex. According to the NDHS (2000) 53% of sexually active young women were using modern contraceptives, but only 16 % of them were using condoms.

The reproductive health and development of young people is now one of the priority areas for the Ministry of Health and Social Services (MOHSS, 2001^a). The reproductive health programme in the MOHSS, which is also responsible for activities targeting young people, has developed a national reproductive health policy with a short component addressing adolescent and youth sexual reproductive health. In addition, the national school health policy under the Ministry of Education is addressing the overall health of school-going children and adolescents as well as the promotion of life skills, provision of health education on reproductive health and sexuality (National Planning Commission, 2000).

The national policy for reproductive health highlighted that early sexual experiences, pregnancy, HIV/AIDS and other sexually transmitted infections are some of the major factors giving rise to health problems among young people in Namibia (MOHSS, 2001^a). The policy further states that shortage of skilled personnel, inadequate referral facilities, availability of integrated reproductive health care, difficult geographic access (in terms of the location of the health centre) and socio-cultural barriers to acceptance of reproductive health services, especially among men, are some of the constraints in addressing reproductive health. Facilities do not ensure adequate privacy and confidentiality due to lack of space, while interpersonal communication and interaction between service providers and clients are also poor (MOHSS, 2001^a).

1.3 Statement of the problem

Young women often lack basic reproductive health information. They need information on the consequences of unprotected sexual intercourse and they also need to be well informed on developmental body changes. In addition to the above-mentioned information, young women need skills in negotiating sexual relationships, and knowledge about affordable confidential reproductive health services. Many do not feel comfortable discussing sexual issues with parents or other key adults with whom they can talk about their reproductive health concerns. Likewise, parents, health care workers, and educators frequently are unwilling or unable to provide complete, accurate, age-appropriate reproductive health information to young people. This is often due to their discomfort in discussing the subject or the false belief that providing the information will encourage increased sexual activity. Because of this, most young women enter into sexual relationships with very little knowledge on the consequences, either shared by their peers or from the media.

In response to the 1994 ICPD Programme of Action, the Namibian government introduced the reproductive health and family planning programme with the overall objective of promoting, protecting and improving the health of family members, especially women and children. The objective of the programme was to reduce maternal and infant deaths, increase contraceptive use among women of reproductive age, and promote and improve access to reproductive health services at all levels of health care delivery. The objectives of these programmes have not been fully achieved. There is need for continuous monitoring and evaluation of these programmes to make sure that they cater for the needs of all people who are targeted.

Furthermore, many activities have been undertaken to address the sexual and reproductive health problems of young women, without significant impact so far. The government of Namibia established the Ministry of Youth to coordinate and facilitate all youth activities through line ministries and non-governmental organizations (NGOs). Through this Ministry, multi-purpose youth resource centres were established in all 13 regions of the country with the purpose of serving as resource base for young people and to provide youth friendly services to address the needs of the youth. How accessible these centres are has been the subject of many questions over the past few years. Do they meet the needs of young women, and if not, why not? Do these facilities readily offer contraceptives to young women and do young women have choices when selecting contraceptives? These are some of the questions that frame the larger research problem.

The particular problem, which led to this study, has been the acknowledgement that teenage pregnancy and unwanted premarital childbirths have been on the increase in Namibia despite efforts on the part of the Ministry of Health and Social Services to provide adolescent friendly health and contraceptive services. Given the increasing vulnerability of young

women to the risk of unintended pregnancy, it is of program and policy relevance to better understand the barriers to effective contraceptive use among sexually active young women in order to help them lead health sexual and reproductive lives. This study is, therefore, of importance as it probes availability and accessibility of sexual and reproductive health services and informs policy makers on the gaps in the family planning policy, reproductive health policy and other policies that affect young women's reproductive health and contraceptive needs.

1.4 Purpose of the study

The study has three main objectives:

- To identify the demographic and behavioural determinants of contraceptive use among young women in Namibia.
- To examine the perceptions of young women with regard to the availability and accessibility of sexual and reproductive health services.
- To examine young women's use and choice of contraceptive methods.

These objectives will be achieved through an examination of the following research questions, hypotheses and assumptions:

- What determines contraceptive use among young women in Namibia?
- Why is contraceptive use still low among young women in Namibia? (In other words, are there cultural, traditional, behavioural, social, economic or demographic barriers in using contraceptives?)
- How do young women in Namibia make choices when considering the range of contraceptive methods?

In addition to the above research questions, the study will also consider the following assumptions and hypotheses listed as follows:



- There exist regional differentials in terms of how young women use sexual and reproductive health services and access them for contraceptives. Young women in the Northwest and Northeast health directorates are less likely to utilise sexual and reproductive services for contraceptives than young women in the Central and South health directorate.
- Young women who discuss family planning issues with their mothers are less likely to use contraceptive methods, because they are likely to be discouraged from engaging in sexual activities.
- Teenage women (15–19 years) are more likely to use condoms than young women aged 20-24 years.
- The negative experiences of young women who attempt to make use of sexual and reproductive health services for family planning purposes have a detrimental impact on their long-term utilisation of these services.

It should be emphasised that whilst these hypotheses are not novel, they require examination in the Namibian case. No other study to date has addressed and found substantive answers to the basic research questions raised about the situation of young women in Namibia.

1.5 Organisation of the thesis

Chapter one begins with the introduction to the research problem. Background information on Namibia is offered. The statement of the problem is highlighted and the purpose of the study is also outlined. Research questions are formulated and assumptions and hypotheses to be tested are presented. *Chapter two* discusses the theoretical and conceptual framework for analysing the use of contraceptive methods and for choice of method and reviews related literature. *Chapter three* discusses the sources of data and

methods of analysis. *Chapter four* presents the bivariate and multivariate results of determinants of contraceptive use and contraceptive method choice respectively. The *qualitative results* on issues related to contraceptive use and method choice are presented in chapter four. Finally, *chapter five* presents the summary of findings, conclusion and policy implications as well as recommendations.

CHAPTER TWO

Theoretical Framework and Literature Review

2.1 Introduction

This chapter presents a review of the literature on the utilisation of health facilities and use of contraceptives among young women worldwide. Special attention is paid to contraceptive use and health facilities utilisation in Africa and, in particular, sub-Saharan Africa. Utilisation of health facilities is one of the important aspects because in Namibia most sexual and reproductive health services, including contraceptives, are offered by the Ministry of Health and Social Services through its health centres. To access contraceptives young women have to be able to utilise health facilities where such services are offered. Hence, if utilisation of health facilities by young women is limited then it can be assumed that contraceptive use for young women is also limited. The evolution and importance of contraceptive use as well as other reproductive health services in sub-Saharan Africa are the central issues addressed in this chapter. A conceptual and theoretical framework is introduced: it comprises an adaptation of the Davis and Blake (1956) model, the Health Belief model and Easterlin's supply and demand theory. Socio-economic, demographic and behavioural factors that influence contraceptive use among young women are also reviewed.

2.2 Theoretical and conceptual framework of the determinants of contraceptive use

When the modern family planning movement began in the early 20th century, its primary purpose was to liberate women from social and health consequences of unwanted pregnancies. When organized family planning

programmes reached developing countries in the early 1950s, these programmes were viewed as the means to alleviate the pressure of rapid population growth on economic development. In the last few decades, the purpose of family planning has broadened to encompass both these objectives and the objective of improving women's health and welfare. Previous research (Castro & Juarez, 1994) has examined how women's roles and status influence their use of contraception and their fertility. However, although young women are seen as beneficiaries of family planning, too little attention has been paid to assessing their behaviour in relation to family planning.

The theoretical framework presented in this chapter is based on research and literature concerned with young women and family planning. The framework is an integration of the intermediate determinants' framework proposed by Davis and Blake (1956) and the fertility decision-making model presented by Bulatao and Lee (1983). The Davis-Blake model starts from the premise that reproduction involves three necessary steps: intercourse, conception and completion of gestation. The fertility decision-making theory is based on the notion that as society modernises, changes occur including rational decision-making and changes on the structure of the family.

The integration of the two approaches leads from the assumption that decisions have a direct input in altering the intermediate variables. While it might not be possible to include all the variables and pathways in any one model, it provides a useful starting point and guide in selecting the variables which have a direct influence on contraceptive use. In the framework, the proportion of current contraceptive users in a population is a product of new users (adoption), continuing users (continuation) and those who have resumed use (resumption). These can be used to distinguish pre-adoption

and post adoption stages of contraceptive use. These stages are themselves influenced by socio-economic, cultural and macro factors.

Decision-making consists of three elements: knowledge, motivation and assessment of fertility regulation. The initial step involves being aware of the alternatives of influencing ones' costs of reproductive behaviour. However, knowledge alone would not be sufficient to influence fertility regulation although it is a precondition. Knowledge about contraceptives should be accompanied by perceptions about access and availability of methods in order for proper considerations to be given whether to use or not. In order for women to adopt contraception, they should have a perception of the availability and accessibility of the means of fertility regulation, so that they can translate these perceptions into action according to Davis & Blake model (1956).

The second stage of the decision-making process involves motivation. Within a population, motivation is influenced by socio-economic, cultural and family life cycle patterns. The concept of motivation has been used widely in the economic models of fertility in which motivation is thus defined as the balance between supply and demand (Davis & Blake, 1956). The last stage in the decision-making process is assessment, which is the weighting of the positives and negatives of adopting contraception.

A key purpose of the framework is to highlight how parental involvement acts as an intervening factor in influencing young women to use family planning services. Young women's contraceptive behaviour is multidimensional and has been studied extensively with or without a theoretical basis (Bender & Kosunen, 2005). Attitudes and beliefs about contraceptive use are considered to be of great importance regarding contraceptive intention and behaviour. If young women trust their ability to have control, if they believe that pregnancy

at a young age is a serious matter and that it is beneficial to use contraception and have parental support, they are considered more likely to obtain sexual and reproductive health services, including contraceptives, effectively. However, if young women do not believe in the above-mentioned items and think there are several barriers to obtaining sexual and reproductive health services, then they are considered less likely to use contraceptives.

Several theoretical models on health behaviour such as the Health Belief Model and the Health Promotion Model, have been developed (Becker, 1974). These models have been applied and tested with regard to the use of contraception. Several studies (Boohene et al., 1991; Bongaarts & Johansson, 2000) have shown a significant relationship between attitude and contraceptive intention and behaviour. Considering the value of the attitude/belief behaviour relationship and its relevance to preventive strategies like sexual and reproductive health services, it is considered of importance to explore some beliefs of young women in Namibia regarding contraception by adapting some ideas from the Health Belief Model and Easterlin's supply and demand theory (Easterlin, 1975) of fertility regulation.

According to the Health Belief Model, individual perceptions such as perceived seriousness of pregnancy, perceived benefits and perceived barriers are more likely to affect the preventive actions such as using contraception which can prevent a specified condition such as unplanned pregnancy. In addition, perceived barriers such as difficult access to sexual and reproductive health services (SRH) and providers' negative attitudes can prevent use of services. In contrast, the perceived benefit of communicating with parents may result in more effective use of contraception. This model promotes an ability to weigh benefits and make changes when confronting a health risk. An example of a scenario for this model would be: a young

woman having unprotected intercourse who must first perceive that sexual activity involves consequences such as an unintended pregnancy (susceptibility); then, that the consequence could be negative, such as having a child and dropping out of school to support her child (severity); and finally, that the prescribed interventions such as using contraception and finishing school before becoming a parent are useful (benefits) and outweigh potential negative side effects, such as weight gain from contraceptive use or potential loss of social status by delaying parenthood (Brindis & Davis, 1998).

The Health Belief Model provides a framework for understanding the potential influence on an individual's decision to make use of available health services. Although the model provides a framework for understanding factors operating at the individual level to influence the decision to use reproductive health services, it does not examine factors operating beyond the individual level, nor does it include the role of community and health system characteristics in shaping this decision. Thus, previous studies on the use of sexual and reproductive health services focus largely on the barriers and facilitators involved in the decision to seek care, that is, the modifying factors taken into account in the Health Belief Model (Stephenson & Tsui, 2002; Glover et al., 2003). These studies highlighted a range of potential modifying factors in a woman's propensity to seek health care that are broadly categorized as demographic, socio-economic, cultural and health experiences characteristics. Demographic factors that have been shown to increase the likelihood of health service use are low parity (Magadi et al., 2000; Stephenson & Tsui, 2002); young maternal age (Bhatia & Cleland, 1995); women's employment status and educational level.

Socio-economic factors, however, have been shown to be of greater importance than demographic factors in influencing the use of health services (Obermeyer & Potter, 1991). Although demographic factors may shape a

woman's desire to make use of services (for example, younger women may have more modern attitudes towards health care), the socio-economic status of an individual and her household determines her economic ability to do so. In terms of socio-economic factors, the determinants of reproductive health-service use have been found to be most consistent with a woman's educational attainment (Magadi et al., 2000). Higher levels of educational attainment result in greater use of sexual and reproductive health services. Apparently, increased educational attainment influences service use in several ways, including an increased woman's decision making power and awareness of health services, changing marriage patterns and creating shifts in household dynamics (Obermeyer, 1993).

Cost has been shown to be a barrier in service use (Bloom et al., 1999; Griffiths & Stephenson, 2001) and it also influences the choice of source from which care is sought. In a study of the use of antenatal care in India, Griffiths and Stephenson (2001) show that although women perceive private services to offer greater quality care, the cost of such services often makes them unaffordable. Socio-economic indicators such as urban residence (Addai, 1998), household living conditions (Bloom et al., 1999; Magadi et al., 2000) and employment status have also proven to be strong predictors of a woman's likelihood of using reproductive health services.

Both demographic and socio-economic determinants of the use of reproductive health services are mediated by cultural influences on health care seeking behaviour that shape the way an individual perceives her own health and available health services (Stephenson & Tsui, 2002). Community beliefs and norms relating to health care seeking behaviour are reflected in individuals' decisions which are based, to some extent, on how the community views their actions (Rutenberg & Watkins, 1997). Community beliefs concerning childbearing preferences and sexual and reproductive

health behaviour are a strong influence on individual attitudes towards family planning and fertility preferences (Greenwell, 1996). In addition, Goodburn and her colleagues (1995) note that in many cultures, the use of reproductive health services is an alien concept, because services are perceived as existing solely for curative purposes. This belief was also highlighted by Griffiths and Stephenson (2001) who found that women in India would only avail themselves for antenatal care if they experienced problems during their pregnancies. Thus although demographic and socio-economic factors are key determinants of health service use, the individual's cultural environment and behaviour influences the extent to which these factors can lead to service use.

A woman's previous exposure to health care services has been shown to be a strong predictor of her propensity to make use of available reproductive health services (DeGraff et al., 1997; Bloom et al., 1999). Bloom et al. (1999) found that contact with health care professionals during pregnancy leads to an increased likelihood of postpartum contraceptive use. A woman's positive previous experience with health care professionals can instil confidence in and familiarity with care services, so that she may be more likely to use reproductive health services on future occasions.

Interest has grown in examining community influences on individual health outcomes so as to place and characterise health care seeking behaviour of the community, including levels of economic development and the community's health care infrastructure (DeGraff et al., 1997; Manda & Makandi, 1998; Magadi et al., 2000; and Stephenson & Tsui, 2002). A community has the potential to influence the health of an individual in several ways. Community attitudes and practices relating to health influence individual health care decision strongly (Greenwell, 1996; Rutenberg & Watkins, 1997). Clearly, the level of a community's economic development

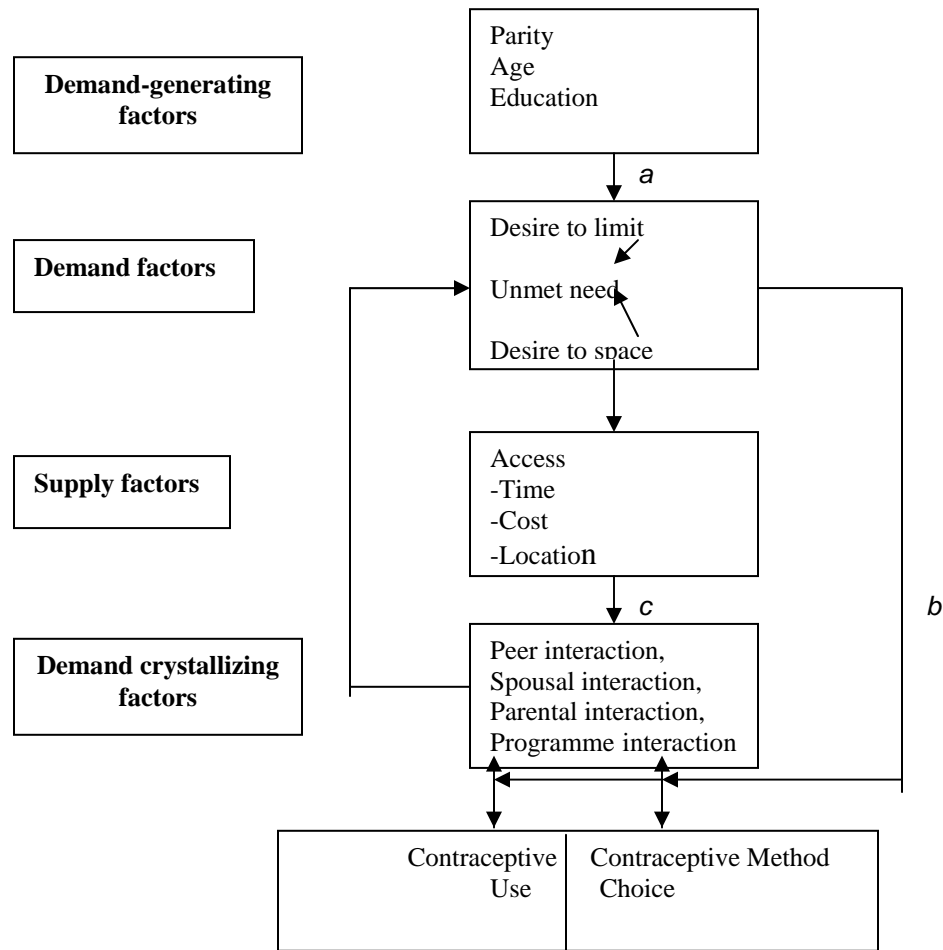
can influence health directly through the association between poverty, deprivation and poor health (Kriegar et al., 1993) and indirectly through access to health care services and social support systems (Diex-Roux, 1998). Economic development is positively related to health outcomes as a result of its relationship to increased female decision making power, through the increased likelihood of female labour force participation and through positive attitudes towards the use of health care services (Grady et al., 1993). Characteristics of a community's health service infrastructure influence individual behaviour through access to services. Many studies (Brindis & Davis, 1998; Hague & Faizunnisa, 2003; Hock-Long et al., 2003; Belmonte et al., 2000) have demonstrated a relationship between measures of access to services (for example, travelling distances to services) and individual health care seeking behaviours (Jahn et al., 1998). There is however dearth knowledge on the dimension of household influences on the use of sexual and reproductive health services. This is crucial especially for young women who are still in the care of parents.

The framework presented on the next page is based on structural models of fertility in which contraceptive use is an endogenous determinant of fertility. These models take into account demand and supply side factors that affect contraceptive use and ultimately fertility. The simple form of these models suggests that exogenous individual background factors affect a woman's fertility preferences. These factors include the woman's age, education, parity, spousal interaction, familial support, as well as family planning programme variables. Together with the direct effects of household and programme variables, parental support affects contraceptive practices.

The outcomes that are modelled here are contraceptive use and contraceptive method choice. The focus of this study is on the behavioural effect of young women on contraceptive use and contraceptive method

choice. The main concern is about the specific pathway by which individual and behavioural variables affect the outcomes.

Figure 3: Conceptual framework for the determinants of contraceptive use and contraceptive method choice



Source: Adapted from Davis & Blake (1956)

The schematic presentation in figure 3 examines the relative roles of individual and social support factors as determinants of use of contraceptive and choice of methods. Determinants are divided into four general classes: (i) demand-generating factors such as education, age and other personal characteristics; (ii) demand components which are composed of desire to limit

births and desire to space future births (iii) supply factors and (iv) demand crystallising components which are composed of factors that facilitate the implementation of the outcome such as spousal support, social (peer) support and parental support.

In this specification, individual agency is generated by individual socio-economic characteristics indicated by the pathways *a* and *b* representing the extent to which demand fosters adoption of contraceptive methods in the absence of facilitating factors. Pathway *c* represents the role of crystallizing factors in fostering the implementation of demand. In this framework, programme activities play a role in contraceptive method adoption that is similar to the roles of social, familiar and spousal support. The psychological, logistical and social constraints to contraceptive adoption are offset by programme activities that enhance service accessibility, improve the climate of information exchange and legitimize contraceptive behaviour.

2.3 Background information on contraception

Any deliberate practice undertaken to reduce the risk of conception is considered as contraception (Mturi, 1996). Hennink (1997) similarly defines contraceptive use as “the deliberate employment of a technique or device to prevent conception”. Contraceptive use has been described as the most important proximate determinant of fertility (Bongaarts et al., 1994). The proximate determinants of fertility are the biological and behavioural factors through which social, economic and environmental variables affect fertility. These were first described by Davis and Blake in 1956 who provided 11 determinants categorized into those which affected exposure to sexual intercourse; the chance of successful conception; and finally successful gestation. Demographers study the use of contraceptives because of its relationship with fertility and birth spacing. It is well known that contraceptive

use has a significant impact on reducing a woman's fertility level (Ntozi & Ahimbisibwe, 2001; Mturi & Hinde, 2001). Use of contraception is also one of the indicators most frequently used to assess the success of family planning programmes (Rutenburg et al., 1991; Curtis & Neitzel, 1996). When modern contraceptives, such as the oral contraceptives and the intrauterine device (IUD), became available more than 35 years ago, excitement prevailed about their potential to prevent unintended pregnancies, while concerns were also raised about their long-term safety.

Later, Bongaarts et al. (1994) argues that four intermediate variables are key to the determinations of fertility; namely age at marriage, duration of lactation amenorrhoea, use of contraception and the incidence of induced abortion. The idea of Bongaarts' framework is that couples who wish to control their childbearing will do so by using one of these strategies and that the choice of approach and propensity to control childbearing will depend on socio-economic and cultural factors. Actual use of contraception among women may be considered a function of interest or motivation in delaying, spacing or limiting childbearing within a population and the accessibility of contraceptive services to that population. Effective access may in turn be defined in terms of: awareness or knowledge of source of family planning information and other services; proximity to one or more sources of those services; and the extent to which other constraints that limit utilisation of those services exist. Such constraints may include the cost of contraception, social barriers, and the quality of service available (Curtis & Neitzel, 1996). The spread of contraceptive use within a society can be viewed as a diffusion process (Curtis & Neitzel, 1996). The first stage is to become aware of and have informed knowledge about contraceptive methods. In populations with family planning policies designed to increase contraceptive use, measuring the level of awareness of contraception also provides a useful measure of success of

information, education and communication activities and may help to identify programme areas that need to be strengthened.

Mturi & Hinde (2001) reported that differences in levels of contraceptive use explain about 92 per cent of the variation in fertility and argued that this implies that where contraceptive use is widespread, fertility is expected to decline and birth spacing is equally widespread. Thus, contraceptive use is important not only for its effect on fertility but also because it has health implications for both mother and child. The consequences of teenage fertility are well documented and raise fundamental concerns about the health and social development of young mothers and their children. Pregnancy and childbearing during young ages are generally associated with higher rates of maternal mortality and greater risks for abortion, delivery complications and low birth weight infants. Pregnancy related complications are among the main causes of death for 15–19 year old women worldwide (McDevitt et al., 1996).

The Population Reference Bureau (PRB) (2004) reported that teenage women are less likely than women over age 20 to use contraceptive methods. Reasons given for this include lack of information, misinformation and fear of side effects, along with geographic, social, cultural and economic barriers to access and use of contraceptives. In addition, most of these women are not sexually active and thus they do not need contraceptives. Furthermore, in most African countries, young women aged over 20 years are married and use contraceptives mainly to space births and those who are not married use contraceptives to delay first births. Although family planning services are designed to serve all women of reproductive ages, there are studies (Belmonte et al., 2000) which report that unmarried young women find service providers hostile or unhelpful, especially where strong cultural or religious beliefs condemn sexual activity among unmarried women (Belmonte et al., 2000). Young women may also be unwilling to disclose their sexual activities

to adult health service providers. In addition, the sporadic and unplanned nature of adolescent sexuality can be an obstacle to consistent contraceptive use (PRB, 2004).

The quality of family planning services has a strong impact on contraceptive use (Koc, 2000). Choice is the first and fundamental element in providing quality family planning. Making family planning available at various types of outlets also promotes choice. Until the 1990s the emphasis was on the quantity of services provided rather than the quality (DeGraaf, 1991). DeGraaf (1991) argues that evidence from field programmes demonstrates that the quality of services provided can have an important impact on contraceptive use.

Quality in family planning programmes means extending the choice of contraceptive methods, providing adequate information, increasing the technical competence of providers, improving interpersonal relations between providers and clients, and incorporating adequate client support and follow-up. Much of the failure to use existing services is attributable to lack of quality. A study in Indonesia found that 12 months after receiving contraceptive services, 85 per cent of women who had not received their first choice of method had stopped using contraception (Fathonah, 1996). In addition, a Bangladesh study found that lack of counselling about usual side effects and their significance was the main reason why women discontinued using injectables (DeGraaf, 1991).

According to Shane (1996) between 12 per cent and 42 per cent of married young women in less developed countries who say they would prefer to space or limit births are not using contraceptives. This is an indication of unmet needs for contraceptives among young women. There is a need for them to use contraceptives but there are barriers which prevent them. Some

of the barriers include disapproval from partners or in-laws, access to health facilities and so on. Shane (1996) further suggests that if sexually active unmarried young women were taken into account, the unmet needs figure would certainly be higher. Shane (1996) also reports that married young women worldwide can benefit from contraceptive use by delaying first births until their bodies are physically mature enough to carry a healthy pregnancy to term, and by delaying subsequent births. However, this might not be the case in most African countries where a married woman is normally expected to bear at least one child immediately after marriage. In the African context, married couples are under immense pressure from in-laws and family members if they fail to bear a child immediately after marriage, because childless marriage is regarded as a shame in the family (Nengomasha et al., 2004).

However, UNICEF (2004) and Griffiths et al., (2001) report a strong relationship between a mother's pattern of birth and the survival chances of her children. Infants and young children have a high risk of death if they are born to very young mothers or if they are born shortly after another birth or if their mothers already have many children. This is, thus, not taken into account among many African societies, where people believe that if you are married then you are grown up and ready to bear children no matter how young you are (Nengomasha et al., 2004).

The transformation in contraceptive practice reflects the growing desire of couples and individuals to have smaller families and to choose when to have children. It also reflects great increases since the 1960s in the availability of effective modern contraceptives in developing countries and of associated family planning information and services. The introduction of modern methods has also brought about a transformation in contraceptive practice in the more developed regions, although changes concern primarily the choice of specific

birth control methods rather than the overall level of contraceptive use (United Nations, 1988; Koc, 2000; Ketende et al., 2003).

Substantial evidence is found in existing literature that broadening the choice of contraceptive methods increases overall contraceptive prevalence (Magadi & Curtis, 2003). The provision of a wide range of contraceptive methods increases the opportunity for individual couples to obtain a method that suits their needs. A study (Ross et al., 2001) of contraceptive method choice in developing countries confirmed that prevalence is highest in countries where access to a wide range of methods is uniformly high. Contraceptive choice is also a central element of quality of care in the provision of family planning services and an important dimension of women's reproductive rights (Bruce, 1990; Diaz et al., 1999). To increase prevalence of use, family planning programmes should offer a variety of safe, effective, acceptable and affordable contraceptive methods to help women to prevent unwanted pregnancies and sexually transmitted diseases (STDs) and to help them achieve their childbearing goals. The report of the International Conference on Population and Development issued the following directive:

Recognize that appropriate methods for couples and individuals vary according to their age, parity, family size-preference and other factors, and ensure that women and men have information and access to the widest possible range of safe and effective family planning methods in order to enable them to exercise free and informed choice (UNFPA, 1996).

Although most countries have made much progress in addressing the reproductive health of young women in particular, there are still some countries in sub-Saharan Africa which offer a limited choice of contraceptive methods and couples cannot easily choose the method that best suits their reproductive needs (Ross et al., 2001). Substantial evidence also indicates that restrictive choice of contraceptive methods has constrained the

opportunity of individual couples to obtain a method that suits their needs, resulting in lower levels of contraceptive prevalence. Method mix is a key determinant of the fertility impact of contraceptive practice; the use of more effective methods even by a smaller proportion of eligible couples can produce a greater decline in fertility than can the use of less effective methods by a larger proportion of couples (Magadi & Curtis, 2003).

Until the 1960s, rhythm and barrier contraceptives were the only methods of birth control widely available to couples desiring to plan the number and spacing of their children. In the late 1960s, oral contraceptives were introduced and new efficacious intrauterine devices (IUDs) became widely available so that the choice of effective methods of contraception increased substantially. Later, in the 1970s, female and male sterilization techniques became much more widely accepted and used (Parnell, 1989). Couples were then able to choose from several different temporary and permanent methods of contraception and to switch from one to another. World-wide, family planning programmes expanded and the prevalence of contraceptive use increased. As these methods of contraception became more widely used, anecdotal reports of adverse health effects associated with their use began to appear. Not surprisingly, the first generation of contraceptive technologies brought unanticipated risks and benefits. Since that time, these methods have been reformulated and redesigned to increase their safety and effectiveness. Indeed, contraceptive drugs and devices have been, and continue to be, subjected to extensive worldwide research to expand our knowledge of their safety (Shane, 1996; Miller et al., 1998; PRB, 2004). This research has documented many unanticipated benefits of methods, such as protection against certain cancers.

Since the United Nations World Population Conference in 1974, government policies have shifted in the direction of increased support for services

providing modern, effective contraceptive methods. Repeatedly at the international level, and at the International Conference on Population and Development held in Cairo in 1994, and the Fourth World Conference on Women held in Beijing in 1995, governments have affirmed the right of couples and individuals to choose the number and timing of children and to have access to the information and means to do so (United Nations, 1998). Many governments support family planning as part of basic reproductive health services. The United Nations report (2004) stated that 75 per cent of countries support the provision of contraceptives directly through government facilities, while 17 per cent of governments provide indirect support through non-governmental organizations such as family planning associations and the private sectors. Namibia is one of the countries that provides direct support for family planning services through government operated facilities such as hospitals, clinics, health posts and health centres.

2.4 Contraceptive use in developed and developing countries

The United Nations report (2004) claims that men and women in developing nations are marrying later, having fewer children and having them later in life. As a result of these trends, average fertility in poor countries has fallen below three children for each woman. The United Nations report (2004) shows that investment in reproductive health programmes including family planning has helped reduce fertility in developing countries from six children per woman in 1960 to around three in 2000. Further declines in fertility are contingent on the ability of couples worldwide to realize their desire for smaller families. UNFPA (2003), on the other hand, reports that growth rates and fertility are falling much more slowly in the poorest countries than elsewhere. The 49 least developed countries are expected to grow from 668 million people today to 1.7 billion by 2050 (United Nations, 2004) and their share of the world's adolescent population will increase from 14 to 25.6 per cent.

Young women's fertility is also reported to be high in developing countries (Mturi & Hinde, 2001). UNFPA (2003), on the other hand, highlights that young women from poor societies are more likely to not complete schooling and hence they are deprived of the education on reproductive health and sexuality that is provided at higher grade levels and do not know how to find health information. UNFPA (2003) also reports that poorer young women are likely to marry earlier, which contributes to them bearing more children, thus contributing to high fertility levels among young women. However, UNFPA highlights that differences in young women's fertility are driven by many factors, including life opportunities, service access, providers' attitudes, socio-cultural expectations, gender inequalities, education aspirations and economic levels.

The belated fertility transition in sub-Saharan Africa is now definitely underway not only in Southern Africa but also more widely (Caldwell & Caldwell, 2003). By the standards of the rest of the world, fertility in Africa as whole is still high. However, Southern Africa has a remarkably low fertility rate (total fertility rate (TFR) = 2.9) as shown in Table 2.1, compared to the other regions of Africa (World Population Data Sheet, 2006). In addition, for the period 2000-2005, fertility at the world level stood at 2.65 children per woman.

The percentage of all births to young women under age 20 is also high in most of the sub-Saharan African countries as compared to the developed countries and demographers project that this number might increase over the next few decades. This is primarily due to an increase in the number of young people in the region. Dickson (2003) argues that fertility has been declining over the past two decades in most countries of Africa and teenage birth rates show some decline too. However, the fertility gap between the rich and the poor has widened. Poor rural women and men lack access to modern birth control methods and to condoms that will prevent sexually transmitted

infection (STIs) and AIDS, and in most countries of the region, there is still a high percentage of sexually active young women with unmet needs for contraception.

Table 2.1: The total fertility rates and births by region of the world

Region	Total fertility rate (TFR) 15-49
World	2.7
Developed countries	1.6
Africa	5.1
Eastern Africa	5.5
Middle Africa	6.3
Northern Africa	2.0
Southern Africa*	2.9
Botswana	3.1
Lesotho	3.5
Namibia	3.9
South Africa	2.8
Swaziland	3.7
Zimbabwe	3.8
Western Africa	5.8

Source: World Population Data sheet, 2006

In Namibia, there are currently 190 496 young women aged between 15 and 24. These young women account for 10.4 per cent of the total population. According to the Namibian Demographic and Health survey (2000), about 15 per cent of teenage women in Namibia are already mothers and another 3 per cent are pregnant with their first child. Evidence has also shown that about 7 percent of teenage women in Namibia give birth in one year (Population Reference Bureau, 2005)

Tracking trends in fertility and birth rates help support effective social planning and adequate age-appropriate resources to accommodate changes in population composition. Sustained high fertility rates create large populations of young dependents, creating demand for support for young children, for an adequate number of schools, and for affordable childcare. For example,

during the Baby Boom period (1946-1964), the unanticipated period of high fertility rates caught communities unprepared and without the school facilities needed to accommodate the rapidly increasing number of school age children (World Fertility Report, 2003).

On the other hand, sustained low fertility rates lead to a rapidly aging population and in the long run may place a burden on the economy and the social security system because the pool of younger workers responsible for supporting the dependent elderly population is smaller while the dependent elderly population is comparatively larger.

One of the most consistent findings of analyses in developing countries is a strong correlation between the level of women's education and fertility regulation. Schooling of women is often viewed as an indicator of socio-economic development and the variable is also negatively associated with infant mortality, thus reducing the overall demand for children (Addai, 1998). Education thus improves reproductive health, because, educated women are more likely to seek adequate prenatal care, skilled attendance during childbirth and use of contraception. They also tend to initiate sexual activity, marry and begin childbearing later than uneducated women.

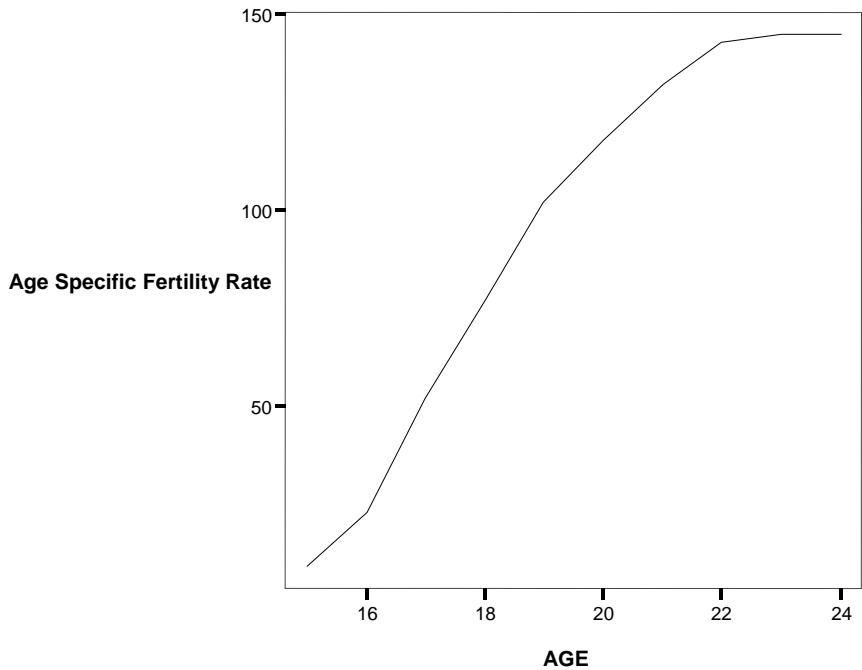
Early pregnancy and childbirth limit a young woman's educational opportunities, compromise her ability to support herself and her family and limit her self-determination and quality of life. Among young women, while higher levels of education are associated with a lower probability of giving birth, the direction of causality is less clear. Some young women may delay childbearing in order to complete their formal education while teenage mothers may be forced to leave school early upon having a child. The situation in most African countries is that marriage is now delayed, and the proportions of never married women are increasing (UNFPA, 2004). This

behaviour seems to be related to increasing levels of education, urbanization and economic opportunity.

In addition, fertility levels are expected to be lower in urban areas than in rural areas. This differential pattern in reproductive behaviours can often be attributed to the influences of cultural differences. On the other hand, access to contraceptive services might have contributed to this differential. Although a large number of family planning clinics and services exist throughout the country, young women are often not welcome at these services. As mentioned earlier in this study, the difficulties young women encounter in accessing contraceptive services have been documented in several studies (Wood et al., 1998; Dickson, 2003). Staff attitudes can be judgmental or even hostile, and the professional norms of confidentiality and empathy are often neglected when providers deal with young women. Health facilities can also have opening times that prevent easy access for youth.

An indicator of the level of fertility namely, age-specific fertility rate (ASFR) for young women aged 15-24 years is used in this analysis. Figure 4 below provides information on ASFR for Namibian young women. Although evidence suggests that fertility is falling in Namibia (TFR of 4.1 in 2000, 3.9 in 2006 compared to 6.2 in 1992), age-specific fertility rates for adolescents and youth are still relatively high by world standards. As expected, the ASFR rises rapidly with age. For example, the number of births to young women aged 24 per 1000 young women aged 24 is 145 compared to only 9 for young women aged 15.

Figure 4: Age specific fertility rates (ASFR) per 1000 young women in Namibia



Source: NDHS 2000

The world has experienced a contraceptive revolution over the past 25 years. Contraceptive prevalence has risen from less than 10 per cent around the world in the early 1960s to an estimated 55 per cent in the late 1980s and early 1990s (Bertrand et al., 1993) and to 67 per cent in 2004 (Population Reference Bureau, 2004). The prevalence levels are higher in developed than in developing world. But, it is noted that more than half of women of reproductive age in developing countries are currently using some form of contraception. Hennink, (1997), Dang (1995), DeGraff (1991) and Bertrand et al., (2001) show that this contraceptive revolution has been brought about through improvements in medical technology which have led to the development and availability of a whole range of safe and reliable methods of contraception as well as the social and economic changes which have led to

women having more control over their fertility and a greater sharing of the responsibility of contraception between the genders.

In comparison to the above, the United Nations report (2004) claims that 62 per cent of married or in-union women of reproductive age are using contraception. In the more developed regions, 70 per cent of married women use a method of contraception, while in the less developed regions 60 per cent do. In Africa, only 25 per cent of married women are reported using contraception, whereas in Asia and Latin America, the prevalence of contraceptive use is fairly high – 66 per cent and 69 per cent respectively. Most contraceptive users worldwide rely on modern methods. The most commonly used modern methods are IUDs for older women and oral pills for younger women. Modern methods are considered more effective at preventing pregnancy and require access to family planning services. The United Nations (2004) reports that short acting and reversible methods are more popular in the developed countries, whereas longer-acting and highly effective clinical methods are used more frequently in the developing countries. In the developed countries, contraceptive users rely mostly on oral pills (17 per cent of married women) and condoms (15 per cent). In contrast, female sterilization and IUDs, used by 22 per cent and 16 per cent, respectively, of married women, dominated in the developing countries. Traditional methods are also reported to be more popular in the developed countries than in the developing countries. The most used traditional methods include rhythm (periodic abstinence) and withdrawal. Despite the increase in contraceptive use prevalence in developing countries, high levels of unmet needs for family planning remain. In sub-Saharan Africa, an average of 24 per cent of married women need family planning (because they want no more children or want to delay their next pregnancy) but, for various reasons such as not knowing where to get a method or fear of side effects, are not using any method of contraception.

Since the late 1960s and early 1970s, epidemiological studies have evaluated the health effects associated with the use of different contraceptive methods more rigorously (Parnell, 1989). Most of these studies have been conducted in developed countries. In the process, researchers have recognized that different contraceptive methods have important beneficial health effects, in addition to the desired effect of preventing pregnancy. For example, oral contraceptives can protect a woman against pelvic inflammatory disease, ovarian and endometrial cancers, and benign breast disease (Shane, 1996). Condoms, when used correctly and consistently, can prevent infection from sexually transmitted diseases, including HIV/AIDS. Although much research is still needed, especially targeted to the developing world, a large body of information is now available to assess the health effects of the various contraceptive methods. Reproductive health programmes have been established in many countries (Zambia, South Africa, Namibia, Zimbabwe) with rising contraceptive use among couples indicating greater access to family planning (United Nations, 2004). The level of contraceptive use by couples in union is estimated at nearly 70 per cent in the more developed regions and 60 per cent in the less developed regions (United Nations, 2004). However, many births are still unwanted or mistimed and modern family planning methods remain unavailable to large numbers of couples.

In most of the developed world, the majority of young women become sexually active during their teenage years (McDevitt et al., 1996). For instance, young women in the United States are more likely to have sexual intercourse before age 15 and have shorter and more sporadic sexual relationships than young women in other developed countries. Young women in the United States have the highest rates of pregnancy, childbearing and abortion as compared to other developed countries. There is low use of contraceptives which have a high effective rate like the pill and other long-

acting reversible hormonal methods. Other factors in cross-country differences in young women's contraceptive use include negative societal attitudes towards teenage sexual relationships, restricted access to and high costs of reproductive health services, ambivalence towards contraceptive methods and lack of motivation to delay motherhood or to avoid unintended pregnancy.

Despite the United States, there has been a drop in unwanted pregnancy rates in the developed world. Some of the reasons for the decline in pregnancy rates include increased motivation in the youth to achieve higher levels of education, employment training and goals in addition to motherhood and family formation, provision of comprehensive sexuality education, leading to young women's greater knowledge about contraception, more effective contraceptive use and improved ability to negotiate contraceptive practice, and greater social support for services related to both pregnancy and disease prevention among young women (Manlove et al., 2003).

Young people constitute a large proportion of the society in many developing countries, including Namibia. While there has been increasing recognition of the importance of young people's health in policy, developing intervention strategies that are effective and feasible for implementation on a large scale represents a difficult challenge. This is particularly the case for programmes addressing the sexual and reproductive health needs of young people with the aim of preventing HIV/AIDS infections and unwanted pregnancies. There are few appropriate mechanisms in place for young people to be educated about self-protection from adverse reproductive health outcomes. In addition, young people do not make much use of existing services for contraception and STD care. Thus, they are at risk of early unsafe sex which, combined with low contraceptive use, may lead to unwanted pregnancies with often

poor obstetric outcomes and high rates of often unsafe abortions (Matasha et al., 1998).

Using the 1992 NDHS data, Chimere-Dan (1997) reports that teenage mothers are concentrated in the northern part of Namibia which is more rural, and among people with low levels of education. Chimere-Dan (1997) further argues that the high number of cases of teenage pregnancies indicates that young women have unmet sexual and reproductive health needs which require immediate attention. The pregnancy rate of girls could be an indication that young girls are involved or forced into sexual relations with older men who have greater experience and exposure to sex. Mukonda (1998) reports that there are some girls in the Caprivi region (Northeast) who believe that the easy way to make money for themselves is by “selling their bodies” to teachers, policemen and male nurses.

Other studies (Hailonga, 1993; Voeten, 1994; Mufune, 2003; Witte et al., 2003) indicate that many young women get involved in sexual relationships because men, especially older men give them gifts, money and other social or economic favours. However, there are also those young women who want to experiment with sexual intercourse, yet have little knowledge on how to avoid pregnancy. There are also those who fall pregnant deliberately in order to keep their relationships.

As young people make the transition to adulthood they are faced with many challenges such as understanding changes in their bodies, forming relationships and re-developing communication skills (Namibia Broadcasting Corporation, 2001). During this transition period, young women have increased desires for experimentation and imitation of adult behaviour, including sexuality in its various cultural manifestations. Unfortunately, in Namibia, sexual experimentation often occurs before young people have

acquired knowledge of sexual and reproductive health (SRH), important life skills to guide behaviour or have had experience with reproductive health care services. Risks associated with early sexual activity include unwanted pregnancies, STIs including HIV/AIDS. In addition, Mchombu (1998) notes that communication between adults and youth on sexual matters - including STDs and HIV - is restricted or is often simply non-existent. Although, in some cases grandparents, aunts or uncles play some role in sexual and reproductive health education; there is still a vacuum in the sex education arena.

Looking beyond, reproductive health interventions targeted at young people are relatively new phenomenon in sub-Saharan Africa with the first programme having been established in the late 1970s. Most of these programmes are educational and are delivered via youth centres, peers, the media and schools (Erulkar et al., 2004). Few of these programmes provide sexual and reproductive health services perhaps because of discomfort with addressing the needs of unmarried, sexually active young people. Despite considerable evidence to the contrary, many policy makers fear that discussing family life or sex education will encourage young people to experiment with sex and may increase risky sexual behaviour.

Namibia has relatively good health care facilities, especially in urban areas. The fact is, however, that these services do not specifically cater for young people's sexual and reproductive health care needs and problems. This lack of facilities for young people's SRH is partly due to the fact that in the past, young people had been assumed to be in good health because being young has always been synonymous with having good health. However, during the past two decades, the HIV/AIDS pandemic has drastically altered the health profile of young people in Namibia. There is a need to know and understand young people's sexual and reproductive perceptions, attitudes and practices

as well as gender influences, thereby improving the provision of SRH services. There is also a need to identify the cultural and social contexts within which sexual relationships involving young people occur if viable SRH programmes are to be designed and implemented. In Namibia, most women describe their role as one characterised by hard work – in the field and at home. They see themselves as subordinate to their husbands and primarily responsible for bearing children, caring for them and managing households, while men are seen as the ones who possess wealth – often in the form of cattle (Mufune et al., 1999). Men are believed to make significant contributions to their communities, have many children, and look after their families, all of which can lead to serious communication problems between women and men.

2.5 Patterns of contraceptive use in Africa

In Africa, a large proportion of teenagers and even young adolescents are having children. Among sexually active adolescents there has been a very low level of contraceptive use despite widespread knowledge (Sapire, 1988; Speizer et al., 2001). This, in part, may reflect both a lack of interest in the use of contraception among those who wish to bear children as well as socio-cultural barriers that attach a stigma to the use of contraception by young women, and thus prevent them from having access to contraceptive methods. Speizer et al. (2001) report that only a small minority of adolescent women could identify their fertile period. The lack of understanding of the fertile period is a reflection of general deficit in basic knowledge about human reproduction. Such knowledge is particularly relevant to sexually active young people many of whom may have no access to contraceptives, and for whom the use of the rhythm method may be one of their alternatives.

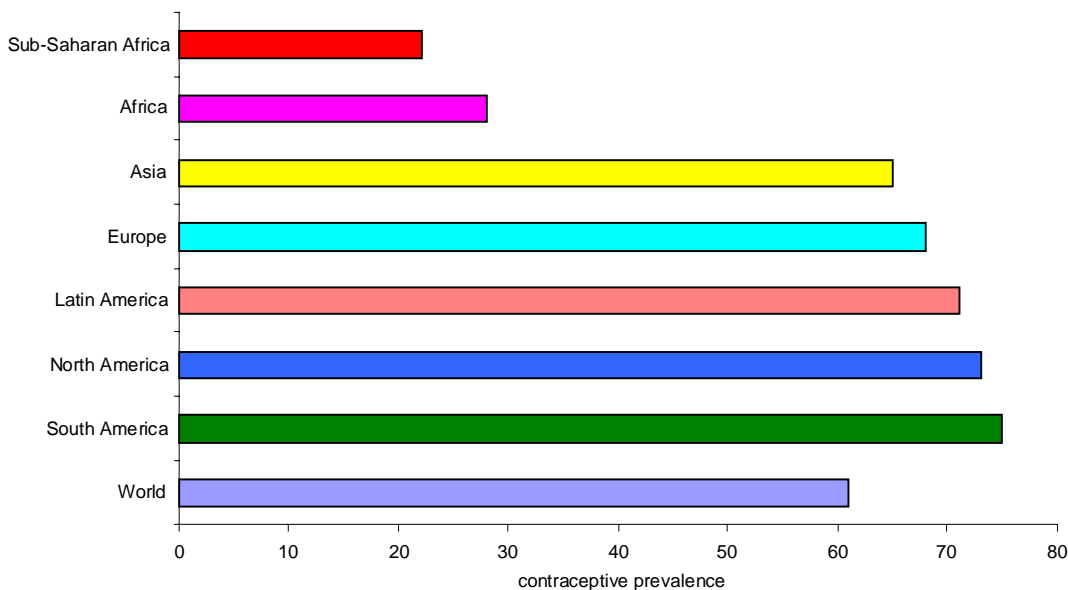
In addition, today's adolescents attain puberty earlier and marry later. They are more likely to engage in premarital sex than members of their parents' generation were (UNFPA, 1999; UNFPA, 2003). Adolescents who have premarital sex often fail to use contraceptives thus exposing themselves to the risk of unintended pregnancy and of sexually transmitted infections, including HIV. Globally, more than 15 million adolescents younger than 20 give birth each year, contributing roughly 10% of the total annual number of births (World Population Data Sheet, 2004). Moreover, about one-half of all HIV infected individuals are younger than 25 and the majority of these young people are women (Speizer et al., 2001). In many developing countries, data indicate that up to 60 per cent of all new HIV infections are among 15-to 24-year olds (World Population Data Sheet, 2004).

Unprotected premarital sex is especially prevalent in Sub-Saharan Africa. For example, Speizer et al. (2001) report that a study of female senior high school students in Nigeria found that mean age when engaging in sex for the first time was 15 years and that 23% of those who were sexually experienced had already experienced pregnancy. The vast majority of these pregnancies ended in abortion. Another recent analysis conducted in Cameroon demonstrates that by age 18, the majority of adolescents, regardless of their marital status, are sexually experienced and have been exposed to risky sexual practices, including exchanging sex for money, having multiple partners and failing to use condoms (Speizer et al., 2001).

The contraceptive use rate in Africa is comparatively lower than other regions of the developing world (Gbolahan & McCarthy 1990; United Nations, 2004). This is also supported in Figure 5 below. In sub-Saharan Africa, high birth rates have been the norm (Mturi & Hinde, 2001; Ntozi & Ahimbisibwe, 2001). Some factors that have contributed to sustained high fertility are a large

percentage of the population living in rural areas where there are markedly low contraceptive prevalence and low levels of socio-economic development.

Figure 5: Contraceptive Use Levels Among Women of Childbearing Ages by regions of the world



Source: World population data sheet, 2006

Contraception was not heavily used in sub-Saharan Africa prior to 1980s mostly because access was limited (Population Reference Bureau, 1992). On the other hand, the report from the Population Reference Bureau (1992) consistently shows that women in sub-Saharan Africa are much less likely than those in other regions to state that they currently want no more children. This is mainly a function of the large number of children desired. Other factors contributing to the relatively low proportions of women wanting no more children may include high levels of disease – induced sterility, which remains a problem in parts of Africa and relatively high levels of child mortality.

The contraceptive prevalence rate estimated in most African countries was less than 15 per cent by 1990 except in Zimbabwe, Botswana, South Africa

and Kenya where the prevalence was high (Rutenberg et al., 1991; Ngom et al., 2005). In Tanzania, the contraceptive prevalence rate has doubled from 10 per cent in 1991/92 to 20 per cent in 1994 (Mturi, 1996). The main reason given for using contraceptives in many African societies is birth spacing rather than limiting fertility. Recent demographic and health surveys (DHS) conducted in sub-Saharan Africa have shown an increase in contraceptive prevalence rates in various countries (World Population Data Sheet, 2004). The Population Reference Bureau (2004) also indicated that modern methods account for a large proportion of current contraceptive use, especially in the less developed regions where they constitute 90 per cent of contraceptive use. The three most popular methods among married women are female sterilization, IUD and the pill with prevalence levels of 21 per cent, 14 per cent and 7 per cent respectively. However, modern methods typically used by youths include condoms, oral pills and hormonal injections.

Contraceptive use varies substantially by region and country (Bertrand et al., 1993; World Population Data Sheet, 2004). Only 13 per cent of married adolescents aged 15 to 19 use contraception in sub-Saharan Africa compared with 55 per cent in Latin America and the Caribbean (Population Reference Bureau, 2004). The breakdown between use of modern and traditional methods also varies from one country to another. Efforts to meet the need for contraception in less developed countries are hindered by factors such as population growth, contraceptive shortages and inadequate funding (Population Reference Bureau, 2004). Many factors including issues related to demand and supply constrains the use of family planning in poor countries. Regarding demand, couples may not know about contraception. Cultural values may support high fertility and in some cases, a woman's low status relative to her husband's and other family members may limit her ability to use family planning. PRB (2004) report also highlighted that supply side factors are important obstacles in using family planning. Many couples still

lack access to choices regarding contraceptive methods. Providing contraceptives without sufficient information, education and counselling may also not be efficient: couples may have misperceptions about the health effects of contraceptive use or may not know enough about methods.

Meeting the needs of young people is a special concern. Past population growth in less developed countries has meant that the largest ever generation of young adults are entering their reproductive years. Rani & Lule (2004) reported that rapidly growing populations such as in Nigeria, which has 44 per cent of its population under age 15, will need to greatly expand their services to meet the needs of young people coming of age.

Early marriage and childbearing is a common occurrence in Africa. The average age at marriage among women, while slowly rising, is still generally below 20 years in most African countries, and the fertility rate among young women aged 15-24 years is higher than in any other region of the world. As opportunities for education grow for young women, the time between menarche and marriage will also increase, leaving young women exposed to the risk of premarital pregnancy for a longer period. For a school girl, an unplanned pregnancy guarantees that she will drop out of school (Al Azar, 1999). In many countries, schools prohibit pregnant students from continuing their studies while in other countries, social pressure forces them to stop school.

Several explanatory variables for differentials in the reproduction of young women have been identified in the literature and may be broadly classified according to either their socio-economic or cultural nature. Some of these factors have positive effects on fertility levels of young women while others have negative effects. One of the most consistent findings of analyses of fertility behaviour in developing countries is a strong correlation between the

level of women's education and fertility regulation (Castro & Juarez, 1994; Barnett, 1997; Shapiro & Oleko, 1997; Villarreal, 1998; Sarup, 2005). Schooling of women is often viewed as an indicator of socio-economic development and the variable is also negatively correlated with infant mortality, thus reducing overall demand for children.

Among young women higher levels of education are associated with a lower probability of giving birth, but the direction of causality is less clear. Young girls may delay childbearing in order to complete their formal education but teenage mothers may also be forced to leave school early upon having a child. Education has been proven to have the undisputed effect of delaying the age at marriage and first union. With higher levels of education the incidence of adolescent pregnancy decreases (Voeten, 1994). However, part of this reported decrease may be just an effect of attrition, given that pregnancy usually leads to the end of the educational process for the girls. The lower rates of pregnancy and births are due to the fact that educated women are more likely to use contraceptives and are also more likely to resort to abortion (where legalized). Education provides alternative means of creation of status for women as well as a source of self-esteem and self-value. It thus provides the motivation to use contraception, facilitates its putting into practice as well as the motivation to terminate the pregnancy if unwanted (Al Azar, 1999; Magadi et al., 2000).

Women are key agents in determining the quality of life of their families. Children's success in schools and their health and their productivity in later life may depend to a considerable extent on their mother's health, education, welfare and skills (Shapiro & Oleko, 1997). Education is the strongest of all factors enabling women to improve their own lives and those of their children. Education increases family income and reduces poverty by boosting the wages women can earn. Education also has a strong effect on child health.

Educated women have better knowledge of nutrition and sanitation and are in a better position to obtain outside help if needed as concluded in the case of Kenya by Magadi et al. (2001). Educated women tend to marry later, have fewer children and use contraception (Caldwell & Caldwell, 2003). They are more open to change and more aware of social services. These effects combine to reduce women's fertility. Family planning helps to improve women's status and education. Where women marry early or risk teenage pregnancies while still at school they are more likely to have to cut short their education (Hailonga, 1993; Dickson, 2003). Women who are exposed to repeated pregnancies find it harder to get and keep jobs outside the home. When family planning is widely available, women are more able to choose what type of work they do. Educated and working women are presumed to have closer conjugal ties with their husbands or partners compared to non-educated and unemployed women. This is supported by findings from a study conducted in South Africa by Caldwell and Caldwell (2003). The educated women are therefore expected to have similar reproductive attitudes as their husbands or partners according to Barnett (1997). This is in line with the fact that educated young women tend to date educated men. On the other hand, education and employment tend to give greater freedom and power within the household.

Another socio-economic variable that emerges from the literature as an important influence on fertility behaviour is place of residence (Ntozi & Ahimbisibwe, 2001; Mturi & Hinde, 2001). Fertility levels are expected to be lower in urban areas than in rural areas. A study conducted in Zimbabwe by Boohene et al. (1991) support this evidence. On the other hand, differential patterns in reproductive behaviour that are not readily explained by socio-economic variables can often be attributed to the influence of cultural differences.

Mass media are believed to play significant roles in promoting social change with respect to attitudes about fertility and reproductive behaviours (Ministry of information and Broadcasting, 1998; Keller & Brown, 2002). Differences in fertility levels, according to ethnicity and religious affiliation, have also been observed in several studies (Amin et al., 1995; Meekers & Ahmed, 1997). These studies suggest that Catholics experience relatively high fertility rates when compared to other religious groups.

Keller (1997) emphasises that media campaigns are an effective way to inform people about where to obtain contraceptive or other reproductive health care services. Clinic locations, hotline phone numbers and referral networks can be included in media campaigns to direct listeners to where to go for services. Campaigns seem to be more effective if messages appear in different media simultaneously e.g. music, television, radio, movies and posters. For example, a 1992 AIDS prevention campaign by the National Youth Union and CARE International in Vietnam combined leaflets, television, radio, posters, newspaper articles, booths, discussion groups and a parade on World Aids Day (Dang, 1995).

Television, radio, music, magazines and other media have become powerful tools for giving young adults perspectives on the consequences of sexual activity. For example, HIV prevention media campaigns in Uganda have played a major role in encouraging safer sexual behaviour, condom use in risky sexual relationships and later age of sexual debut which has led to a decline in HIV prevalence among young women in Uganda. These pertain to behaviour messages that were emphasized in HIV prevention media campaigns (Keller, 1997). Another Ugandan media campaign that can be mentioned is the following: the AIDS information Centre used radio announcements to attract clients to anonymous and voluntary HIV testing services over several years. When the programme advertised special days for

young adults to receive free testing, young people turned up in large numbers (Keller, 1997).

Keller (1997) reports that research in Nigeria suggests that media campaigns can help influence family planning behaviour. She further notes that a 1993 survey of Nigerian reproductive age women correlated current use of contraception with whether the woman had watched television, music or videos. Women who were exposed to pro-family planning messages seemed to be more likely to use contraception and desire fewer children, even when other variables such as education and urban residence were taken into account.

The government of South Africa during the early 1990s had given health a priority status on the development agenda and integrated family planning programmes with AIDS education, prenatal care and reproductive health care (Haffajee, 1996). The Youth Information Centre, which is part of the Planned Parenthood Association, uses creative strategies to teach adolescents about the effects of teenage pregnancy. The approaches at the Youth Information Centre are used to help young people make realistic choices by providing contraception and health education. Haffajee (1996) reports that the need for adolescents' services is apparent from the survey results that indicate that 1 in 3 South African young women had babies by the time they were 18 years old, but only 33% of these pregnancies were planned and almost 50% were to youth who were enrolled in school. In addition, the study concludes that the major obstacle in successful implementation of programmes targeting the youth remains the involvement of men and changes in the attitudes of men, because even men who are counselled still refuse to use condoms.

The importance of ethnicity has been largely overlooked in relation to adolescent fertility. Ethnicity is of prime importance in defining age at

marriage, acceptability of sexual behaviour, initiation of sexuality, use of contraception and the resolution of pregnancies when they occur. A study of Nepal singled out ethnicity as the most important factor in the determination of the timing of marriage and of the first birth, and is much more important than education, religion, urban/rural and ecological regions (Bledsoe & Cohen, 1993; Bongaarts et al., 1994; Caldwell & Caldwell, 2003).

In Kenya, where adolescent fertility is reported to be among the highest in Africa, sexual custom varies greatly among ethnic groups, with differing values on virginity, consequences of premarital pregnancy, practice of genital mutilation, level of knowledge and use of contraception, among other characteristics (McDevitt et al., 1996; Gage, 1998). A study of ethnic differences between non-Hispanic whites and Mexican American female adolescents concluded that Mexican Americans who had been born in Mexico tended to initiate sexual intercourse later than non-Hispanic whites, but that they had the highest rate of early births because they were the most likely to become pregnant if sexually active and the least likely to terminate pregnancy (Neeru & Leite, 1999).

In Namibia, like many other African countries, women have limited control over their reproductive health. In most cases men have final decisions on family size. There have been a number of cases made for sustained efforts to address the reproductive health of men (Mufune et al., 1999). There have been efforts made to overcome the reluctance of men to use available health facilities in third world countries as well (Babalola, 1999; DeRose et al., 2004).

Dickson et al. (2001) explains that health care facilities can play an important role for adolescents in preventing health problems, in promoting sexual and reproductive health and in shaping positive behaviours. South Africa has a national Adolescent Friendly Clinic Initiative programme which is designed to

improve the quality of adolescents' health services at the primary care level and strengthen the public sectors' ability to respond to adolescent health needs (Ehlers et al., 2000). The key objectives of the programme are to make health services more accessible and acceptable to adolescents, establish national standards and criteria for adolescent health care in clinics throughout the country and build the capacity of health care workers to provide quality services. Despite this, Dickson et al. (2001) report that extensive research has established that South African public health facilities are failing to provide adolescent friendly health services.

Inconvenient hours or location, unfriendly staff and lack of privacy are among reasons many young adults give for not using reproductive health clinics (Ersheng et al., 2003; Hock-Long et al., 2003; Finger, 2000; Erulkar et al., 2004). Finger also reports that a study by the Washington based International Centre for Research on women, based on research with adolescents in Africa, Asia, Latin America and the Caribbean, recommends that reproductive health services for the youth be private, confidential, affordable, accessible and staffed with sensitive providers. Finger (1997) reports that better ways to make services more accessible involve the positive attitude of health care providers and training on sexual and reproductive health services, the logistics of clinic location and service, questions of privacy and confidentiality and other issues that will address the unique needs of young women. Finger (2000) further emphasizes that for programmes on adolescent sexual health to succeed, providers need special training to serve the youth.

Mouli (2003) and Belmonte et al. (2000) maintain that even when young women choose to seek care, there are certain barriers which prevent them from gaining access. In many places health services such as emergency contraception and safe abortions are not available either for young women or for adults. In other places where these health services are available restrictive

laws and policies may prevent them from being provided to some groups such as unmarried young women. Even when laws and policies are not an obstacle judgmental health workers may withhold services from unmarried young women. Mouli (2003) further reports that even where services are available young women may not be able to obtain them for some reasons. For example, they may not know where to go, facilities may be located a long distance away from where they live, study or work; or in places that are difficult to reach, facilities may also not be open at times of the day when they can get away from study/work. On the other hand, Mouli (2003) reports that health services may be delivered in ways that young women perceive to be threatening or of poor quality. For instance, young women may be reluctant to use available services for fear that they may be observed by acquaintances also awaiting services, or may be required to go through long bureaucratic procedures before they get to see a health worker. They may also be obliged to wait for lengthy periods before they see a health worker or obtain the services they need. Of great concern are their fears concerning interaction with health workers. For example, young women may fear that they will be humiliated by health workers who ask awkward questions or subject them to unpleasant and painful procedures, that health workers will demand the consent of parents or guardians or will not respect confidentiality (Masilamani, 2003; Poonkum, 2003).

Ersheng et al., (2003) on the other hand, report that family planning workers from urban areas are more likely to oppose providing reproductive health services. One important reason given by them was that they did not consider youth to be their target population. At a youth information centre set up by the Planned Parenthood Association of South Africa, young women said the most important factors determining their choice of a clinic were the attitudes of staff, location and atmosphere, contraceptive methods available and clinic hours in that order (Finger, 2000). Mensch et al., (1998) report that the

attitudes of providers have discouraged even married young women. They further report that providers in some countries refuse to provide services until the young wives have given birth. Ehlers et al., (2000) recommend that accessibility of contraceptives for young women should be investigated in specific areas and attempts made to enhance such accessibility. Ehlers et al. (2000) further argue that this might necessitate offering these services over weekends or during evenings when schoolgirls could attend without fear of meeting their mothers, aunts or teachers at those clinics.

2.6 Gender and cultural perspectives on contraceptive use

The family obviously has a strong influence on young people's aspirations and values from an early age (Speizer et al., 2001). For example, adolescents who learn about or are strongly aware of their parents' and elders' values regarding premarital sexual activity or contraceptive use are less likely to engage in risky sexual behaviours than their peers who are not exposed to their elders' value system. Family influence comes from parents and from other family members who interact with youth such as aunts, uncles, older siblings and grandparents.

Many parents believe that sex education leads to promiscuity. But the opposite seems to be true. Haffajee (1996), Finger (1997) and Al Azar (1999) have shown that sex education leads to responsible sexual behaviour, higher levels of abstinence, later initiation of sexual relationships, higher use of contraception and fewer sexual partners. These good effects are even greater when parents talk honestly with their children. In general, such talks are unusual in most societies. In the United States, for instance, fewer than one in three girls and one in six boys discuss these concerns with either parent (UNFPA, 1999). UNFPA reports that family life education has been part of the curriculum in many countries, but all too many have forbidden discussion

of contraception or even reproductive physiology. Teachers' discomfort with these subjects, opposition from some traditionalists and religious groups, fear of parents' criticism, and difficulty in setting priorities can all cause problems.

According to the UNFPA report (1999), most parents want to protect and guide their children, but none want to give them a free rein to do whatever they please. UNFPA emphasizes that parents must be realistic about the possibility that their children will engage in sexual activity at a young age, and without their knowledge. The only way to protect them from unwanted pregnancies, diseases and death will be to make available to them the information about sexual and reproductive health and the services they need to take care of themselves.

Finger (1997) maintains that it is crucial to acknowledge the importance of culture and tradition when advocating what young people need. Involving community leaders, parents, teachers and others help to achieve this difficult balance. The UNFPA report (1999) explains that lack of contact with parents and other invested community groups misses an opportunity to gain their support. Finger (1997) however, concludes that several programmes have successfully invested time and resources in involving parents. For example, in Zimbabwe, the National Family Planning Council offered a programme to help parents educate their children about sexuality and reproductive health. In Tanzania, a parents' organization developed a manual designed to help parents communicate with their children (Finger, 1997).

The transition from traditional societies to modern societies that is occurring throughout the world is generating a radically different culture for reproductive and sexual decision-making among today's adolescents. When most of today's older generation were adolescents themselves, social roles and expectations were arguably better defined. Individuals appointed by the

community taught adolescents a set of clear and unambiguous rules that governed sexual conduct. With increased urbanization, however, the role originally played by community appointed teachers must now be assumed in part by an adult family member and by parents in particular. Parents and other family members are often reluctant to talk to young people about reproductive health issues (Briggs, 1998; UNFPA, 1999; Mturi, 2001; Shapumba et al., 2004; Gebhardt et al., 2004). This reluctance may result from parents' lack of reproductive health knowledge or from a concern that adolescents will interpret such communications as affirming the acceptability of premarital sexual activity. Parents may also think that their information is outdated (Adedimeji, 1999). When families do not provide reproductive health information, young women will seek out that information from other sources, including their peers. Nonfamiliar sources of information may provide incomplete or inaccurate messages about sexuality which can increase adolescents' participation in behaviour that exposes them to the risk of unintended pregnancy and STIs, including HIV (UNFPA, 1999). In many developing countries, parents still have a tremendous influence over their children despite eroding traditional values, especially in urban areas. Therefore, meeting the reproductive health needs of young women mostly rests on the shoulders of parents. However, most parents do not discuss sexual matters with their daughters as a result of shyness, ignorance on sexual matters or societal norms that do not encourage open mother-with-daughter discussion on sexual matters. As was pointed out by Briggs (1998), most parents are either not knowledgeable on sexual matters or are embarrassed to discuss them with their daughters.

Lack of information or misinformation about reproductive and sexual health may lead to teenage pregnancy. However, the lack of economic alternatives in the labour market and poverty are other factors that encourage girls to get pregnant and drop out of school prematurely (Al Azar, 1999). They may

believe that the economic benefits of engaging in a sexual relationship with a sugar daddy is more rewarding than any economic opportunities that are available for better educated women. Al Azar (1999) reported that young girls may also use pregnancy to hook a man of their liking or they may think it is important to prove their fertility in order to get a husband. More often than not, premarital pregnancy does not result in marriage. Instead the girl's family name and honour is soiled, their bride price is decreased; their education is ruined and their chances of getting married are lowered. They become socially and economically dependent on their families.

Political, social and economic changes and resulting social problems affect parent-child relationships, views of parental authority and the institutions that serve adolescents. There is great diversity in the circumstances of young people between and within countries. In many settings, child parent relationships have traditionally been just one component of a web of extended family relations. However, according to Dilorio et al., (1999) migration, new values and understandings, poverty, family dispersal and impact of HIV/AIDS have reduced reliance on the extended family, particularly in cities. Many young people live without one or both of their parents and may not be able to rely on their families for support.

Family planning programmes have mostly concentrated their attention on women. In Africa research on the effectiveness of these programmes indicate limited success in curbing fertility although women consistently prefer to delay, limit or cease childbearing at some point (Lapham & Mauldini, 1985; Ross & Mauldini, 1996). Family planning programmes have been struggling with this unmet need of African women. A major reason for the failure to reduce fertility and to deal with the unmet need has been the fact that programmes have not involved men (Benefo & Pillar, 2005). Men are an increasingly "popular" focus of reproductive health interventions. In the past,

men's participation was sought by family planning programmes to increase the use of condoms. However, later, men's involvement was considered necessary to support women's contraceptive use, when studies in both rural and urban areas showed that husband's approval was the most important determinant of contraceptive use by women. Mufune et al. (1999) reports that, according to research conducted in Kenya, men who have some education on reproductive and sexual health are more likely than those who have not, to support their partners in family planning and contraception. They are also more likely to support their partners in pregnancy and in making better sexual and reproductive health care decisions. Therefore, the role of gender in family planning should not be downplayed. Both men and women together play an important role in fertility decisions, including decisions to use contraceptives and it is thus their responsibility. Ndunyu (1999) reports that family planning programmes have been guilty in ignoring the role of men in family planning in their keenness to improve better contraceptive prevalence rates.

In Africa, research has concentrated on finding out the nature of men's involvement in reproductive decision-making. Some studies (Babalola, 1999; Rono, 1999) reveal that men are instrumental in reproductive decision-making. This is because in most African cultures, upon marriage, a man and his family pay lobola (dowry price) to the family of the bride. An implicit outcome of this transaction is that it shifts reproductive decision-making power to the male side. The gendered nature of marriages favours men whose costs in reproduction are minimal. Ntozi & Ahimbisibwe (2001) state that for men, more children add to prestige; therefore men in this context do not usually favour contraceptives. Ntozi & Ahimbisibwe (2001) further argue that Uganda is predominantly agricultural and children contribute a lot to the subsistence living of their families in form of labour in producing food and cash crops and looking after domestic animals.

There has been evidence that many married women got pregnant even when they took contraceptives, especially the pill, because their husbands objected to them using it. They had to hide the pills in the garden and take them at irregular hours (Kaufman, 1998). There are also many myths circulating regarding the use of contraceptives – for example, that the “loop” (an intra-uterine device) makes a woman cold and unresponsive in bed (Jackson & Harrison, 1999).

Ross and Mauldini (1996) recommend that family planning programmes must offer abortion services along with contraceptive services if the aim of these programmes is to ensure that all children born are wanted children. They argue that contraception, by itself, does not prevent all unwanted births as contraceptive failures do occur. They also report that many adolescents believe that they cannot become pregnant and others fear that their sexual activity will be discovered if they utilise available contraceptive services.

Urbanization is an especially important influence in the least developed countries. Rural areas are changing, small towns are becoming cities and big cities are still expanding. People migrate in response to opportunity, economic deprivation and environmental emergency, reflecting both under-investment in rural development and poor resource management. The urban experiences offer young people opportunity and expose them to sexual risks (Shapumba et al., 2004; Gebhardt et al., 2004; Nengomasha et al, 2004). In every area of their lives, migrant young people remain highly vulnerable and an often hard to reach group. Young people may move with their families or on their own in search of work or education. The experience of rural to urban migrants varies considerably. In many developing countries, domestic work is one of the main sources of income for young women in urban areas (Kaufman, 1998). In Nigeria, young women apprenticing to be tailors are very

vulnerable to sexual abuse because of their subordinate position at work and separation from their families (Akande, 1994).

The process of urbanization and the increasing influences of western cultural precepts on many population groups, but especially the young, are seen to be responsible for the breakdown of traditional customs. In this sense, the increase in premarital sexual activity and the increase in unmarried teenage pregnancy is seen by Villarreal (1998) as a consequence of the introduction of “western” values and ways of conduct, which expand more easily in the urban context and through the media available in this context. Villarreal (1998) reports that urbanization and detribalisation have loosened social practices and in the process sexual behaviour among the youth has become more extended and unmarried teenage pregnancy more frequent. Westernization has had an important influence in the disappearance of certain taboos and certain practices like initiation ceremonies. In the process of urbanization two factors are relevant in the changes in sexual practices and outcomes: education and the changes in traditional systems of social controls. In Latin America, the rural-urban migration flow is reported to provide young women with a physical way to escape the traditional controls on their sexuality, for with the change of location, young women are able to flee the controlling eye of parents, the local priest and the community (Purdy & Ramsey, 1999).

With urbanization, the socialization process has shifted from being entirely the responsibility of the direct or extended family to being partially dominated by social institutions like the school, under the ever-stronger influence of the media. The introduction of western systems of thought – within the power relationship that is generated by a dominant culture – often destroys local taboos, along with the element that legitimizes them within the local belief systems (Kinsman et al., 2000). In the same manner other forms of social

control lose relevance, as the weight of the western values, attractive to the young cannot be countered by local propositions. Early marriages and childbearing continues to be mostly a rural phenomenon. In the urban areas young women have their first child significantly later, although this does not necessarily mean later first pregnancies, for illegal abortion is much more widely practiced among urban adolescents.

According to Mufune et al., (1999), a large number of people are migrating from the Northern to the Southern part of Namibia. Many of them are in search of jobs and education. Migration is associated with the spread of STD and HIV/AIDS. This is due to the fact that the sexual behaviour of young women at home significantly differs from their sexual behaviour away from home. They are outside the controls of family, friends and community. The anonymous sex that they engage in is more likely to involve a new partner, exchange of money or materials and many partners (Kim et al., 2001). A large number of married men also migrate to urban areas in search for jobs and leave their wives and children to work in the fields in the rural areas. The periodic and prolonged absence of men holds implications for women's status and livelihood and for reproductive dynamics.

Kaufman (1998) reports that the absence of men at home is hypothesised to be negatively associated with contraceptive use because of lower coital frequency and a decreased risk of pregnancy. Kaufman (1998) further argues that the absence of men is also likely to increase demand for children because of the future labour and support children represent to women who may find themselves in unstable social and economic relationships with men. Anecdotal evidence suggests that many men working away from their wives are opposed to their wives' use of contraceptives, perceived as a sign of promiscuity and that men departing for contract work prefer to leave their

wives pregnant, also eliminating the need for contraceptives (Kaufman, 1998).

In most of sub-Saharan African countries (e.g. Zambia, Namibia, Malawi, Kenya, South Africa) it is a tradition that women should not have sex before marriage and because of this most teenage women find it difficult to have access to contraceptives to protect themselves from pregnancy and infections (Population Reference Bureau, 1992). They often feel shy if they are seen getting condoms from the nearby clinics. They fear that people will know that they are having sex outside marriage and will not be respected in their communities. On the other hand, most young girls do not want to deny their boyfriends sex because they are afraid that they might lose their boyfriends as well as lose their relationships. Thus most of them decide to have sexual intercourse without protection (Eggleston et al., 1999). Some girls believe that relationships without sex will not turn into true love and hence this has caused most girls to have sex very young (in their first relationships). Furthermore, some girls tend to emphasize prevention of pregnancy in relationships by using the pill, injections or the IUD, but these do not protect them against HIV and other infectious diseases.

There is evidence and cases reported that a high percentage of married women have been infected with HIV/AIDS by their husbands (Ntozi & Ahimbisibwe, 2001). Simply being married is a major risk factor for women who have little control over abstinence or condom use at home or their husband's sexual activity outside. In Zambia, generally, it is reported that women lack complete control over their lives and are taught from early childhood to be obedient and submissive to males. In sexual relations, a woman is expected to please her male partner, even at the expense of her own pleasure and well being. Dominance of male interests and lack of self assertiveness on the part of women put their reproductive health at risk.

Women are taught to never refuse having sex with their husbands regardless of the number of partners he may have or his non-willingness to use a condom, even if he is suspected of having HIV or another STD (Zambian Ministry of Health and Central Board of Health, 1997; Benefo, 2004).

A question that has stimulated considerable research is the degree to which organized family planning programmes are responsible for recent increases in contraceptive prevalence in developing countries. It may be observed that the countries where contraceptive use has grown rapidly (Kenya, South Africa and Zimbabwe) do tend to have relatively strong programmes (Ngom et al., 2005). However, cultural and economic conditions affect the ease with which an effective network of family planning services are provided, and also affect the desire of couples to practice family planning.

Certainly, there are some developing countries where contraceptive prevalence has reached high levels with little or no official support for family planning (United Nations, 1988). In Brazil, for example, although during the 1970s the government adopted a generally permissive stance towards dissemination of contraceptive information and supplies, which improved the ability of non-governmental organizations and commercial sectors to provide services, organized programme activities were limited in scope; the strength of the programme effort has been rated weak (United Nations, 1988). The level of fertility, however, has fallen rapidly, and contraceptive prevalence reached 65 per cent by 1986 (United Nations, 1988). Although strong support for family planning programmes is clearly not always necessary for contraceptive practice to become established in a population, most evidence indicates that organized family planning programmes have had an important role in increasing the level of contraceptive use in developing countries.

Gender imbalances in sexual decision-making influence young women's contraceptive use. Waszak et al., (2000) report that some young women would rather risk pregnancies than ask a partner to use a condom. Gender roles and gender norms are culturally specific and they vary around the world. Almost everywhere men and women differ from each other in power, status and freedom. However, in most societies men have more power than women. Gender roles begin at birth and span a lifetime. At very young ages boys and girls learn from their families and peers how they are expected to act around people of the same sex and of the opposite sex (Bender and Kosunen, 2005). Almost universally, young males experience more sexual freedom than young females.

Gender has a powerful influence on reproductive decision-making and behaviour. In many developing countries, men are the primary decision makers about sexual activity, fertility and contraceptive use (OsayiOsemwenkha, 2004). Men are called “gatekeepers” because of the powerful roles they play in society – as husbands, fathers, uncles, religious leaders, doctors, policy makers and local and national leaders. In their different roles men can control access to health information and services, finances, transportation and other resources. Gender is just one of the many factors that influences couples and affects their reproductive decisions. Educational level, family pressures, social expectations, socio-economic status, exposure to mass media, personal experience, expectations for the future and religion also shape such decisions (Grady et al., 1993).

In some developing countries, husbands dominate reproductive decision-making, whether regarding contraceptive use, family size, birth spacing or extramarital sexual partners. Traditional gender roles can jeopardize the reproductive health of both women and men. Inequities in power often make women vulnerable to men's risky sexual behaviour and irresponsible

decisions. Because of their gender roles, many women around the world have trouble talking about sex or mentioning reproductive health concerns. They may not be able to ask their partners to use condoms or to refuse sex even when they risk getting pregnant or being infected with STD, including HIV/AIDS. Women engage in dangerous sexual practices with men because they are afraid of retaliation, such as being beaten or divorced because their gender roles place them in subordinate positions in society (Grady et al., 1993; Mufune et al., 1999; lipinge et al., 2004).

Kim et al. (2001) on the other hand report that gender roles along with a host of economic factors contribute to risky sexual behaviours. Kim et al. (2001) further report that young women are socialized to be submissive and not to discuss sex with their partners, which leaves them unable to refuse sex or insist on condom use. Women's economic dependence on men also leads young females to exchange sex for the opportunity of marriage or for gifts, sometimes with older "sugar daddies". There are reports in the local newspapers that some of the "sugar daddies" engage in sexual intercourse with school-going young women in exchange for paying school fees and providing transport.

2.7 The role and importance of reproductive health programmes

Reproductive health programmes are carried out within a variety of social and economic contexts and their effects coincide with those of other influences on contraceptive use and health service utilisation. Since the 1960s, there has been a substantial increase in the number of countries that have organised efforts to provide reproductive health suppliers and services (Ross et al., 1999). These efforts have involved both public and private channels – more often the former, but with significant and growing emphasis on the latter.

Reproductive health encompasses many elements: safe childbirth and postnatal care, prevention and treatment of STIs, including HIV/AIDS, prevention and treatment of infertility, elimination of harmful practices and violence against women. The Programme of Action thus calls for all countries to provide these services, mainly through the primary health care system.

Each year more young women are reported to have died from complications of pregnancy, childbearing and unsafe abortions (Shane, 1996). Most of these deaths are often reported in developing countries. Reproductive health programmes can prevent many of these deaths by enabling women to bear children during their healthiest times for themselves and their children (Ross et al., 1999). It also allows couples to decide how many children they want and when to have them.

Innovative services for youth have been developed in general settings in many countries. In Zambia, the Lusaka Urban Youth Friendly Health Services project used participatory needs assessments and learning exercise to involve community leaders and parents (Nelson et al., 2000). The project provided education on contraception and prenatal care and this led to the number of young women using clinics doubling with significantly more nonpregnant young girls seeking counselling and contraceptive services. In addition, adolescent reproductive health in Zambia remains a sensitive issue. A 1994 study found that most Zambian adolescents have limited knowledge about reproduction and sexuality and that 20.4 per cent of childbearing, teenage women in urban Zambia were HIV positive (Shannon, 1998). Although providing family planning information and services to adolescents is legal in Zambia, Shannon (1998) reports that youth were routinely scolded by clinic staff who were reluctant to provide services to young, unmarried people.

In 1994, public health workers in Lusaka clinics realized that existing health care services were not reaching the youth (Nelson et al., 2000). Zambian NGOs further found that providing reproductive health information and education to adolescents did not encourage their use of health care services. Even though the youth understood the importance of using health services, they were still fearful of using them. The NGOs and clinics began to collaborate to identify and reduce barriers to young people's access to reproductive health services. The Ministry of Health (MOH) Maternal and Child Health/Family Planning unit launched an adolescent Health Task Force. The Task Force was drafted to develop a National Health Programme for Youth, made up of Youth serving organisations (YSOs) and clinics. The aim was to establish the Youth Friendly Health Services (YFHS) Project. The YFHS was established and peer educators were trained to provide counselling, information, condoms and referrals to their peers. The response from adolescents has been reported to be positive towards the programme (Shannon, 1998).

Successful programmes typically identify a specific target group to be served, often defined by age, school status, marital status and other social factors. Finger (1997) maintains that this helps in analyzing the needs of the target group and in developing appropriate strategies to meet those needs. Finger (1997) also reports that young women should not be treated as a homogenous group. This implies that focusing on specific characteristics is important, especially marital status, school enrolment and geographical location. For example, the reproductive health needs of urban and rural youth are usually different as are the available resources to serve them. In an evaluation of projects focusing on adolescents, UNFPA found that almost none of the projects had defined its target population clearly (Finger, 1997). Programme planners were not always clear about the age range they intended to serve and in some cases; they chose the least costly channel

such as in-school programmes, even though the most needy and underserved are out of school youth.

Finger (1997) thus emphasizes that in designing a programme for a particular group, it is essential to use specific and measurable objectives. Marital status can be important to consider. Both married and unmarried young women have common biological and developmental issues regarding reproductive health. Thus, the need for information about sexuality, contraceptives, pregnancy and other issues are similar for all youth. Whether married or unmarried, young people face health risks from pregnancy and STDs. However, young women who are unmarried often face more obstacles to services and have different contraceptive needs.

In 1998, South Africa received a financial grant from the World Health Organization to establish whether adolescent mothers aged 19 or younger at the birth of their babies utilised contraceptives. The findings reported by Ehlers et al., (2000) indicate that adolescent mothers in Gauteng did not make optimum use of the available reproductive health care services. The report recommends that education about sex, pregnancy and contraceptives should commence at the age of 10 as the majority of the respondents did not have the necessary knowledge to make informed decisions about their futures. Sex education guides young people towards healthy attitudes that develop concern and respect for others (Sapire, 1988). Sapire (1988) claims that research shows that young women exposed to sex education are not more likely to engage in sexual intercourse than are other adolescents, and those who become sexually active are more likely to use a contraceptive method at first intercourse and are slightly less likely to experience premarital pregnancies. The non-use of contraceptives is, thus, related to ignorance, lack of awareness of the consequences of sexual activity and inaccessibility of suitable services.

Many young women who become sexually active do so without accurate information about reproductive health. This lack of information can put them at risk of unplanned pregnancy or sexually transmitted diseases (STDs). Barnett (1997) recommends that sexual health education can be one way in which young people can be helped to prevent these problems and improve their future reproductive health. The most effective sexual health programmes are those that include more than information on reproductive health. These programmes also help young women to enhance communication and negotiation skills, clarify their values and change risk behaviours. According to Barnett (1997), basic information on reproductive health is important for youth just as basic information about other types of health issues is important. Barnett (1997) further reports that sex education programmes might be the only place that young women can learn accurate information about reproductive health. Sex education programmes may offer the only setting in which young people can practice the skills necessary to maintain good reproductive health.

Misinformation and misunderstandings about conception, family planning and STD risks abound among young adults. In Jamaica, research conducted by the University of the West Indies and Family Health International (FHI) Women's Studies Project found that a group of adolescents had little accurate information about reproductive health issues (Eggleston et al., 1999). In India, of 100 girls who came to a hospital seeking abortion, 80 per cent did not know that sexual intercourse could lead to pregnancy or STDs, and 90 per cent did not know about contraception (Griffiths & Stephenson, 2001). A study of Russian adolescents' knowledge of AIDS found that, among 370 high school students surveyed, only 25 per cent of the girls and 35 per cent of the boys knew that condoms should be used just once. Thirty eight per cent of students incorrectly believed that condoms could be washed and used several times (Belmonte et al., 2000). In Chile, where 948 public school

students were surveyed in Santiago's poorer communities, 57 per cent of boys and 59 per cent of girls said condoms could be re-used. Sixty-seven per cent did not know the fertile or infertile periods of a woman's menstrual cycle (Diaz et al., 1999) Lack of information may be one reason that young women's use of family planning methods is generally low. In South America, for example, only 43 per cent of young married women, aged 15 to 19 use contraception, according to the data compiled by the Population Reference Bureau (2004). The FOCUS on Young Adults programme recently analyzed reproductive health programmes in developing countries and found few studies that demonstrate sex education results in behavioural change. Experts say more research is needed, and evaluation measures need to be refined (Reproductive Health Outlook, 2002). However the FOCUS project reports that sex education programmes that include activities to help young people build skills in communication and negotiation are likely to be more successful than programmes that only provide information on reproductive health (Barnett, 1997).

The US based Sexuality Information and Education Council (SIECUS) recently updated its guidelines for sex education programmes (Waszak et al., 2000). Originally published in 1991, the guidelines were designed to help local communities develop their own curricula or evaluate existing programmes. The SIECUS guidelines emphasized that sex education should begin in early elementary school, when children are ages five to eight, and continue through adolescence, ages 15 to 18. SIECUS recommends that parents and other important family members, teachers, administrators, community and religious leaders and students should all be involved. SIECUS has worked in Brazil, Nigeria and Russia to help local government and nongovernmental organizations that work with adolescents develop their own guidelines for sex education programmes. Involving young people in the design and implementation of sex education programmes is an important

element in ensuring that the programme addresses teens' needs. The Youth for Youth Foundation in Romania began with a survey of students at 17 high schools in Bucharest to determine young people's knowledge of reproductive health issues and their health needs. Lack of basic information on reproductive health was found to be one of the main reasons for unplanned pregnancies and abortions among Romanian youth (Waszak et al., 2000).

In Namibia, improvements in sexual and reproductive health service provision took place on both the supply and demand side, after independence. The government and the private sectors worked to increase the availability of contraceptive supplies and services and at the same time initiate information and education campaigns to influence the demand for those services (MOHSS, 2002).

2.8 Conclusion

In this chapter, the theoretical and conceptual framework on the use of contraceptives among young women adapted from the Davis and Blake model, Easterlin model and Health Belief Model was presented. The literature on contraceptive use among young women, particularly in sub-Saharan Africa, was reviewed. Contraceptive use prevalence among young women in sub-Saharan Africa has improved, although still low as compared to other developing regions of the world. Some socio-economic, demographic and behavioural factors that influence contraceptive use were reviewed and adapted to the conceptual framework. Finally the role and importance of reproductive health programmes targeting young women and their success were discussed. The following issues discussed will receive particular attention in the next few chapters: the availability and accessibility of reproductive health services, privacy and confidentiality on reproductive

health services for young women, urbanisation process as well as traditional and cultural issues on reproductive health, including parental involvement.

There is ample evidence to show that reproductive health services are in short supply in many African countries and even where available, young women do not make adequate use of them. A key barrier to access is the perception among young women that reproductive health services are not confidential and that their private information will become known, particularly to their parent. Confidentiality has been identified by most researchers (Ringheim, 2006) as the barrier in utilisation of reproductive health services for young people. Fear that the confidentiality of private information will not be protected by RH service providers prevents many young people from seeking needed services like contraceptives, STIs treatment, maternal care as well as counselling services.

According to international law, young women must enjoy the same human rights as adults. The ICPD Programme of Action recognises that sexual and reproductive health services “must safeguard the rights of adolescents to privacy, confidentiality, respect and informed consent” (United Nations, 1994). The Key Actions document resulting from the ICPD plus Five conference in 1999 specifically noted that countries should ensure that programmes and attitudes of health care providers do not restrict the access of young people to appropriate services and information. Many countries, however, have developed national youth policies that specifically endorse the rights of young people to receive confidential RH information and services. Yet, in practice these policies are far from being fully implemented and more young women do not enjoy access to private and confidential RH services. The issue of privacy and confidentiality is also of great importance in Namibia. There are some health care providers who feel that morally, their primary obligation is to inform and involve the parents rather than to protect the confidentiality of the

adolescent clients. Furthermore, cultural and religious beliefs underlie the harsh judgement and ridicule with which some providers treat adolescent clients, a treatment which further alienates adolescents from seeking services.

With urbanization, some cultural and traditional practices lose value. Sexual intercourse outside marriage for young women is no longer a taboo. Traditional story telling for young women with adult members of the community do not exist anymore, because more young women have moved to urban areas for better living conditions i.e. in search of good education, employment opportunities, etc. Thus, urbanisation has also the advantage of promoting the well-being of women. More women are attaining high levels of education and have good employment opportunities.

CHAPTER THREE

Data and Methods of Analysis

3.1 Introduction

This chapter discusses the sources of data used for analysis in the study. The chapter is divided into three sections. The first section describes the two sources of data. It also highlights the reasons for using both quantitative and qualitative research methods and explains how samples were selected in each. The second and third sections describe the procedures and methods used in this study for carrying out qualitative and quantitative analyses. Binary logistic and multinomial logistic regressions are the main statistical methods applied to the quantitative data while verbatim quotes from focus group discussions (FGDs) were used for qualitative research.

3.2 Sources of Data

The study used both quantitative and qualitative research methods. The Namibian Demographic and Health Survey (NDHS) conducted between September and December 2000 and focus group discussions conducted with young women aged 15-24 in June/July 2004 are the major sources of data used in this study. The NDHS provided secondary data for this study and primary data was generated from the focus groups discussions and are used to complement the quantitative results and provide more in-depth information, which cannot be provided by the DHS. The NDHS is the latest national dataset with information on contraceptive use and June 2004 was the convenient time to conduct focus groups discussions for this study. There was a period of 4 years between the survey and the interviews. This could

hold consequences for the conclusion. However, although attitudes change with time the change is usually slow and minimal.

Although the two methods overlap in practice, quantitative methods can identify “how” young women behave in certain circumstances, while qualitative methods especially focus group discussions are better equipped to answer the diagnostic question of “why”. The quantitative research methods have advantages of systematic control of variables, rigorous sample selection which can be representative, highly structured design, pre-testing of questionnaires and many others (Brannen, 1995). There is no doubt that precise statistical information obtained through more careful mathematical elaboration of survey research is an invaluable tool in many policy decisions. Thus, quantitative research encompassed the whole of Namibia and therefore the results can be generalised to cover all Namibian young women aged 15-24 years.

But as with any method, there are also drawbacks. One of the major problems is that a quantitative survey is a highly structured design in which the respondent has to adapt his or her responses to previously determined alternatives (Folch-Lyon & Trost, 1981; Brannen, 1995). Therefore, such a method rarely elicits in-depth information on sensitive intimate areas (for instance sexual relations) and answers often reflect attitudes on a rational, normative level, while more emotionally based attitudes are not voiced. In addition to the possibility of obtaining erroneous information on sensitive areas, quantitative research is subject to underreporting of negative attitudes by some respondents due to concerns about social disapproval (Brannen, 1995; Pötsönen & Kontula, 1999). These drawbacks are often overcome by the use of qualitative research, in which participants are encouraged to disclose behaviour and attitudes that they might not consciously reveal in quantitative studies. Some participants often feel more comfortable and

secure in the company of people who share similar opinions, attitudes and behaviour or simply because they become carried away by the discussion. Thus the use of qualitative research and specifically focus groups discussion was considered in this study.

However, focus group discussions cannot be used to statistically quantify group norms, traits and characteristics but to expose their underlying attitudes and opinions. In focus group discussions, the “quality” of the response is important and the purpose is to detect directions of behaviour rather than magnitude (Folch-Lyon & Trost, 1981). Hence, focus group discussions are rigorous in the depth of the inquiry but not as rigorous in sample selection as quantitative surveys. Qualitative research methods are not considered a substitute for quantitative studies but as an important input to the latter and as a parallel source of distinct, rich and pertinent information. Qualitative research has in the last few decades, strengthened its position within health research (Pötsönen & Kontula, 1999). It has been realized that in addition to explaining things, one needs to understand the concepts, beliefs and meanings behind them. Ideally, different research methods and approaches are applied in parallel and complement each other (Brannen, 1995). FGDs are then used to examine the spectrum of values norms and meanings revealed in discussions by young women. Pötsönen & Kontula (1999) report that FGD method is useful for researching the concepts employed by the target group and their ideas and opinions on the topic under study. Since every research method obviously has its limitations and advantages, a multiple research approach is more capable of disclosing diverse dimensions of behaviour. This is the main reason why both qualitative, in particular, focus groups discussion and quantitative research methods were used in this study.

3.2.1 The Namibian Demographic and Health Survey

Data

The NDHS was a nationwide sample survey of women of reproductive age designed to provide information on women's reproductive histories, fertility, awareness and use of contraceptive methods, breastfeeding practices, nutritional status of mothers and young children, early childhood mortality and maternal mortality, maternal and child health and knowledge and behaviour regarding HIV/AIDS. The primary objective of the NDHS was to provide up-to-date demographic information and to produce regional demographic estimates and health indicators. The survey was conducted by the Ministry of Health and Social Services in collaboration with the Central Statistics Office. Technical assistance for the programme was provided by the MEASURE DHS+ project of Macro Systems International. The data were intended for use by programme managers and policymakers in order to evaluate and improve family planning and maternal and child health programmes.

Target population

A total of 6755 women aged between 15 and 49 years were successfully interviewed. Of these, 2748 women were aged 15-24. Because this research study focuses on the determinants of current contraceptive use and current method choice among young women, the sample was limited to young women (15-24 years old) who were exposed to the risk of conception at the time of the survey that is, those who were not pregnant at the time of the survey. This reduced the sample to 2576 young women, which included 1776 sexually active young women. Table 3.1 on the next page shows the age distribution of these young women.

Table 3.1: Age distribution of young women (15-24 years)

Age group	all young women		sexually active	
	N	%	N	%
15-19	1380	54	695	39
20-24	1196	46	1081	61
Total	2576	100	1776	100

Source: NDHS 2000

Sample design

Sample frame

The sample for the Namibian Demographic and Health Survey (NDHS) was designed to yield a nationally representative probability sample of 6500 completed interviews with women between the ages of 15 and 49 and 3000 men aged 15-59 regardless of their marital status, to be selected from 260 area units throughout the country. The sampling frame for the NDHS was the list of enumeration areas created by Central Bureau of Statistics for the Census conducted in 1991. The enumeration areas were stratified by urban and rural. The number of households in the enumeration areas served as a measure of size of the enumeration area. The 2000 NDHS is a stratified two-stage sample. In the first stage of selection, 260 primary sampling units (PSUs) (106 urban and 154 rural) were selected with a probability proportional to the number of households within the PSU. In the second stage, each selected PSU was divided into equally sized segments, one of which was randomly retained in the sample. All households residing in the selected segment were included in the sample and all women aged 15–49 listed in these households were eligible for individual interview.

Questionnaires

Three questionnaires were used for the 2000 NDHS: a Household questionnaire; a Women's questionnaire, and a Men's questionnaire. These questionnaires were based on the model survey instrument developed for the MEASURE DHS + programme. The individual questionnaire for women was based on the DHS model "B" questionnaire, which is designed for use in countries with low contraceptive prevalence and was adapted to the data needs of Namibia during consultations with specialists in reproductive health, child health and nutrition in Namibia. The Household questionnaire was used to enumerate all the usual members and visitors in the selected households and to collect information on the socio-economic position of the household. In the first part of the Household questionnaire, basic information was collected on the characteristics of each person listed as a household member. These include his/her age, sex, educational attainment and relationship to the head of household. The main purpose of the Household questionnaire was to identify women and men eligible for individual interview. In the second part of the Household questionnaire, questions were included on the dwelling units such as the number of rooms, the flooring materials, the source of water, the type of toilet facilities and the availability of a variety of consumer goods. The Woman's questionnaire was used to collect information from all women aged 15–49 years and covered topics such as background characteristics, reproductive history, knowledge and use of contraceptive methods, fertility preferences, maternal mortality, knowledge of HIV/AIDS etc. Only the Household and Women's questionnaires were used in this study (see Appendix 6).

Training and fieldwork

The survey instruments were pre-tested and the results were used to modify the survey instruments as necessary. Candidates for field positions were recruited on the basis of maturity, friendliness, level of education, language

ability and willingness to work away from home for a period of up to four months. The training programme included a detailed description of the content of the questionnaire, how to complete the questionnaire, interviewing techniques, and contraceptive methods. Fieldwork lasted four (4) months, and field teams were supervised frequently by trained supervisors.

Response rate

Table 3.2 presents information on the coverage of the 2000 NDHS samples including household and individual response rates. A total of 6849 households were selected in the sample, of which 6594 were reported occupied at the time the fieldwork was conducted. Interviews were completed in 6392 households or 97 per cent of the occupied households. In some selected households only children were found in the house during the fieldwork period these houses were therefore excluded from the study. In the interviewed households 7308 women were identified as eligible for the individual interview, of which 6755 (92 per cent) were successfully interviewed. Some eligible women listed as household members were not available at the time of interview.

Table 3.2: Results of the household and individual interviews, Namibia 2000

	<u>Residence</u>		<u>Total</u>
	<u>Urban</u>	<u>Rural</u>	
Household interviews			
Households sampled	3008	3841	6849
Households occupied	2876	3718	6594
Households interviewed	2760	3632	6392
Household response rate	96.0	97.7	96.9
Individual interview			
Number of eligible women	3392	3916	7308
Number of eligible women interviewed	3102	3653	6755
Eligible women response rate	91.5	93.3	92.4

Source: NDHS, 2000

NDHS data quality assessment and limitations of the study

Retrospectively reported quantitative data are subject to various types of errors. Recall errors due to memory lapses, age misreporting and event omission (both deliberate and accidental) are common problems and can bias the results of even the most careful analysis. Therefore, evaluation of data quality is a crucial stage of the analysis. It is reported that a global assessment of the quality of DHS data collected in 22 countries did not detect any serious errors that could affect the demographic estimates, but apart from this, efforts should be made to evaluate non-sampling errors which results from retrospective data (Fathonah, 1996).

It is common that people are more likely to report their ages ending in 0 or 5 and sometimes ending with even numbers. It is, therefore, likely that heaping may occur at certain specific ages for women in both rural and urban areas. Hence, it is important to be cautious when performing any analysis, which involves women's age. The Myers's blended index is commonly used to measure overall digit preference in age reporting. The index can range from 0 if no age heaping is present to 90 if all ages were reported at a single digit. The problem of heaping in particular ages (if it exists) can, therefore, be slightly reduced by grouping women's ages within five-year age groups.

Eggleston et al. (2000) report that few studies have addressed the accuracy of data used to measure sexual behaviour. He emphasised that having accurate measures of the extent of adolescent sexual activity is important to help identify populations in need of family planning and STD services and to assess the impact of such programmes. Eggleston et al. (2000), however, report that sexual behaviour is difficult to measure accurately since self-reports serve as the only source of information. No independent record of sexual activity exists to serve as a good standard of measurement. When respondents are asked about sensitive topics such as sexual experience,

they might give what they consider socially desirable responses rather than accurate information. This type of misreporting is prevalent among adolescents who are not yet comfortable with their sexuality and who may be more sensitive than adults to the consequences of public knowledge of their sexual experience. It is also believed that if interviewers are the peers of participants, this would increase the accuracy and meaningfulness of responses.

This study notes several limitations. From the DHS, the behavioural outcomes among young women are based on self-reported information, which is subject to reporting errors and biases. The type of data collection procedures used (personal interviews) may have contributed to such errors. Furthermore, the study is based on cross sectional data, which implies that the direction of causal relationships cannot always be determined.

3.2.2 Focus Groups Discussions

The DHS by its nature does not collect in-depth information on understanding young women's basic perceptions and attitudes towards use of sexual and reproductive health services in order to understand specific problems and fears relating to sexual and reproductive health utilisation, including use and non-use of contraceptives and the method choice. The focus groups discussions were thus conducted to fill gaps, which cannot be addressed through quantitative analysis. The emphasis in the group discussions was on the in-depth investigation of respondents' attitudes and opinions through a guided discussion. In this study, qualitative focus group discussions complement the quantitative data collection. Focus group sessions integrate qualitative research techniques that are widely used to understand the psychological and behavioural underpinnings of human behaviour and to identify ways and means to influence these behaviours (Brannen, 1995;

Pötsönen & Kontula, 1999). Focus groups offer researchers the means to gain insight into the dynamic relationship of attitudes, opinions, motivations, concerns and problems related to current and projected human activity. This method has been found valuable in the areas of determinants of basic behaviour, reactions to specific stimuli, as a complement to numeric data, and as a source of information to develop quantitative research (Pötsönen & Kontula, 1999). For example, in family planning studies, focus group sessions can be used as an avenue to better understand behavioural and psychological rationales for use and non-use of contraceptives among the general population. Since groups contain only a small sample of people, the data are not capable of producing typical or projected information for the whole universe under study.

Composition of the groups

The researcher identified categories of young women whose views would be important to an understanding of health service utilisation, contraceptive use and contraceptive method choice. The following categories were chosen: married or never married young women (15-24 years); with or without children; current users, dropouts or those who have never used contraceptives; those who are in school or out of school; living in urban or rural areas. Six focus group discussions were conducted. Each group consisted of 8 to 10 participants. Those in school were interviewed separately from the out of school young women and the groups were homogeneous as to age.

Selecting participants

A key element of the focus group method is the selection of participants. Careful recruitment is vital to the entire process, since the inclusion of ineligible participants can result in less fruitful discussion. In this study, recruitment of participants for in-school young women was done with the

assistance of the school Principal and staff with consent from the parents, while for out-of school young women the Youth officers at the multipurpose youth centres rendered assistance in organising eligible young women for the discussion (Appendix 2). The researcher travelled to the regions to conduct the sessions with the young women who had been invited to participate. Eligible young women were required to sign the consent form if they agree to participate in the group discussion (Appendix 1). For those who were willing to participate but were below age 18, their parents signed the consent form (Appendix 3). The researcher held an information session with parents and their children who were eligible for interview to explain to them verbally what the study is all about and what their options were, before they sign the consent forms. Anonymity was assured as participants were informed that no real name would be revealed or published. No monetary or other inducements were offered at the time of recruitment.

Conducting the sessions

The group discussions were held in the afternoons for the young women who were in school and in the morning for young women who were out-of school, as these were the convenient times for the participants. Noms de plume nametags were provided for each respondent to establish the feeling of warmth and personal recognition. Soft drinks and light snacks were made available to make participants feel comfortable and at ease. The researcher explained to participants how important their opinions on the topic under discussion were. Participants were encouraged to express their points of view and experiences freely and spontaneously. The researcher followed an interview guide (Appendix 4) that ensured that the same subject matter was discussed in each group. However, apart from this guide, the discussions were left relatively unstructured and time was reserved for the exploration of particularly interesting areas that arose spontaneously. All discussions were audio recorded. But, besides the audio recording, the researcher took notes

on the discussion as it proceeded. After the first focus group discussions, the researcher listened to the audiotape in order to identify gaps and mistakes made and improve on the subsequent group discussions.

Limitations of focus groups

Focus groups do have their limitations. The participants are chosen scientifically but, as a group of 10 or 12 people, the findings cannot be projected onto the entire population. The results are dependent upon the interaction between the respondents and the moderator or researcher. The responses of each participant are not independent. A few dominant focus group members can skew the session. It is therefore the responsibility of the researcher to make sure that he/she has a good control of the focus group discussion.

3.3 Methods of Qualitative Analysis

Audiotapes were transcribed and those Focus group discussions that had been conducted in Oshiwambo were translated into English. Field notes were used to enhance and substantiate data from the transcripts. Audio tapes of each focus group discussion were reviewed several times in order to get an adequate impression of the discussion climate and to make a verbatim transcription in which hesitations, silences, enthusiasm and other psychological indicators are noted. Findings, together with pertinent quotations, were then organised according to the theme discussed, so that differences of thoughts, beliefs and emotions of groups representing diverse characteristics would become evident. New themes emerged from the focus group discussions and these were also included in the analysis. Verbatim quotes, which were common in the focus groups, were considered for analysis. The verbatim quotes were also quoted as evidence to either reject or accept the research hypotheses. Furthermore, unique responses from

focus group discussions, which were not reported in other similar studies, were also included in the analysis. Table 3.3 below shows the age distribution of young women who participated in the group discussions.

Table 3.3: Age distribution of young women selected for the Focus Group Discussions

Age group	number of participants	per cent
15-16	8	15
17-18	14	26
19-20	9	17
21-22	12	23
23-24	10	19
Total	53	100

Source: Focus group (2004)

3.4 Methods of Quantitative Analysis

Two related methods of analysis are to be adopted in this study. They are (a) Logistic regression models and (b) multinomial logistic model, which is a generalisation of the binary logistic model. They are discussed below:

3.4.1 Logistic regression

Binary logistic regression analysis was used to analyse the data because the response variable, current use of contraceptives, was classified into two categories: current use and current non-use. It was chosen as the most suitable method because of its ability to detect changes in measurements that are brought about by addition of new variables to the equation. In logistic regression, the dependent and independent variables do not need to have a linear relationship and data for variables do not need to be normally distributed. Logistic regression analyses were used to examine the influence of constructs in the behavioural change framework on contraceptive use. The

results of the logistic regression models are converted to odds ratios, which represent the effect of one unit change in the explanatory variable on the indicator of contraceptive use. Odds ratios larger than one indicate a greater likelihood of contraceptive use than for the reference category; odds ratios smaller than one indicate a smaller likelihood compared with the reference category.

The relevance of a particular independent variable as a predictor of contraceptive use can be determined by comparing the magnitude of the regression coefficient with that of its standard error. Evidence of the usefulness of the independent variable becomes apparent if the coefficient is much larger than its standard error. The overall form of the model was determined by the square of the multiple correlation coefficients between the dependent and independent variable (R^2), measuring the percentage of variation explained by the variables. The models assumed no relationships between the independent variables. On the other hand, nested models were tested with the likelihood ratio test.

The models were fitted to the data using backward stepwise procedure, where the full model was fitted but at every step, terms already in the model were checked to see if they were still significant. To test whether a variable is significant the t-value was produced for each variable coefficient. The value was used to test whether any levels of categorical variables could be combined or whether any term of categorical variables should be removed from the model. The 5% significance level was used as a basis for deciding if a particular variable should be retained in the model. In all cases a reference category was chosen. The models were interpreted in terms of the odds ratios. The odds ratios are generally obtained by taking the exponential of the parameter estimate (e^β) and used to compare odds between two groups.

The logit model is of the form

$$\text{logit}(p) = \log\left(\frac{p}{1-p}\right) = \beta_0 + \beta_1 x_1 + \dots + \beta_k x_k$$

The odds of using contraceptive methods can equivalently be determined in terms of probability of current use, p , as

$$p = \frac{\exp(\beta_0 + \beta_1 x_1 + \dots + \beta_k x_k)}{1 + \exp(\beta_0 + \beta_1 x_1 + \dots + \beta_k x_k)} = \frac{1}{1 + e^{-z}}$$

where $z = \beta_0 + \beta_1 x_1 + \dots + \beta_k x_k$ (Retherford and Choe, 1993)

3.4.2 Multinomial logistic regression

Multinomial logistic model is a generalization of the binary logistic model. The response variable takes three or more categories. Details of the multinomial logistic model used are shown in the Appendix 5. A convenient way to present the effects of the predictor variables on an outcome based on multinomial models is in the form of estimated probabilities (Retherford and Choe, 1993). These probabilities are calculated for each covariate while the remaining covariates and community level random effects are held at their mean values. They represent the estimated probability of choosing a particular method when other factors are held constant. For comparability predicted probabilities for the logistic model of contraceptive use were presented.

In this study, the response variable is contraceptive method choice among the commonly used methods in Namibia (pill, injection, male condom and other methods). The interest is on investigating factors that influence a woman to use any of these methods. In the literature, several studies report that young women use Injectables more than other contraceptive methods, therefore, women using the injection will be in the reference category.

The multinomial logistic model is of the form:

$$\log\left(\frac{P_j}{P_J}\right) = \sum b_{jk} x_k$$

and this can be interpreted as the logarithm of the ratio of the odds of an individual belonging to category j for $j = 1, 2, \dots, j-1$, to the odds of being in the reference category J . In applying the multinomial logistic model to contraceptive method choice, it is necessary to examine, carefully, some assumptions of the model. The assumption of mutual exclusiveness and exhaustiveness of the choices does not pose a serious problem. For women who may use more than one method concurrently, a choice has to be made about which method should be chosen as the one used. The assumption of independence is, therefore, important for applications of the multinomial logistic analysis (Retherford and Choe, 1993; Hedeker, 2003).

The coefficients of the multinomial logistic model can be estimated by means of the maximum likelihood method. Each coefficient can be tested for significance using the t-ratio statistics and the overall significance of the effects of one variable consisting of $J-1$ coefficients can be tested by the likelihood ratio statistics. If two Models are nested, for example, Model one nested in Model two, then the likelihood ratio test

$$-2 \log\left(\frac{L(M1)}{L(M2)}\right) = -2\{l(\text{Model1}) - l(\text{Model2})\}$$

has a chi-square distribution with degrees of freedom equal to $df_1 - df_2$, where $L(M1)$ and $L(M2)$ are the likelihood of the Model one and Model two respectively; $l(\text{Model 1})$ and $l(\text{Model 2})$ are the log likelihood for Model One and Model two respectively and $df_1 - df_2$ is the difference in degrees of freedom for the two models.

3.5 Analytic Strategy

The prevalence of specific contraceptive methods is determined by two related processes, namely: the decision to practise contraception and the choice of method. Therefore, these processes are modelled here in two stages. In the first stage I examine the determinants of the decision to use contraception. This analysis is based on data gathered from all young women who were ever sexually active (a total of 1776) in the NDHS. Contraceptives are mainly used for the purpose of limiting, delaying or spacing births (MOHSS, 1995). Thus it is sufficient to consider young women who are sexually active (ever had sexual relationships).

In the second stage, I examine determinants of the choice of methods among sexually active young women who are using contraceptives. The interest here is on examining which method is preferred by young women, why it is preferred and what the characteristics of young women are who are using a specific contraceptive method. Further analysis was carried out to examine the factors associated with condom use, where the sample is limited to sexually active young women currently using a method. Condom use is of great interest among young women because the researcher is also interested in knowing whether young women are responsible for their sexual behaviour by protecting themselves from STIs, including HIV.

Contraceptive use and method choice among young women in the same community are likely to be correlated as a result of unobserved factors such as the availability of specific methods at existing facilities or the community's perceptions of specific methods. To assess potential determinants of contraceptive use, the association between contraceptive use and socio-demographic and behavioural characteristics of respondents were examined through cross-tabulation. The Chi-square test was performed to decide which

variables had a relationship with use of contraceptives and were therefore statistically significant. The p-value for deciding the significance of the variable was set at 5%. Frequency tables were also constructed to examine the distribution of variables of interest.

Two models were fitted using logistic regression analysis. In the first analysis the focus was on the current use of contraceptives among young women. The response variable, current use of contraceptives was classified into two categories: current use and current non-use. The second analysis focused on the factors associated with condom use or non-use of condoms among young women. A multinomial logistic regression model for the multivariate analysis was also used to examine determinants of method choice among young women

3.6 Operational Definitions of Variables

Dependent variables

CCUSE	The variable measured contraceptive use among sexually active young women. It had two categories: those who were using any contraceptive method at the time of the survey and those who were not using any contraceptive method at the time of the survey
METCHOICE	The variable measure contraceptive methods choice. It was divided into four categories: those who were using injection, those who were using pills, those who were using male condom and those who were using any other contraceptive method (IUDs, traditional, female condom etc). Non-users of contraceptives were excluded.

CONDOMUS The variable measured male condom use among sexually active young women. It had two categories: those who were using condom and those who were not using condom.

Independent variables

AGEGRP Respondent's age in 5-year categories. The categories were recoded as 1 = 15-19 and 2 = 20-24. The reference category was 15-19.

MARITSTA The marital status of the respondent was measured as a dichotomous variable where the respondent was either in union or not in union. Those who were in union referred to all respondents who were currently married or living as married (cohabiting, living with partner) while those who were not in union included all those who were single, divorced, widowed etc. Those who were not in union were the reference category.

LIVCHIL The total number of living children the respondent had. It was divided into two categories and coded as 0 = those with no living child/ren and 1 = those with at least one living child/ren. Those with no living child/ren were in the reference category.

EDUCLEV The respondents' highest level of educational attainment. Categories included those who have never been to school, those with primary education and those with secondary or higher education. The reference category was those who had never been to school.

RESIDENCE The respondents' current place of residence in terms of whether it was rural or urban. It was measured as a

	dichotomous dummy variable with the reference category being urban residence.
HEALTHDIR	The health directorate in which the respondent reside. There are four (4) health directorates in Namibia namely: Northwest, Northeast, Central and South. Those residing in the Northwest were in the reference category.
DFPWM	Whether the respondent discusses family planning issues with her mother. It was coded as 0 = those who never discuss family planning issues with their mothers (reference category) and 1 = for those who discuss family planning issues with their mothers.
DFPWP	Whether the respondent discusses family planning issues with her partner. It was coded as 0 = those who never discuss family planning issues with their partners (reference category) and 1 = for those who discuss family planning issues with their partners.
DFPWF	Whether the respondent discusses family planning issues with her friends. It was coded as 0 = those who never discuss family planning issues with their friends (reference category) and 1 = for those who discuss family planning issues with their friends.
NEWSPAPER	Whether the respondent read a newspaper or a magazine at least once a week. It was coded as 0 = those who never read a newspaper in a week (reference category) and 1 = those who read a newspaper at least once a week.
RADIO	Whether the respondent listened to the radio at least once a week. It was coded as 0 = those who never listen to the radio in a week (reference category) and 1 = those who listened to radio at least once a week.

TIME Measured the time it takes the respondent to reach the nearest health facility/centre. It was divided into two categories: those who take less than an hour to the nearest health centre (reference category) and those who take an hour or more.

3.7 Summary

This chapter outlines two sources of data that were used in this research study: 2000 NDHS, and focus groups discussions conducted with young women in Oshana, Ohangwena and Khomas regions. Analyses of interest include contraceptive use, and contraceptive method choice as well as condom use among young women. Binary logistic and multinomial logistic regression analyses were the main statistical methods used. The section also highlights the fact that results will be interpreted in terms of odds ratios and estimated probabilities.

CHAPTER FOUR

Results and Discussion

4.1 Introduction

In this chapter, I present the descriptive, bivariate and multivariate analyses of the effect of selected independent variables on contraceptive use in Namibia. The independent variables were selected on the basis of empirical findings and theoretical explanations. Information obtained from responses to the questionnaire provides data on socio-economic, cultural and demographic characteristics of users of a variety of contraceptive methods. Moreover, the NDHS data provide information for constructing contextual community factors (for example, the proportion of women reached by information campaigns through mass media such as radio) that are also included in the analysis. Background characteristics were selected for inclusion in the analysis based on their significance in the previous studies of contraceptive behaviour or on their hypothesized association with contraceptive choice. They can be grouped broadly into contextual factors (region, place of residence); demographic factors (age, number of living children, marital status); socio-economic factors (religion, education, employment status) and behavioural factors (exposure to SHR messages on radio, TV).

The analysis excludes infecund and pregnant or sterilized women. Current use includes use of any contraceptive method: this can either be a modern, traditional or folk method. Non-users on the other hand, refer to women who are not using any methods to delay or prevent pregnancy.

This chapter is divided into four main parts: analyses of the determinants of contraceptive use, analyses of the determinants of contraceptive method choice, factors associated with condom use among young women in Namibia

as well as focus group discussion results. The discussion for each subsection is also included after the presentation of the data. The significant aspects of the findings will be addressed in the final chapter.

4.2 Contraceptive use

Current use of a contraceptive method is the aspect of contraceptive practice that is of greatest interest both to demographers (as a proximate determinant of fertility) and to family planning policymakers (as a measure of the coverage of their programs). However, several other aspects of contraceptive practice are of interest: ever use of a method, knowledge of contraceptive methods, and knowledge of sources of contraception and fertility preferences. Family planning researchers often use these variables as indicators of constraints on use in a population (Curtis & Neitzel, 1996). Ever use of contraception can signal the degree to which contraception is accepted or tried. Low levels of knowledge of contraception may indicate that the population is unaware of fertility-limiting options. Low levels of knowledge of sources of contraception may suggest that access to family planning is limited and programme extension is warranted.

Knowledge of contraceptive methods is one important aspect of the changing social context of fertility and reproduction. Although many young women know about contraception, they do not necessarily use it. Bledsoe and Cohen (1993) suggest that young women who are most knowledgeable about contraceptives are those living in urban areas or those living in households with a radio or television or those who have more education. Information on young women's knowledge of contraception was collected in two ways. Respondents were first asked to mention any "ways or methods" of contraception that they might have heard about (spontaneously). Interviewers then described methods not mentioned spontaneously to see if the

respondents recognized the method. Knowledge of a family planning method was, therefore, defined as “having heard of a method”. The data suggest that the overall level of knowledge among young women was very high (98 per cent). Almost all young women have heard of at least one contraceptive method and all young women who knew a method knew a modern method. Less than half of all young women have heard of a traditional method. This was because the existing family planning programmes only promote modern methods as effective methods other than the traditional methods. Nurses responsible for family planning services also do not recommend use of traditional methods to young women because of fear that the methods might fail, thus resulting in unwanted pregnancies. Traditional methods were viewed as not reliable. Table 4.1 presents the percentage of young women by knowledge of contraceptive methods.

Table 4.1: Percentage of young women’s knowledge of contraceptive methods, Namibia, 2000

Contraceptive method	per cent
Modern method	
Pill	85.6
Injections	90.0
Male condom	94.1
IUD	40.4
Female sterilization	49.8
Male sterilisation	27.3
Female condom	65.2
Vaginal cream	19.6
Emergency contraception	17.8
Traditional methods	
Withdrawal	30.1
Periodic abstinence	29.2
Others	5.1
N	2576

Source: NDHS 2000

The most commonly recognized method among all young women was the male condom (94 per cent), followed by injectables (90 per cent), and the pill (86 per cent). Knowledge of the female condom among young women was also quite high (65 per cent), while 50 per cent of young women had heard of female sterilization and 40 per cent had heard of the IUDs. These results reflect the fact that many programmes targeting young people on sexual and reproductive health matters promote the use of the condom more readily than other methods. This is due to the fact that the programmes are more concerned with young people contracting STIs, including HIV, than preventing pregnancies.

There are currently programmes targeting young people on sexual and reproductive health on national radio and television that invite young people to express their views among themselves on current sexual behaviour. Sometimes there are meetings for young people where they are shown how male and female condoms are used. Thus, condoms are widely known. The Ministry of Women and Child welfare under a programme supported by UNFPA has been highly involved in the promotion of both male and female condoms by sending them to almost all regions. Community meetings have also been held in which women have been advised on how they are used. It is thus not surprising that high proportions of sexually active young women have heard of both male and female condoms.

Injectables are also known because they are the most available methods at almost every clinic. Injectables have been popular methods in Namibia since the introduction of family planning in the late 1970s. During the colonial era, injectables were the only methods offered to the majority black population. Although the pills were also available, the education level of women at that time was very low and it was difficult for them to accurately follow the pill instructions. Pills were thus not popular. The least widely known methods are

emergency contraception (18 per cent), vaginal contraceptives (20 per cent) and male sterilization (27 per cent). Less than one third of all young women have heard of periodic abstinence and the same proportion have heard of withdrawal. This indicates that knowledge of modern methods of contraception is more predominant than any other method among young women.

Knowledge of contraceptive methods among young women is high in all health directorates in Namibia. In the South and Central health directorates knowledge of contraceptives is as high as 98 per cent. The least known methods (IUD, vaginal cream, emergency contraception) appeared to be mostly known by young women in urbanized regions: Khomas, Erongo and Karas regions (results not shown here). These methods are less likely to be available in rural hospitals and hence young women in rural dominated regions are less likely to know them. The IUD in particular requires a professional nurse or doctor to insert it and in some cases clinics in rural areas do not have experienced nurses to insert IUDs or there are no adequate facilities to offer such services. In addition, vaginal cream and emergency contraception are mostly available in pharmacies, which are only easily accessible in urban areas.

The pill, injections and male condoms are known by young women in almost all regions. Furthermore, knowledge of modern methods of contraception is more predominant than knowledge of any other method among young women in all regions. Knowledge of other contraceptive methods, which included herbs, etc., was high among young women in the Kavango region (Ministry of Health and Social Services, 2001^b). This region is more rural and access to health facilities is not easy, in terms of location and transport. Young women are forced to walk or travel long distances to health facilities. It is, thus,

assumed that young women in this region have limited knowledge of modern contraceptive methods.

All young women interviewed in the 2000 NDHS, who said they had heard of a contraceptive method, were asked if they had ever used that method. The level of current use of contraceptive methods is one of the indicators most frequently used to assess the success of family planning programmes. Current use in this context was defined as the proportion of young women 15–24 years who reported that they were using a family planning method at the time of interview. The table below shows the percentage of sexually active young women who reported that they were using contraceptive methods at the time of interview. According to the 2000 Namibia Demographic and Health survey, 53 per cent of sexually active young women were using contraceptives (Table 4.2).

Table 4.2: Percentage of sexually active young women (15-24 years) who reported using contraceptives by type of method, Namibia 2000

Contraceptive method	prevalence
All methods	53
Modern methods	52
Pill	7
Injection	28
Male condom	17
Other modern methods	0.7
All traditional methods	0.8
Calendar /periodic abstinence	0.1
Withdrawal	0.1
Other traditional (herbs etc)	0.6
N	1776

Source: NDHS 2000

The table above shows a relatively high prevalence of modern contraceptive methods (52 per cent). Injection had the highest prevalence (28 per cent) followed by the male condom (17 per cent) and then the pill (7 per cent) and other methods (0.7 per cent). Only less than one per cent of sexually active young women were using traditional methods. Overall, the prevalence of use of contraceptive methods among sexually active young women in Namibia is still below the regional prevalence level of 60 per cent.

4.3 Factors associated with contraceptive use

Descriptive analyses

Characteristics associated with the use of contraceptives are shown in table 4.3 below, which displays the sample distributions.

Current age

Several researchers (Bertrand et al., 1993; Agyei & Miggade, 1995; Bertrand et al., 2001; Burgard, 2004) report that a woman's age is one of the factors associated with contraceptive use. The age categories used are 15-19 and 20-24 years. One could anticipate that contraceptive use is highest among the youngest (adolescents) because they are most likely to want to delay childbearing. In contrast, Table 4.3 shows that a large proportion (61%) of sexually active young women was young adults (aged 20-24 years). Marital status can also influence young women's use of contraceptives. Among sexually active young women who were sampled during the Demographic and Health Survey, only 25 per cent suggested that they were married or were living as married with their partners. Thus, 75 per cent 'not in union' would include those without partners/boyfriends as well. In Namibia, age at first marriage has increased and there are few women who get married before age 20. The majority of young women in Namibia get married from age 25.

Table 4.3: Sample distribution of sexually active young women by background characteristics associated with contraceptive use, Namibia 2000.

Characteristic	per cent	N
Age group		
15-19	39	695
20-24	61	1081
Place of residence		
Urban	43	761
Rural	57	1015
Discuss FP with partner		
No	90	1604
Yes	10	170
Discuss FP with mother		
No	92	1637
Yes	8	137
Regions		
Northwest	28	505
Northeast	17	305
Central	27	472
South	28	494
Time to nearest health facility		
Less than an hour	77	1373
1 hour or more	16	291
Education level		
None	8	144
Primary	26	469
Secondary+	66	1163
Marital status		
Not in union	75	1329
In union	25	447
Number of living children		
None	46	824
At least 1	54	952
Total	100	1776

Source: NDHS 2000

Number of living children

The number of living children is a measure of women's previous experience of childbearing and an indicator of demands already placed on household resources. Women with at least two or more living children are likely to be more interested in limiting childbirth than are childless women, or those with only one living child, whereas those with no living child may be trying to delay the start of childbearing. The majority of women in the sample reported having at least one living child (54 per cent). This could be an indication of high premarital childbearing.

Educational level

Socio-economic characteristics are also key determinants of the use of contraceptives. Education may affect contraceptive use in multiple ways: it may expose women to modern ideas about contraception and family size limitation, and it may enhance their ability to exercise control over their sexual relationships and childbearing preferences. Women with more schooling may be more comfortable interacting with medical personnel and may have better access to sources of modern contraceptive methods than women who have little or no education. In addition, better-educated women may be more likely than others to earn incomes or to live in households having higher incomes, and thus may have greater economic resources or health insurance that could improve their access to the type of contraception that they prefer. In the sample, there were few young women who reported that they have never been to school (8 per cent) and about two-thirds reported having at least secondary education (66 per cent).

Place of residence

Community conditions may influence the availability of contraceptives and the perceptions of potential users. Current area of residence was one of the measures which was included in the analysis regarding community influence.

Women living in rural areas were likely to have poorer access to information about contraception or available family planning services. The sample included 57 per cent young women from rural areas and 43 per cent young women from urban areas.

Parental influence

Parental involvement in their children's sexual and reproductive health was a community factor, which has an influence on young women's use of contraceptives. Young women who discuss family planning issues with their mothers were more likely to be discouraged by their mothers from using contraceptives, because in most societies parents believed that contraceptives may promote promiscuity among their daughters. In the sample there were few young women who discussed family planning with their mothers (8 per cent). However, the data does not show a significant difference in discussing family planning with mother for young women who live in rural or urban areas. Among those who discuss family planning with their mothers, 50 per cent live in urban areas and 50 per cent live in rural areas.

Health directorates

In addition, the sample includes a fair distribution of sexually active young women from each health directorate. It is expected that contraceptive use would be high among sexually active young women who live in urbanised and industrialized health directorates than in the least urbanised. Central and South are the most industrialized health directorates. It is important to consider health directorate as a variable for the analysis to assess which health directorate lags behind others on sexual and reproductive health services for young women and to advise programme implementers accordingly.

Bivariate and multivariate analyses

This section presents the bivariate and multivariate analyses of socio-economic and demographic factors, which have an influence on contraceptive use. The bivariate analysis was done through cross tabulations and the multivariate analysis was carried out using logistic regression. Since it has been indicated in several studies that in various countries of the sub-Saharan region, contraceptive use prevalence had increased, it was important to examine factors that influence contraceptive use. This will help policy makers to establish proper strategies for raising contraceptive prevalence, especially among young people. Although the family planning policy in Namibia clearly stipulates the fact that all women of childbearing age are free to seek and use family planning services/methods, in practice young women, especially those 'not in union', have limited access to such services. This has contributed to a problem of high premarital births, most of which are unwanted.

According to the United Nations (2003) report, contraceptive use varies according to income, education, ethnicity, proximity to clinics and the strengths of family planning programmes. It is argued that the wealthiest women are four times more likely to use contraception than the poorest, according to the UNFPA report (2004). In some countries, such as Mali, the rate is 12 times higher. Several factors affect demand for contraception. Social, cultural and gender related obstacles can prevent a woman from realising her childbearing preferences. Women who cannot read or have limited education may know little about their own bodies and much less about family planning. Misconceptions and myths about pregnancy and contraceptive methods also abound. Men tend to want more children and to want them earlier than women do, and in many cases have greater decision-making power to determine family size. Furthermore, social norms

surrounding fertility and virility, and the overall low status of women, keep many women from seeking family planning.

Table 4.4 on the next page summarises the bivariate and multivariate results for use of contraceptives and the associations of use with socio-demographic and behavioural characteristics among sexually active young women in Namibia. Many of the independent variables have statistically significant effects on contraceptive use in the bivariate analyses, but these effects are often not significant in the multivariate models. In addition, some determinants of contraceptive use are in agreement with what other researchers found in their earlier studies while others contradict their findings. Several interactions between variables were carried and only significant variables and interactions are presented for interpretation. Variables that are not significant as well as interactions, which are not significant, are not presented. The results show that there is a significant association between contraceptive use and the education level of a woman, place of residence, access to media, communication with mother and communication with partner. Overall, the prevalence of contraceptive use among sexually active young women in Namibia stands at 53%. Although in a sense higher, there is still more than a quarter of sexually active young women who are not using contraceptives. The differences between users and non-users are then explained in relation to characteristics identified above.

Table 4.4: Percentage distribution of sexually active young women using contraceptive methods and their estimated odds ratios of the likelihood of contraceptive use, by selected background characteristics. Namibia 2000.

Characteristic	%	odds ratio
Educational level		
Never been to school (r)	35	1.000
Primary education	45	1.450
Secondary or higher	58	2.092**
Listen to radio at least once a week		
No (r)	42	1.000
Yes	54	1.312*
Read newspaper at least once a week		
No (r)	45	1.000
Yes	58	1.397**
Time to nearest health facility		
Less than an hour (r)	54	n/a
1 hour or more	42	n/a
Health directorate		
Northwest (r)	44	1.000
Northeast	52	1.370
Central	64	1.714
South	50	0.711*
Discuss FP with partner		
No (r)	51	1.000
Yes	62	1.520*
Discuss FP with mother		
No (r)	51	n/a
Yes	65	n/a
Place of residence		
Urban (r)	58	1.000
Rural	48	0.623**
Interactions		
Not discuss FP with mother & urban (r)	n/a	1.000
Discuss FP with mother & rural	n/a	1.694*
Northwest & Urban (r)	n/a	1.000
Northeast and rural	n/a	1.365
Central & rural	n/a	1.261
South & rural	n/a	2.900**

NDHS 2000: *p<0.05; ** p<0.01, based on Wald's chi-square test for the significance of the regression coefficient.

r=reference category; n/a = not significant, -2 log likelihood = 751.645**

Educational level

Women's education occupies a unique place in demographic discourse and policy because a large amount of empirical research has revealed that educated women delay marriage, use contraceptives, reduce fertility and produce other beneficial reproductive and child health outcomes (Benefo, 2006). He further states that elite educated women play a major role of exposing other women to new ideas about fertility control. They develop a heightened awareness of the opportunity costs of childbearing, learn about western contraception and become empowered to adopt them. They therefore, act as sources of information, social support and social pressure that diffuse their lifestyles and ideas to other women.

The results show that contraceptive use is higher among young women with some level of education. Among those who have never been to school, only 35% reported that they use contraceptives and 65% of the uneducated do not use contraceptives. The logistic regression results show that young women with at least secondary education were more likely to use contraceptives than those who have never been to school (odds ratio = 2.092). The literature on fertility studies (Kasarda et al., 1986; Robey et al., 1992) also reports that the higher the education level of a woman the more likely she is to practise contraception. Other studies (Bertrand et al., 1993; Castro and Juarez, 1994) document the relationship of female education to the decline in fertility. According to the above studies, education influences women's reproduction by increasing knowledge of fertility, increasing socio-economic status, and changing attitudes about fertility control. Education also affects the distribution of authority within households, whereby women increase their authority with their partners and affect fertility and use of contraceptives. Caldwell et al. (1992) see education as a vehicle through which people learn more Western views about the family, which lead to a more child-centred parenting approach, and to different definitions of acceptable child care. This also leads

to a demand for fewer children, and consequently the use of contraceptives to prevent or to space childbirth.

In Namibia, like in many African societies, educated women in a community initiate social and ideational changes that undermine traditional patriarchal power and reduce men's interest in having large numbers of children, whom they cannot afford to take care of. Educated women are also competitive in the labour market and can make them interested in practising safe sex and use contraceptives. However, although education is good on its own, because of the benefits attached, some earlier researchers (Kiragu et al., 1995; Gleit, 1999) argue that the lengthening process of formal schooling and the concomitant postponement of marriage can be expected to lead to an increase in problems associated with premarital sexual activity among young women.

Educated young women are also likely to be employed and earning income; thus the relationship between women's status, employment and childbearing are complex. Some statistical studies (Kasarda et al., 1986; Castro & Juarez, 1994; Bongaarts et al., 1994, DeGraaf et al., 1997; UNFPA, 2005) found lower fertility associated with more female participation in the labour force, while others found the opposite. Such inconsistency is not surprising, given the variety of jobs and occupations, demographic and household characteristics, cultural forces, and socio-economic circumstances around the world. While statistical research into women's labour force participation and women's use of contraception had not produced clear findings, the conceptual links are clear. With effective contraception, women are better able to work when they need to without the interruption of unplanned childbearing. Whenever unplanned pregnancy limits the types of work available to women, effective contraceptive use may help provide women with broader opportunities to obtain the economic security of a job. When a

woman cannot be sure of avoiding pregnancy, her occupational choices often are limited. More detailed studies (Gbolahan & McCarthy, 1990; Shapiro & Oleko, 1997) offer a clear view of how contraceptive use and employment are linked. For example, in Nigeria researchers found that young unmarried women out of school were using contraception in order to work longer before marriage (Gbolahan & McCarthy, 1990), because they were aware that after getting married they would have the responsibility of bearing children and looking after them. Such a situation would require some to even leave their jobs and take care of the family.

Access to media

Media access is also found to influence young women to use contraceptive methods. Young women who report that they listen to radio or read newspapers at least once a week use contraceptives more than those who do not have access to such media. For example, among young women who state that they listen to radio at least once a week, 54% (odds ratio = 1.312) report that they use contraceptives. Similarly, for those who read newspapers or magazines the odds of using contraceptives is 1.397. Reading newspapers is related to educational level and also to employment. Young women with some level of education are able to read and understand the content of the newspaper or magazine. If there is information provided on sexual and reproductive health in the newspaper they have the advantage of gaining additional knowledge. In most cases, as mentioned earlier, those with some level of education are also employed, hence the relationship. Several studies (Namibia Broadcasting Corporation, 2001; Keller & Brown, 2002) show that exposure to family planning messages through radio and print media are strongly associated with contraceptive use. Safe sex media campaigns are associated with increased teen condom use with casual partners and reduction in the number of teenagers reporting sexual activity.

In addition, the Namibian Broadcasting Corporation has several educative and informative dramas relating to sexual and reproductive health in all Namibian languages, which are of importance to young people. Those who listen to such programmes through the radio can learn from them. There are also other NGOs like UNICEF who develop prototypes for advertisements and these are heard in all radio and television services. For example, UNFPA and UNICEF have funded projects which directly work with young people to promote safer sexual behaviour. Furthermore, the Ministry of Health and Social Services together with other NGOs have developed informative and educational posters on reproductive health, which are displayed in health centres and clinics.

Media campaigns influence the sexual behaviour of young women. The young women who rely on media for information are more likely to use effective contraceptive methods. Some young women report being fearful and being too shy to be seen at health facilities for SRH services by older people and by their friends (FG, 2004). Thus, if information is published on posters, in leaflets or booklets which they can easily obtain and read on their own, it will be to their advantage. The mass media are useful for teaching young adults because the media can use elements of popular culture to articulate a message in young people's own terms.

Place of residence

Young women in the rural areas are less likely to use contraceptives than those in urban areas (odds ratio = 0.623). The bivariate results show that among young women who live in urban areas, 58% report that they use contraceptives while among those who live in rural areas only 48% report that they use contraceptives. This finding is consistent with a number of earlier studies on contraceptive use. Earlier researchers (Parnell, 1989; May et al., 1990) argue that in rural areas, access to and availability of contraception are

limited. Transport costs to health centres is one of the barriers reported in several studies to obtaining contraceptives, along with shortage of nurses, unavailability of some contraceptive methods and lack of motivation from parents and other adult members of the community are also reported. In some studies (Ross et al., 1999, 2002), the cost of contraceptives was reported by several young women in rural areas as inhibiting their ability to get contraception. In the Namibian context, contraceptive methods are freely offered in government hospitals and clinics; young women do not have to pay for them in either rural or urban areas. Therefore, the cost of contraceptives is not a barrier to use. However, there is a shortage of nurses in some clinics, especially in rural areas and this has led to some young women not getting the contraceptives when they require them.

Some contraceptive methods are also not available or not offered at some health centres and young women have to be referred to other hospitals or health centres. This necessitates incurring the cost of transport. In addition, some health centres in rural areas have shortages of doctors and young women who need the service of some contraceptive methods like IUDs have to wait for their appointments which are sometimes months away from the time they need them.

The multivariate results show a significant relationship between living in urban or rural area and communication with mother on family planning issues. Young women in rural areas who discussed family planning with their mothers were more likely to use contraceptives than those in urban areas and do not discuss family planning with their mothers (odds ratio = 1.694). *This is an indication of the importance of parental involvement in the reproductive health of young women.* Parents are viewed as knowledgeable by their children. Children thus tend to believe in whatever they are told by their parents. When parents discuss contraception with their children, they (young women) tend to

view contraceptives as important services and become motivated to use them whenever they need to.

This study hypothesised that young women who discuss family planning with their mothers are less likely to use contraceptives because their mothers are likely to discourage them from using contraceptives. *However, the data fail to support this hypothesis.* The results in Table 4.4 confirmed that among young women who discuss family planning issues with their mother as many as 65% use contraceptives and only 35% of them do not use contraceptives. Thus, discussion with mothers on sexual issues breaks the fear and encourages closeness. Young women who are close and open to their mothers can ask questions relating to sexual issues. They also become free and motivated to seek out additional information from health centres which their mothers could not provide. Most studies on contraceptive use (Agyei & Miggade, 1995; Meekers & Ahmed, 1997; Manlove et al., 2003) have not taken account of parental communication as a determinant because they only considered married women of childbearing ages. An exception in this regard would be the findings of Whitaker et al. (1999) in their comparative analysis of parents and teenagers in New York and Puerto Rico. Thus, the needs of those who are not married and those who are very young are often not taken into account.

The study shows significant regional differentials in use of contraceptives. Among young women who live in the Central health directorate, as many as 65% use contraceptives. In contradiction to the set hypothesis, the Northeast health directorate which is largely rural has a large proportion of young women using contraceptives. It is also surprising to note a lower proportion of young women in the South health directorate, which is largely urban, who use contraceptives. However, the implications can be due to a large population which live in the informal settlement of the area. Furthermore, among young women who live in the Northwest health directorate, only 44% report that they

use contraceptives. There is, however, an urban-rural relationship in contraceptive use with respect to health directorates. Young women who live in the rural areas in the Central, South and Northeast health directorates are more likely to use contraceptives than those who live in the urban areas in the Northwest health directorate (odds ratio = 1.261, 2.9 and 1.365 respectively). There is thus a clear indication that young women who live in the Northwest health directorate have a lower probability of using contraceptives. There are several factors contributing to this difference: firstly, the Northwest health directorate covers a large part which is rural. Although there are adequate health facilities, there is a shortage of nurses at most health facilities. Some health facilities are reported to have only 2 or 3 nursing sisters and most of the time they are not able to attend to all patients and hence those seeking sexual and reproductive health services, like contraceptives, and counselling, are often turned away. The negative attitude of nurses towards young women obtaining contraceptive services has also contributed to the low use of contraceptives among young women in the Northwest region as a whole (Voeten, 1994). Even those young women in urban areas are undermined by prevailing cultural norms and traditions, because some nurses who serve them suggest that young, unmarried, girls are breaking cultural rules by attempting to gain contraception. Abstinence, rather than safe sexual practices, would be regarded as more appropriate. Some nurses ask young women many questions that make them feel embarrassed, thus preventing them from using and obtaining the services they need.

Furthermore, in the Northwest, not all the contraceptive methods are available at clinics or health centres. Most clinics, especially those in rural areas, could run out of stock of some methods. Due to this, young women in the Northwest (urban or rural) would be left with few choices in terms of contraceptives. Agyei and Migadde (1995) also conclude in their study that in rural areas family planning services do not meet the needs of potential clients.

Communication with partner

The results also show that young women who discuss family planning with their partners are more likely to use contraceptives than those who do not discuss family planning with their partners (odds ratio = 1.520). Several studies (Manlove et al., 2003; Magadi & Curtis, 2003; Chen & Guilkey, 2003) document the same relationship. These studies suggest that the type of relationship that young women have with their partners influences their contraceptive use patterns. Young women who have just met their partners and those who consider the relationship non-romantic are less likely than those who are 'going steady' or are in a romantic relationship to use a contraceptive method such as the male condom. In addition, Manlove et al. (2003) also report that young women who are in relationships with older men (partners) are less likely to practice contraception, and a greater age difference between partners is associated with reduced contraceptive use.

Furthermore, Whitaker et al. (1999) report that communicating with a sex partner is an important self-protective health behaviour which can help one to learn about a partners' prior sexual behaviour and level of risk, information that will presumably lead to safer sexual behaviours. Whitaker et al. (1999) also conclude that communication with a sex partner is associated with increased condom use. Therefore, in the light of this, encouraging young women to communicate with their partners about sex and family planning is potentially an effective strategy for preventing STDs, including HIV and teenage pregnancy.

In Namibia, programmes like "Men involvement in sexual and reproductive health" were designed to equip young men on how to negotiate safe sex with their partners (Mufune et al., 1999). This programme provides SRH information through workshops and seminars. Young women may lack the power to negotiate reproductive decisions with their partners and within their

families and to navigate health and legal systems. The wider socio-cultural and economic environments may influence the opportunities and choices that women have in the realm of reproductive health and rights. UNFPA (2005) reports that rights-based reproductive health programmes may encourage shared responsibility for reproductive health by counselling couples. They may mobilize communities into an understanding of the risk of child marriage and too early or poorly spaced births. Rather than simply making condoms available, a rights-based approach will seek to empower women, to sensitize their partners and facilitate mutual cooperation and negotiation on condom use.

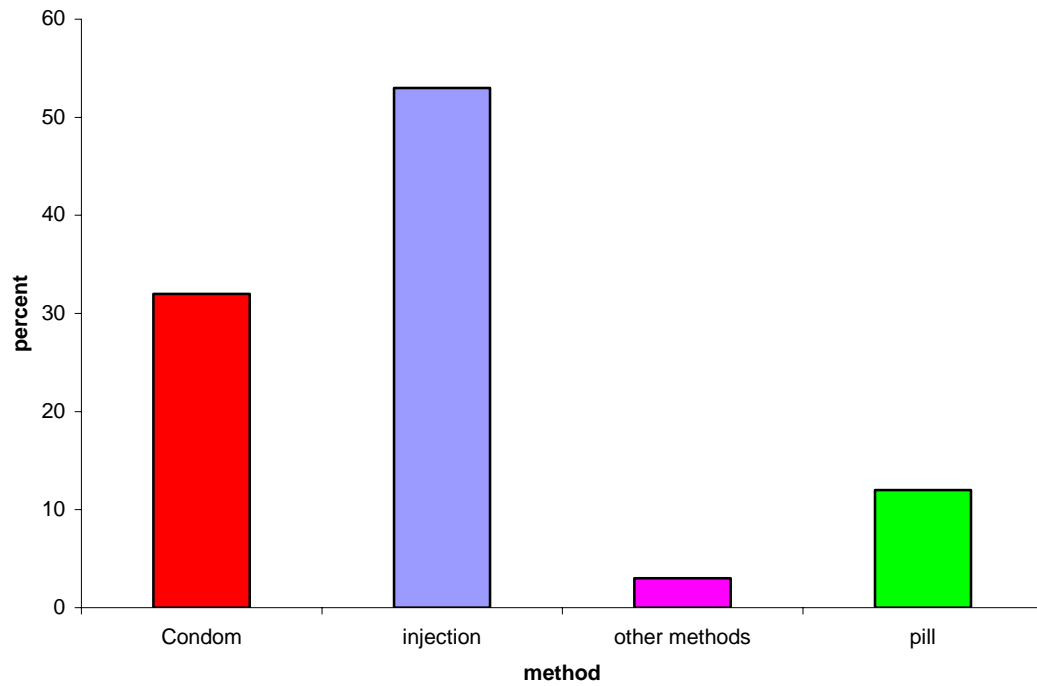
To sum up, knowledge of contraceptive methods is high; however knowledge does not necessarily result in use. Although 98% of young women report that they know a contraceptive method only 53% say that they use contraception. There are several factors that determine contraceptive use among sexually active young women in Namibia. The most significant ones include their educational level, access to media, where they live and communication with their partners and their mothers. There has been a dearth of knowledge on how parents, especially mothers, influence their children on the decision to use contraceptives. However, findings from this study revealed a positive relationship between contraceptive use and parent-child communication of family planning issues, thus rejecting the second hypothesis of our study. Regional differentials are also observed, thus supporting the first hypothesis, but differences are not as expected, as young women in some rural regions tend to report a higher percentage of contraceptive use than those in urban regions. It is, thus, important to examine further whether young women use contraceptives of their choice or not.

4.4 Determinants of contraceptive method choice

Descriptive analyses

Figure 6 below shows the prevalence of choice of method among sexually active young women who reported using a contraceptive method at the time of the survey. According to the bar chart below, among all sexually active young women who were using contraceptives, the injection was the most frequently chosen method during the survey. The next choice was the male condom and then the pill. Other contraceptive methods were only chosen by very few young women. Although the injection is the most preferred method, there are differentials in method choice with respect to health directorates. Some contraceptive methods are chosen more often in some health directorates than in the other health directorates. For example, as shown in Figure 7, in the Northwest health directorate, condoms are the most widely chosen method (65%). Evidence shows that it is not because they are the most preferred method, but basically because male condoms are readily available in most places in the Northwest.

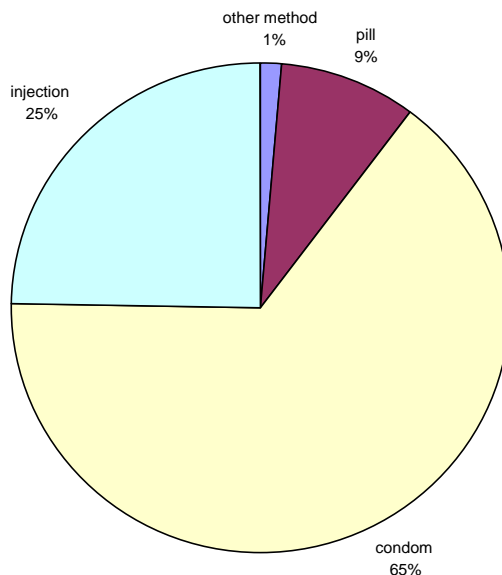
Figure 6: Choice of contraceptive methods among young women in Namibia



Source: NDHS 2000

“condom” refers to male condom . Female condom is included in other methods

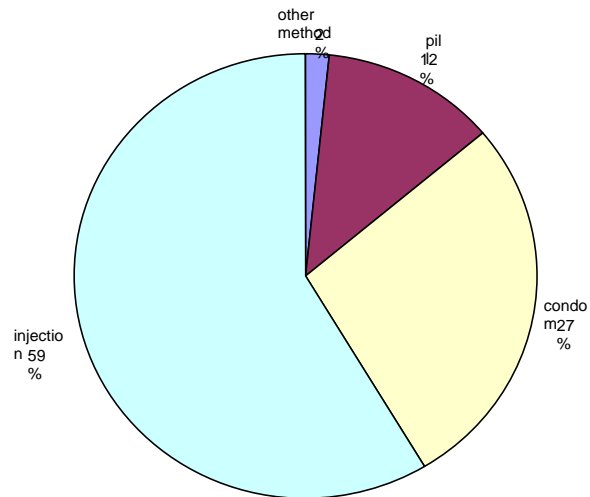
Figure 7: Method Choice for Young Women in the Northwest Directorate



Source: NDHS 2000

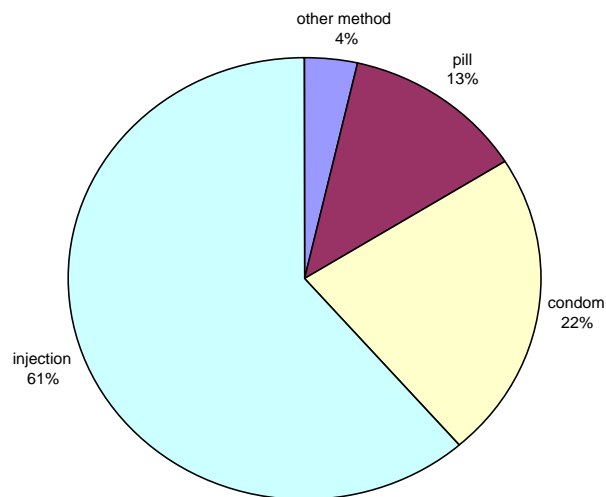
Apart from young women in the Northwest health directorate who use male condoms, sexually active young women in all other health directorates tend to choose injectables. The use of condoms in these health directorates is very low considering the fact that a high level of HIV infection was recorded in the Northeast and Central health directorate as shown in figures 8, 9 and 10. It is worrying to note that use of male condoms is very low in the Northeast directorate despite the fact that most non-governmental organisations have funded projects in reproductive health in that area.

Figure 8: Method Choice for Young Women in the Central Directorate



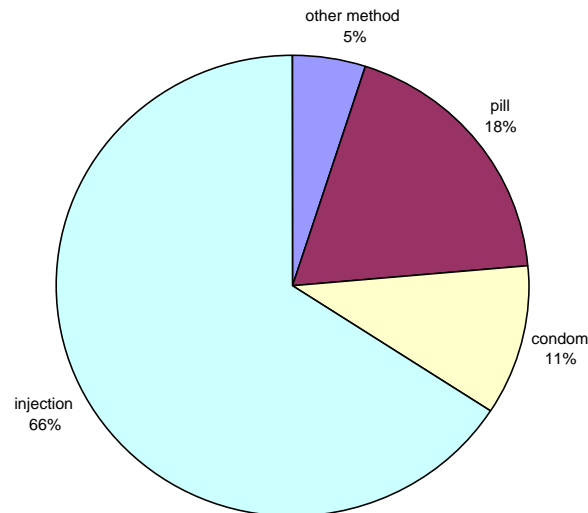
Source: NDHS 2000

Figure 9: Method Choice for Young Women in the South Directorate



Source: NDHS 2000

Figure 10: Method Choice among Young Women in the Northeast Directorate



Source: NDHS 2000

Bivariate and multivariate analyses of method choice

This section presents the bivariate and multivariate analyses results on young women's choice of contraceptives. Young women decide on their choice of methods depending on the availability and convenience of the method. Method choice in this context is defined as the method currently used by a young woman. Multivariate analysis was carried out using the multinomial logistic regression.

The results in Table 4.5 below indicate the percentage distribution of method choice by some selected socio-demographic and behavioural characteristics. The results indicate that most sexually active users aged 15-19 years were

Table 4.5: Per cent distribution of method choice by selected socio-demographic and behavioural characteristics, Namibia 2000.

<u>Variable</u>	<u>Other method</u>	<u>Pill</u>	<u>Condom</u>	<u>injection</u>
Age group*				
15-19 years	2.8	10.1	43.6	43.6
20-24 years	2.6	14.2	25.0	58.1
Discuss family planning with friends**				
No	3.6	12.3	30.6	53.5
Yes	0.4	13.0	36.3	50.4
Currently employed*				
No	2.4	11.2	34.7	51.7
Yes	3.6	17.1	23.9	55.4
Read newspaper at least once a week*				
No	4.4	12.5	25.7	57.4
Yes	1.8	12.7	35.7	49.8
Listen to radio at least once a week*				
No	4.4	10.6	23.0	61.9
Yes	2.5	13.0	33.6	50.9
Number of living children*				
None	1.6	8.8	52.4	37.2
1+	3.6	15.9	14.5	65.9
Marital status*				
Not in union	1.9	9.9	38.5	49.7
In union	5.2	20.6	13.3	60.9
Education level*				
Never been to school	4.0	16.0	14.0	66.0
Primary	5.7	10.0	29.7	54.5
Secondary+	1.6	13.1	34.3	50.9
Time to nearest health centre**				
Less than 1 hour	2.7	11.1	32.8	53.4
1 hour +	2.4	19.5	28.5	49.6
Overall %	2.7	12.6	32.2	52.5

Source: NDHS 2000 **p<0.05; *p<0.01, based on chi-square test for the significance of the relationship/association between variables.

using male condoms and the injection more frequently while those aged 20-24 years were using injectables more than any other method. Those who discuss family planning with their friends also showed a high percentage of making the choice of condom. Among those who report having no living child, most mention male condoms as their choice, while those with at least one living child chose the injection. The results also show a significant relationship between method choice and the marital status of a woman. Among married young women, injections were the most preferred choice and the male condom was chosen by very few married young women. Some relationship

was also observed between method choice and the educational level of young women. Among young women who have never been to school, only 14 per cent chose to use male condoms. Most of these women chose the injection. However, a high percentage of young women with some level of education express a preference for male condoms. It is also observed that the pill and other contraceptive methods like IUDs and vaginal creams were only mentioned by very few young women as their chosen method despite the fact that 20 per cent of married young women chose the pill. The results also show a significant relationship between contraceptive method choice and employment status of a woman. Overall, young women who are employed have a high percent of using contraceptives than those who are not employed. Although they are more likely to choose injection than any other method, only few percent (24%) of them chose condom. One of the reasons attributed to the low percent in condom use could be that most young women who are employed are likely to be aged between 20-24 and likely to be in marital relationships where condom use is generally low.

Results from the multivariate analysis (Table 4.6) indicate that the woman's age, whether she discusses family planning with her friends, her educational level, the health directorate she lives in, the number of children she has, her marital status and the time she took to the nearest health facility were significant determinants of choice of contraceptive methods among young women. Table 4.6 on the next page shows the estimated probabilities of contraceptive method choice. Overall, the results indicate that young women in Namibia prefer to use injections to any other contraceptive method. However, there are exceptions with regard to health directorates and number of living children.

Young women who live in the Northwest health directorate had a higher probability (0.682) of making the choice of male condom than any other

contraceptive method. The Northwest health directorate is mainly the area that was formerly known as “Ovamboland” where more than fifty per cent of the Namibian population live. It was regarded as one of the most underdeveloped areas in Namibia, with poor health facilities and a high per cent of poor people. It is also the area where culture, tradition and religion play a vital role, in the upbringing of children. In the era of HIV/AIDS, there are many programmes promoting the use of condoms countrywide. Through these programmes, condoms are distributed and obtained freely at health centres, schools and public places like bars, restaurants, hotels and many others. This finding suggests that despite a social context in which women prefer more secretive approaches to managing their fertility e.g. through injections, room exists for the promotion of male condoms. It is unusual for the condom to gain such wider acceptance in a rural-like environment. This is, thus, testimony to the effective programmes that have been put in place.

Male condoms have also become the most easily accessible method of contraception, especially in rural areas, where health facilities are not easily accessible in terms of distance. This has contributed to a high use of condoms rather than any other method among young women in the Northwest. This finding is, however, in contradiction to what other researchers have concluded. Magadi and Curtis (2003) found that condom use is more associated with urban residence than rural residence, implying that the male condom is more likely to be used in urban areas than in rural areas. They further argue that in rural areas women tend to use injection because they get it once in every three months and they do not have to come back several times to look for contraceptives. In addition, young women who have at least one living child report a higher per cent (72.3 per cent) of using the injection while those with no child prefer to use the condom (50.7 per cent).

Table 4.6: Predicted probabilities for young women's choice of contraceptive methods, by background characteristics, Namibia 2000

Variables	Other methods	Pills	Condom	Injection
Age(in years)				
15 -19	0.0095	0.132	0.304*	0.554
20 –24 (r)	0.0077	0.142	0.216	0.634
Discuss family planning with friends				
No	0.0142**	0.138	0.232	0.616
Yes	0.0022	0.141	0.288	0.569
Health Directorate				
Northwest	0.0047	0.089**	0.682*	0.224
Northeast	0.0138	0.186	0.064*	0.736
Central	0.005	0.113	0.197	0.685
South(r)	0.0116	0.133	0.188	0.667
Number of living children				
None	0.0059	0.097	0.507*	0.394
At least one(r)	0.0094	0.158	0.110	0.723
Marital status				
Not in union	0.0077	0.120*	0.241	0.631
In union(r)	0.0105	0.211	0.261	0.517
Education level				
Never been to school	0.0037	0.111	0.237	0.648
Primary	0.0191**	0.099	0.264**	0.618
Secondary or higher(r)	0.0069	0.157	0.243	0.594
Time to nearest health facility				
Less than 1 hour	0.0089	0.125**	0.260	0.606
1 hour or more(r)	0.0063	0.211	0.200	0.582

Source: NDHS 2000 The reference category is : injection. **p<0.05; * p<0.01, based on Wald's chi-square test for the significance of the regression coefficient. Likelihood ratio test: chi-square = 373.953 significant at p<0.001, (r) = reference category.

4.5 Factors associated with Condom Use

Social marketing and other condom promotion schemes have substantially increased condom availability in Africa, but condom use in many African countries remains below the level needed to alleviate threats to sexual and reproductive health. Condoms offer dual protection against unwanted pregnancy and some STIs and are one of the most effective means of preventing HIV transmission (Prata et al., 2005). Sexually transmitted infections have been shown to facilitate HIV infection and therefore interventions to promote condom use are essential in efforts to slow the spread of HIV. To protect young women against infection, it is important to understand the factors that influence their use of condoms.

Various factors have led to the renewed attention to condom use. The World Health Organization (WHO) encourages those working in the area of STD prevention to make increased condom use an important goal (Adetunji, 2000). Before the arrival and increased prevalence of these reproductive health problems, condoms were promoted mainly as contraceptive devices. Now, they are promoted both as contraceptives and prophylactics.

Meekers and Klein (2002) report that government and nongovernmental organizations in most sub-Saharan African countries have implemented youth-oriented reproductive health programmes to reduce the incidences of HIV, other STIs and mistimed pregnancies. Because condoms are effective for preventing both unplanned pregnancies and STIs (Zellner, 2003), condom distribution and promotion programmes can play an important role in improving young people's reproductive health. To facilitate the design of effective programmes and policies, programme managers and policymakers need to better understand the factors that facilitate or deter condom use among the target population. To date limited information is available

concerning the specific determinants of condom use among Namibian young women.

Scattered studies (Adih and Alexander 1999; Adetunji, 2000; Meeker & Klein 2002) on condom use among young African people indicate that multiple factors may vary across societies. Other studies (Agha, 2002, Gilmour et al., 2000; SIAPAC 1995) report that most people in sub-Saharan Africa know about male condoms. However, it was realised that condom use was entirely socially, culturally and context bound – even when available, usage was not universal and could be inconsistent. It was, therefore, not surprising that demographic and health surveys (DHS) from different African countries reported low condom use.

The results for Namibia showed that only 16.8 per cent of sexually active young women (15-24 years) used condoms during sexual intercourse (MOHSS 2003). This is considered to be low, taking into account the fact that most of these young women are still attending school and only few of them are married. Sexually active young women are more afraid of falling pregnant before they get married than they are of being infected with STDs. This has also contributed to the low use of condoms among them. Despite the generally low levels of condom use, the NDHS (2000) suggests that preference for the condom may be higher than anticipated.

The sample includes 1776 sexually active young women of whom 299 were using male condoms. The main outcome variable was condom use. Young women who reported use of condoms were defined as users and all others were defined as non-users. Factors possibly influencing condom use were selected on the basis of previous findings in the literature. Bivariate analyses provided preliminary information about the associations between explanatory

variables and condom use, and binary logistic regression was used to examine observed associations within a multivariable framework.

The bivariate results show that several respondent variables are significantly associated with condom use. Condom use is associated with the educational level of a woman, the number of children she has, whether she is in a union or not, her access to media, her age, distance to the nearest health facility and the health directorate she is in, as indicated in Table 4.7. It is important to note that the results support the hypothesis that teenage women are more likely to use condom than young adults aged 20-24 years (odds ratio = 0.763). Most of the teenagers are still attending school, and as highlighted in the literature, they do not feel free to visit health centres for sexual and reproductive health because of either long queues, or because they are served by nurses of their mothers' ages, since they do not want to be seen by older women. Condoms are readily available, not only at health centres but also at multipurpose youth centre or shops where they can be picked without consulting a nursing staff. Several studies (Santelli, 1997; Adetunji, 2000; Meekers & Klein, 2002; Manlove et al., 2003) report that condom use was high within new relationships. As a relationship develops then use of condoms decreases. One of the contributing factors to the low use of condom among young women aged 20-24 years was that most of these women might be in steady relationships or some were either married and were using other forms of contraceptives just to delay or space childbirth. Lutalo et al. (2000) similarly reports that a substantial and significant rise in condom use is among adolescents (15-19) years. This concurs with the findings of Prata et al. (2005). Prata and his colleagues report that the prevalence of condom use among married young women in Angola is low, and most of the married ones are aged 20 to 24 years. They further conclude that condom use is equated with lack of trust, a belief which is associated with a reduced likelihood of condom use among young women in Namibia.

Table 4.7: Percentage of sexually active young women using condom, by background characteristics, and odds ratios from logistic regression analysis assessing associations between characteristics and condom use, Namibia 2000.

Characteristic	%	odds ratio
Age group		
15-19(r)	52	1.000
20-24	48	0.763*
Educational level		
Never been to school (r)	2	1.000
Primary education	21	1.579
Secondary or higher	77	2.331*
Number of children		
None (r)	76	1.000
At least one	24	0.221**
Marital status		
Not in union	90	n/a
In union	10	n/a
Listen to radio weekly		
No	9	n/a
Yes	91	n/a
Read newspapers weekly		
No	27	n/a
Yes	73	n/a
Health directorate		
Northwest (r)	48	1.000
Northeast	6	0.114**
Central	28	0.424**
South	18	0.267**
Discuss FP with partner		
No (r)	n/a	1.000
Yes	n/a	2.257*
Interaction		
Not in union & discuss FP with partner (r)	n/a	1.000
In union & discuss FP with partner	n/a	0.406*

Notes: for percentages, significance level refers to findings from chi-square test. r=reference group.

** significant at 0.01 level, * significant at 0.05 level

-2Log likelihood = 743.803 Chi square = 333.808 **

In relation to the above, most of the teenagers are not in union and also most do not have children. Among those who use condoms, 76% do not have children and those with at least one child are less likely to use condoms (odds ratio = 0.221). Similarly, only 10% of young women who are in union use condoms. Furthermore, the multivariate results show a significant association between condom use and communication with partner with respect to their marital status. Young women who are in union and discuss family planning issues with their partners have a lower probability of using condoms (odds ratio = 0.406). This is more likely though, because a relationship which is built on communication, promotes trust among partners. Generally, couples use condoms in risky sexual relationships for fear of contracting STIs. However, if safety is assured through communication and behaviour of partners, condom use ceases.

There is also a regional differential on condom use among young women. Among those who use condoms, the majority (48%) belong to the Northwest health directorate. This implies that most young women in the Northwest regard condoms as most effective and perhaps easy to use because they lack knowledge of other methods. It is, however, surprising to note that use of condoms is lower among young women who reside in more urban regions than those residing in more rural regions. This is due to the fact that young women in urban areas have access to a wider variety of contraceptive methods than those in rural areas. On the other hand, programmes that promote condom use are more concentrated and pay more attention to the rural regions than in urban regions.

In summary, young women make choices of contraceptives. A wide range of contraceptive methods exist, although there are some methods which are more readily available and easier to get than other methods. The most chosen method is the injection. Most young women find the injection as the

most convenient method to use because it does not require someone to remember instructions; it is a long-term method which is normally taken once in 3 or 6 months. It is thus only good for preventing unwanted pregnancy. However, it should be stressed that the emphasis is not only in controlling fertility but mainly to prevent STIs among young women so that they grow up healthy. In addition, male condoms are more chosen by young women in the Northwest than any other contraceptive method. This signifies the impact that the government implemented and NGOs programmes have on the SRH of young women. Despite the regional differentials on condom use, the analysis makes us accept the research hypothesis that teenagers use contraceptives more than young adults.

Several issues were explored through qualitative data analysis. Some of the issues explored include barriers to the use of sexual and reproductive health services, why young women make choices of some specific methods, as well issues relating to communication between parents and children on contraceptive use.

4.6 Information from focus groups

This section reports on the qualitative data which was gathered from focus group discussions. Qualitative information was collected according to selected topics of interest. These included: utilisation of sexual and reproductive health services by young women, contraceptive use, and contraceptive method choice, special focus on condom use as well as the focus on parent-child communication on sexual and reproductive issues. Results from focus group discussions were then arranged according to the above themes and linked to the findings from quantitative analysis and then also as compared to findings from related literature. As mentioned earlier in Chapter 3, six focus group discussions were conducted with young women

volunteers aged between 15 and 24 years in selected secondary schools and youth centres, with permission from relevant authorities. They were arranged as follows:

Focus group 1 (FG 1) in school (Oshana region) “O”⁵

Focus group 2 (FG 2) out of school (Oshana region) “O”

Focus group 3 (FG 3) in school (Ohangwena region) “O”

Focus group 4 (FG 4) out of school (Ohangwena region) “O”

Focus group 5 (FG 5) in school (Khomas region)

Focus group 6 (FG 6) out of school (Khomas region)

4.6.1 Health services utilisation

Although young women in the focus group discussions reported that they utilise health facilities for sexual and reproductive health services, those who were married were more comfortable and free to utilise health facilities for such services than those who were not married. This theme was considered because in Namibia most contraceptive services are offered at health facilities. The younger women and particularly those who were not married reported that they mostly utilised health facilities for STI treatments or when they fall pregnant and seek maternity care. However, the married ones utilised health facilities for family planning, counselling and information services. It was also observed from focus group discussions that only few young women were aware of their rights with regard to sexual and reproductive health and reported feeling guilty when seeking these services. Several barriers to utilizing sexual and reproductive health services were highlighted from focus group discussions as follows:

⁵ “O” indicates translation from Oshiwambo to English

“I am scared to meet with elder women from my village because they will ask me questions” (in school, aged 17, FG 3, 2004).

“The fact that you have to queue up with elder women and you will be the only tiny poor thing among them looking for contraceptives is already discouraging. You know what... if there is a good understanding between us (young girls) and our parents, it won’t bother me to queue up with my neighbours or other elders for sexual and reproductive health services..... even if I am on school uniform, but now it is impossible because if they find you there (at the clinics) it is a big story in the village, if you even have an elder sister who fall pregnant (premarital) and is not yet married they (elders in the village) will even start labelling you as “sexholic” ” (in school aged 15, FG 1, 2004).

“Some nurses know my parents and they do not keep secrets, they will just tell my parents that I was at the clinic for contraceptives. Parents (including nurses) talk, especially when they meet at the well to fetch water” (in school, aged 21, FG 3, 2004).

“The nurses at a nearby clinic are of the same age as my mother. I do not feel comfortable discussing my sexual problems with them. It is so embarrassing; they will think that I do not have respect for elders” (out of school, rural, aged 23, FG 4, 2004).

“The society we live in is not supporting young unmarried women to get sexual and reproductive health services. Therefore, if you are really strong enough, you can walk long distances to go to the clinic which is a bit far from where you live, so that you are not seen by people who know you” (rural, aged 23, FG 4, 2004).

After probing on what type of nurses they needed to feel comfortable with discussing sexual issues, most were in agreement that they wanted nurses of their ages (their peers) to serve them. This is exemplified in the following statement:

“ If the nurse is of my age and I know that she is not married, no problem I can talk to her freely because I know she also have a boyfriend” (in school aged 24, FG 3, 2004).

Young women also had concerns about being served by a male nurse. This is what one of them said:

“Sometimes when you enter the consulting room, the nurse who is on duty is male. So you are already shy to even say what has brought you to the health centre. If you are suffering from STD you may just tell him that you have come for the pill or injection, because you don’t want him to check your private parts” (in school, 16, FG 5, 2004). ‘O’

Access to health facilities was another factor that could impede or facilitate health care and utilisation of available facilities for young women. The structural environmental factors like location of the clinic, speed with which care can be obtained, the physical and administrative structure, availability of youth friendly personnel, privacy and, most importantly providers’ attitudes have been cited as important factors that facilitate or hinder accessibility to health care. Provider attitudes, beliefs and values, when these are negative, may promote unwillingness in young women to utilise available services. A young woman in one of the focus group discussions in the urban areas said the following:

“ I prefer the private clinic than the government owned hospital, because the way the nurses look at you and ask you questions, you will feel that you have committed the worst offence ever, but in the private hospital the nurses cannot really shout you because it is business and they know that you are paying your money” (out of school, 18, FG 6, 2004). ‘O’

Others were concerned about the physical appearances of the clinics, as indicated in the following statement:

“Some clinics have labels which are embarrassing like “family planning”. Everyone who finds you there will know what you have come for” (in school, 19, FG 5, 2004). ‘O’

From the above vignettes, it is observable that young women have problems utilising sexual and reproductive health services in Namibia. Clearly, the interaction between older and younger women represents a problem. The results confirm that younger women do not feel comfortable interacting with older women when seeking sexual health services. Older women, on the other hand, do not seem to understand or know the rights of younger women on sexual health issues. In most cases, older women are reported to label younger ones (15-24 years) bad when they meet them at health facilities seeking sexual and reproductive health services.

Young women were not in favour of some health facilities which were too close to their homes because they ran into family members and neighbours every time they sought services. Other facilities-related barriers include: a lack of privacy; no area set aside where young people can wait to be seen; and décor that is overly clinical, too adult and welcoming only to older women and not to younger women.

Negative attitudes of some nurses are reported by several researchers in other countries as one of the barriers affecting use of health services (Grady et al., 1993; Wood et al., 1998; Ersheng et al., 2004). This seems to be the case in Namibia as well. Young women in the focus groups kept on referring to being attended to by some nurses with bad attitudes who shouted at them and asked them offending questions. In many societies and cultures, adults have difficulty accepting young people's sexual development as a natural and positive part of growth and maturation. Young women are not encouraged to seek care if they encounter providers whose attitudes convey that young women should not be accessing sexual health services. Young women may be deeply embarrassed and refuse to return for services if staff ask personal questions loudly enough to be overheard by others. Young women may also reject future sexual health services if staff in the facility fail to take seriously the young woman's need for services, treat her without respect, or try to dissuade her from engaging in sexual intercourse.

It was also pointed out clearly from discussions that young women, especially those who are still very young and not yet married, did not want to be served by older nurses who were in the same age group as their mothers. They recommended that there should be separate rooms for young women who could be served by their peers. Young women were also too shy to be served by nurses who knew them well, who were from the same community, or who knew their parents. Often young women used sexual and health services clandestinely. They do not in these circumstances want their parents to know that they go for sexual and reproductive health services. For example, they do not want their parents to know that they were treated for STIs or that they are using pills or taking injections.

4.6.2 Use of contraceptives

Results from the focus group discussions indicate that although knowledge about contraceptives was widespread among young women in Namibia, their acceptability and use was not as widespread. This is in line with the 2000 NDHS, which indicates that in Namibia, the percentage of sexually active young women currently using contraceptive methods stood at 53 per cent while knowledge of contraceptives is as high as 97 per cent. Although more young women in the focus groups report current use of contraceptives, they highlight that the process of obtaining them is not as easy as it should be. Preferences for certain methods such as injection and the male condom were also noted. Educational level also played a major role in deciding whether to use or not to use contraceptives. Poor parent–child communication was raised as a concern and as a barrier to the use of contraceptives among young women. Gender inequalities, especially in relation to culture and tradition, were also reported as prohibiting contraceptive use among young women. Examples can be seen in the following statements:

“I decided to use contraceptives because every time I discuss with my friends about contraceptives, everyone talks about them in a positive manner, no one criticizes them. Maybe they also use contraceptives” (in school, aged 19, FG 3, 2004).

“Contraceptives are for people from urban areas. They give us sexually transmitted diseases because they use contraceptives. We (in rural areas) do not even like boyfriends from urban areas because they infect us with the “rubbers” which they like to use. Our boyfriends from rural areas do not use those “rubbers” and we do not get diseases” (out of school, aged 18, FG 4, 2004).

Most families encourage virginity among their daughters to avoid the embarrassment of premarital pregnancy. If a premarital conception occurs, the couples may be forced by the two families to marry quickly or else just pay compensation to the woman. Thus most young women try hard not to fall pregnant out of wedlock. This is evidenced in the following statement:

“I use any type of contraceptives ... whichever I find accessible at the time just to make sure that I don’t become pregnant because my mother is totally against contraceptives and falling pregnant before marriage. If my mother hears that I have sexual intercourse... I will not rest in the house... she will call me hurting names as if I am a useless person. Sometimes she will even tell her friends who come to visit her that I am no longer a “pure” girl just because I have sexual intercourse. If I even become pregnant it is a worst thing you will ever regret. Shouting, chased out of the house, the way you eat, the way you walk, you can mention all the bad things..., you are totally excluded from your family. They don’t regard you as a valuable person...they may be planning their things without even being informed... parents need to be educated ...” (Out of school, aged 20,FG 4, 2004).

The focus group discussions indicated that young women often used contraceptives in secret and hide this information from both their partners and their parents. They also suggested that their parents, in many cases, did not even know that they were sexually active. In addition, young women indicated that they mostly discuss contraceptive use with their friends and that they were mainly influenced by what their peers do. However, it was observed that knowledge and understanding of contraceptive methods among some rural young women was very poor. Some young women who lived in rural areas still believed that contraceptives were not needed to prevent pregnancy. They also believed that contraceptives could transmit STIs. They even went to the extent of reporting that contraceptives, like condoms, were only used by

young men from urban areas because they were infected with STDs. Furthermore, it was noticed that most young women did not really make their preferred choice of method because of the pressure they get from their parents and other adult community members. They just use any type of contraceptive method to mainly prevent falling pregnant. It was, therefore, also observed that some parents hurt young women by calling them rude names, shouting at them and labelling them ‘bad girls’ once they knew of their sexual behaviour. This was an indication that there were still parents who were not aware or were basically ignorant of the rights of young women with regard to sexual and reproductive health. This, of course, needs careful consideration and attention in future policy formulation.

4.6.3 Contraceptive method choice

Young women were asked about their preferred contraceptive methods and about the reasons for their choice. All were able to talk about a number of modern methods and a few traditional ones. A substantial proportion of women cited the condom as the method they preferred because of its widespread availability, low cost and usefulness in preventing the spread of STIs as well as conception. Below are some statements made by focus group members, which support this view:

“I think that the condom is the best method for young women because it is more discreet and used by the man. When you use the condom you are not only protected from unwanted pregnancy but also from STIs.” (urban 24, employed, FG 2, 2004)

“Male condoms are easy to grab and can easily fit in a jeans pocket. Female condom is big and even if you want to grab, it cannot fit in a trousers pocket

unless you have a handbag” (College student, aged 21, FG 5, 2004). ‘O’

“The fact that the female condom has to be inserted for sometime before even sexual intercourse puts off the man’s feelings. A man has to beg for sex for sometime and a woman has to pretend even if she knows that she is ready for sex” (University student, aged 23, FG 5, 2004). ‘O’

“I use the male condom because it is my boyfriend who carries it and he is the one who should suggest that we have to use it. He is a man and he has to take all sexual decisions. I cannot tell my boyfriend to use condom unless he suggest it” (out of school, aged 19, FG 2, 2004).

Amongst most women interviewed, the overriding reason given for favouring the condom was that, unlike hormonal methods, its use would not lead to long-term sterility. This view persisted among young women regardless of their educational level. Here is one view:

“I don’t have any problem with the condom but regarding other methods of contraception, there can be side effects. For example, someone who uses pills to avoid unwanted pregnancy can find themselves left sterile forever” (out of school, 19, FG 4, 2004).

Asked why there was resistance to condom use for some women, the groups indicated that the use of the condom reduces sexual pleasure for both men and women. This apparently seemed to be based more on what the respondents had heard from other people and not from their own experiences. Below are two statements that confirm this view.

“If your boyfriend does not get sexual pleasure from you he will leave you for other girls who won’t even have to use condom. They will do it flesh to flesh

and he will like it more than when you do it with condom” (rural, aged 24, FG 4,2004).

“Sometimes when men use the condom they feel that they are not doing their duty as men in terms of sexual satisfaction; they like their women to feel fluid entering their bodies” (rural, aged 19, FG 4,2004).

Young women in the groups were also concerned with stigmatization that goes with the possession and use of condoms. They reiterated that if a person was known to be using condoms, that person was regarded as promiscuous; hence users of condoms were regarded as having loose morals. The following statements support this:

“If you are seen with a condom even by your boyfriend or friends, you are stigmatized. You are seen as a ‘cheap bitch’ who is looking for men to sleep with” (urban, aged 21, FG 6, 2004). ‘O’

“Condoms are good for us, the only problem is that you need to negotiate with your partner. If your partner does not understand it brings fighting around condom use again. Condoms involve participation of the men because he is the one to use it. Sometimes you are in a steady relationship which you don’t want to spoil and leave everything to the men to decide”. (rural, aged 24, FG 2, 2004).

Religious teachings were also cited by some young women in groups as one of the factors inhibiting condom use. Some religions forbid the use of contraceptives, arguing that such use amounts to promiscuity. Most of the young women interviewed in this study belong to the Catholic and the Evangelical Lutheran churches. In Namibia, both of these churches are against sex before marriage. Although Catholics and the Evangelical

Lutherans have organizations to fight STIs, including HIV/AIDS, their religions are still in support of abstinence for unmarried people and faithfulness to one partner for those in marriages. However, these young women had different understandings. One of them claimed:

“Christianity is not adhered to nowadays when it come to sexual practices, I go to church every Sunday but I still have sexual intercourse with my boyfriend either with or without a condom, although I am told every Sunday that sexual intercourse outside marriage is a sin and use of contraceptives is killing” (urban, aged 24, FG 6, 2004). ‘O’

In addition, there were also young women who supported the use of other methods like the injections or the pill. Those who were out of school, especially, highlighted that the injection was the most convenient method for them for the reason indicated in the following statement:

“When you are on injection, no one would tell that you are using any form of contraceptive, not even your boyfriend. In addition, you do not need to remember anything everyday like taking the pill or carrying the condom. No one can even stigmatize you with sexual activities” (urban, aged 23, FG 2, 2004).

The method most preferred by young women was the male condom. Most young women in the focus groups suggested that they chose the condom for several reasons. Some felt that male condoms were easy to select from display and could be put in one’s pocket without any one noticing. Young women did not want to be seen in possession of condoms either by their peers or other adult community members. Some young women did not even want to be seen by their partners carrying condoms because of fear of being stigmatised. Others wanted to choose the condom but they felt reticent and

awkward about asking their partners to use one. This raised questions about male dominance and power in sexual relationships. Young women believe that men have the power to make all the decisions including sexual decisions. Some young women report arguing with their partners when they suggested condom use. This was as a consequence of poor communication between partners on sexual issues, which greatly needed to be addressed so that young people learn how to negotiate safer sex. In addition, there were many young women who depended on their partners for a living. Some depended on their partners for payments of school fees, transport, clothing and so on. This dependency made young women less powerful in the domain of sexual decision-making.

Other preferred contraceptive methods include injectables and the pill. Although these were not really supported by most women, especially those who were still in school, the out of school young women praised the convenience of the injections. They mentioned that they do not want their partners to know that they were taking any preventive measures. In addition, they also did not want the burden of remembering to carry the condom or take the pill everyday. Although they claimed that they faced criticisms from health care providers and other adult members of the community, especially when they queued up together at the clinics for contraceptives, they were not particularly concerned because they only did it once in three or six months.

Young women who were in school were not really in support of the injections. They gave time and clinic location as barriers for them to choose such methods. They were concerned that the clinics are located outside the school yard and they needed permission from the Principal or teachers to go to the clinic. They also argued that clinics usually offered family planning services during weekdays only and on weekends they only attended to emergencies. Young women who were in school felt excluded from obtaining the services.

4.6.4 Parent –child communication on sexual issues

Several varying views were expressed in the group discussions. Here are some examples:

“Discussing sexual issues with my father is totally out. My mother sometimes likes to bring up the topic when we are alone in the kitchen, but when she asks me anything to do with boyfriends or sex, I get very angry because I am embarrassed to talk to her about my sexual experiences” (out of school, aged 22, FG 2, 2004).

“My mother is never comfortable bringing up the discussion on sex with me. She has to first tell you a rumour of neighbours who have their daughter fall pregnant before she drag you into what she wants to tell you” (in school, aged 17, FG 3, 2004)

“My mother is more concerned about what her friends and neighbours will think of her...If my friends and neighbours hear that I talk about sex with my children what will they think about me....., the church is another thing..... I will not even be free to attend church meetings with my friends... I will not be free to contribute something to my church if they know that I encourage my children to use contraceptives...My mother thinks that we have small brains, don't keep ideas to ourselves ... she fears that everything we talk with her we go and tell our friends... That is the reason she is so reluctant to tell us anything with regard to sex. Currently, I cannot even tell my mother that I have a boyfriend and sex..... she will take me to church and to the pastor for “ekuthilo”⁶ because she will think that I have sinned against the 6th commandment. I do my things in secret”. (in school, 17, FG 1, 2004).

⁶ “Ekuthilo” means confession

“My mother is scared of Dad .She always say..... what if my husband hear that I talk to children about sexual issues..... if any of them became pregnant, he will think that I am the one who teach them to do things.....” (in school, 19, FG 1, 2004).

“Yes..... parents really have to talk to us. If we have good platform and every parent in the community is supportive, we will not even be making mistakes of falling pregnant, we will not even contract STDs because we will be able to use contraceptives which are protective and safe every time. We will be able to have planned sexual intercourse because our boyfriends will be willing to wait until the right time rather than now when we have to involve ourselves in rush and take chances sex”. (in school, 20, FG 5, 2004). ‘O’

“You will have the freedom to obtain condoms.now we just take chances you always wait until there is time to sneak out of the house for your boyfriend, even if it is not the right time for you to have sex, or even if you are not using contraceptives if you miss it will take quite a while to come again”. (out of school, 22, FG 6, 2004). ‘O’

Parents ought to be informed that premarital childbearing is not the end of the world for their children but it can be the end of their children’s lives. Here are some of the opinions from the focus group discussions:

“I almost lost my life when I found that I missed my two consecutive menstrual period. Having experiences how my elder sister was treated when she fell pregnant....I tried everything I could to abort the pregnancy by myself.... I finally succeeded but also ended up in hospital after fainting. That is how my parents knew.....afterwards they were blaming me for aborting the pregnancy saying that I could just have the baby.....so which side do we take as young people?” (out of school, 18, FG 4, 2004).

“The last time I talked to my mother about sexual issues is when I told her that I noticed blood on my pant. It is good she told me that I will be having that every month.....She warned me not to talk to boys at all..... I should be far from them even in class I should not sit next to boys..... they are dangerous. At first she made me believe that boys are dangerous people but later on I realized that we need each other as human beings. Sosometimes parents give us wrong information instead of clarifying issues.” (in school, 17, FG 3, 2004).

“My mother told me that it is very important that the day I get married and have sexual intercourse with my husband, there should be a lot of blood on those white linens in our bed..... that is when my husband will respect me as a woman... If there is nothing he will know that I have already slept with other men”..... (employed, 24, FG 2, 2004).

“When I got married at the age of 18 I was fed up with my husband because he was forcing me to have sexual intercourse everyday.....when I talked to my mother she even made things worse by telling me to respect my husband..... I have to have sex with him even if I don’t want to.....I have to satisfy him sexually.... I should not refuse my husband sex..... She made me believe that we must be servants of our husbands.... I felt so useless and helpless and I even lost weight because I was not happy in marriage until I finally talked to the pastor about my problems who gave us counselling together with my husband... things improved, however, my mother did not realise that I was being sexually abused all the time. She didn’t want me to divorce my husband, because it will embarrass her as well.” (rural , 24, FG 4, 2004).

“My mother is a good friend of mine. We talk a lotshe gives me advice even regarding boyfriends and leaves the option for me to decide..... she

warns me about the danger of falling pregnant when I am still young...about HIV/AIDS.....However, I have a boyfriend in our neighbourhood and we have sexual intercourse....my mother does not know about this... I cannot talk to her about having sexual intercourse because I still do not know how she will react....I rely on sneaking out of the house while she is at work during the day to have sex with my boyfriend.... Sex does not leave a scar on someone.....as you will still look the same after having it...” (in school, 17, urban, FG 5, 2004). ‘O’

“Now that I am at the University, my mother is more comfortable discussing contraception with me.....she knows I know a lot about contraceptives... she is therefore sort of assured that I cannot fall pregnant because I can use contraceptives..... I think parents want us to use contraceptives but it is just difficult for them to tell us straight that we should use them...”. (Urban, 23, FG 5, 2004). ‘O’

Most young women who participated in the focus group discussions pointed out clearly that they did not discuss sexual issues with their fathers. It was reported by earlier researchers that in most African cultures fathers talked with their sons and mothers discussed with their daughters. It was thus not surprising that fathers did not talk to their daughters about sexual issues in Namibia. Young women suggested that it was impossible to discuss sexual issues with their fathers. However, it was also noticed that even if mothers wanted to discuss sexual issues with their daughters, their children did not welcome the initiatives; they did not feel free to join in the discussion. Thus, although there is room for such discussion with their mothers there is still a feeling of insecurity. There is uncertainty about what their mothers’ reactions would be if they proceeded with the conversations. This is perhaps due to the fact that most young women, especially those in rural areas, were brought up

to fear and respect adults to the extent that they felt too guilty to discuss sexual issues with them.

Despite this, young women maintain that their mothers are not knowledgeable on 'how' and 'what' to address when talking about sexual issues with their children. Some parents simply do not know how to bring up the topic for discussion, whilst others seem to feel that it is not good to discuss sexual issues with their young children in any way. Parents are bound by the culture, tradition and the communities' taboos around them. They are also bound by their religions which are against premarital sex. It was also learnt from the focus group discussions that some mothers did not discuss sexual issues with their children because their husbands were against it.

Some young women blamed their parents for being old fashioned and for not adjusting to modern times where issues of sex are supposed to be discussed more openly. Their parents still related to the fact that in the past even if you were engaged to get married you were never left alone with your future husband for fear that the two of you would lose control and mess things up. Even holding hands was not allowed and that girls only knew about sex the day they got married. Nobody would tell them anything about sex. However, young women were concerned that things have changed and it was time for their parents to engage in dialogue about sexual issues at an early age before serious mistakes are made. Young women were also concerned that their parents still believed that sexual issues were not normally discussed at home because they were regarded as taboo and led to an atmosphere of immorality. They suggested that their parents perpetuated age-old practices about morality that they had learnt, in turn, from the previous generation.

Parents in urban areas were regarded as a bit free in discussing sexually related issues with their children, perhaps because of the media influence.

They often watch television together and in some instances there are those advertisements regarding sex which could come up on the screen and, thus, could trigger discussions. In rural areas the platform of parents to discuss sexual issues with their children was probably poor. Parents generally found it difficult to come up with the appropriate approach because most of them were not well informed.

Although most programmes involve young people, parents were left out. Also, most young women in rural areas reported that their parents still expected many grandchildren from them and, thus, they do not really want their children to “spoil” themselves before they get married, because they (parents) believe it was honourable for them to wed their children who have not had premarital births.

Finally, it was observed from focus groups that young women want their parents to understand their sexual rights so that they may make the right decisions. However, parents do not have adequate information on the sexual matters of young women to share with their children and they also lack skills to educate their children on sexual issues.

4.7 Conclusion

The results presented in this chapter highlight several general reproductive health issues facing young women in Namibia. Premarital sexual activity is common among young women. High levels of awareness of the condom and other contraceptives are not accompanied by widespread contraceptive use. Furthermore, the spread of HIV does not persuade young women to practise protected sex, and a substantial number of young women experience unwanted pregnancies. Attitudes and social norms appear to be important barriers to contraceptive use. Specifically, existing norms seem to inhibit

conversations about contraceptives within relationships and between parents and their children. Therefore, it is difficult for young women to learn what their partners/parents know. In addition, the data support their view that young women seem to have mixed or negative attitudes about buying and carrying condoms.

The traditional focus of family planning has been on the promotion of highly effective methods of preventing pregnancy. However, with the rapid spread of HIV, awareness that such programmes can play an important role in preventing, not only pregnancy, but also, disease has been growing. Although family planning and AIDS awareness programmes in Namibia promote the use of the condom, the study has revealed many obstacles to use. Negative attitudes about condoms are a major barrier. For Namibians like many Africans, condoms suggest unfaithfulness and mistrust. Because of the stigma attached to condom use, personal and emotional concerns often supersede the choice to the use of the condom. The findings are in agreement with what Bankole et al. (2005) report in their studies that despite extensive efforts in promoting condom use, young women still engage in risky sexual behaviours and condom use remains low in sub-Saharan Africa. In their study, they argued that young women's perceptions of condoms tend to be negative because of concerns and experience of condom safety and breakage, the negative effect of condom use on sexual enjoyment, the low quality of condoms (especially condoms that are free), all which coincide with the findings of this study.

A study in South Africa found that condom availability varied greatly according to the type of distributor and could be hindered by short business hours and the attitude of providers (Gilmour et al., 2000). However, in Namibia, these are not the main barriers as condoms are freely available at public places and young women pick them up without direct consultation with health providers.

The major barrier for young women in Namibia is the fact that men control much of the decision-making regarding sexual encounters. There is a strong belief among men that women need their partners' permission to use contraceptives and as a result of this gender differential, women find themselves in situations that increase their risk of STIs, including HIV infections, despite the knowledge they may have about how to protect themselves. Knowledge of condoms is virtually universal among young women in Namibia, but the method is still more commonly associated with disease prevention than with pregnancy prevention. The challenge for reproductive health programmes is to emphasise the dual protective benefits of correct and consistent condom use and, more specifically, the role of this method in preventing pregnancy. Beliefs about condoms are likely to influence use. Other studies (Maharaj, 2006) have found that numerous beliefs about condoms - that they are used only for illicit sex and prostitution, they are difficult to use and that they reduce sexual pleasure - have limited their accessibility and use. The results of this study are, to some extent, encouraging as condoms are reported to be gaining acceptance despite other concerns about them.

Focusing on young women's reproductive health is both a challenge and an opportunity for health care providers. Young women often lack basic reproductive health information, skills in negotiating sexual relationships, and access to affordable confidential reproductive health services. Many do not feel comfortable discussing sexuality with parents or other key adults with whom they can talk about their reproductive health concerns. Likewise, parents, health care workers, and educators frequently are unwilling or unable to provide complete, accurate, age-appropriate reproductive health information to young people (Adedimeji, 1999). This is often due to their discomfort about the subject or the false belief that providing the information will encourage increased sexual activity. Because of this, most young women

enter into sexual relationships with very little knowledge of the consequences either shared by their peers or obtained from the media.

The objectives of the research study were achieved through either quantitative or qualitative analyses. Educational attainment, place of residence, access to media, access to health facilities, discussion with partner, friends or mother on sexual issues, number of living children age and marital status were identified as demographic and behavioural determinants of contraceptive use and contraceptive method choice among young women in Namibia. Different patterns on contraceptive use and contraceptive method choice were also observed. Preference of certain contraceptive methods was evident from the quantitative analysis. Regional differentials were also observed through quantitative analysis, with young women who live in more rural health directorates reporting poor access and utilisation of SRH than those in urban areas, thus accepting the first hypothesis of the research study. According to the Health Belief model, perceived barriers such as difficult access to sexual and reproductive health services and providers' negative attitudes lead to low use of contraceptives. Thus, the experiences of being judged by either health care providers or other elder members of their community (including their mothers), negatively impact on their use of contraceptive methods accurately, which is also in line with the concepts of the Health Belief Model. Age differential on condom use was also reported, with teenagers reporting high prevalence of condom use than young adults. Finally, parent-child communication was found to be an influential factor on young women's use of contraceptives, which led us to reject the second hypothesis and this agrees with the concept of Davis and Blake's (1956) motivation that young women have to be motivated to use contraceptives either by their parents or peers in order to prevent unintended pregnancy and STIs.

There are, however, some contradicting findings from the qualitative analysis. Although young women who live in the Northwest have a high percentage of condom use, there are still those who believe that condoms transmit STIs and, thus, do not use them. In addition, there is need to address misunderstanding in communication between parents and their children on sexual issues. From the focus groups, it is apparent that some parents are willing to talk to their children about sex and reproduction, for example, how to prevent unwanted pregnancy but they lack the skills to approach them. Sometimes, parents fear acting differently from others in their community. Communication between parents and children was better in urban than in rural areas.

In all, the findings from this study concur with earlier research on contraceptive use. One significant factor not paid careful attention to in previous studies, however, is the importance of communication between parents, especially mothers, and their children on sexual and reproductive health issues, which needs to be strengthened in programme implementation. The focus in this thesis is largely on mother-daughter communication; men have not been dealt with comprehensively and it would be useful to focus on both parent communication in future studies, as well as the particular circumstances of young men (15-24 years) and communications with regard to contraceptive/condom use. Since the 1994 Cairo Conference Programme of Action, more attention is being paid to the intersection between men's and women's behaviour and health.

CHAPTER FIVE

Findings and Recommendations

5.1 Summary of findings

The Namibian government introduced the reproductive health and family planning programmes with the overall objective of promoting, protecting and improving the health of family members (especially women and children), reducing maternal and infant deaths, increasing contraceptive use among women of reproductive age and promoting and improving access to reproductive health services at all levels of health care delivery. Teenage pregnancy and unwanted premarital child births have been increasing among young women in Namibia. HIV/AIDS infection among young women who attend antenatal care is also very high. In addition, contraceptive methods are freely offered in hospitals and clinics such that young women who are in need of them do not have to pay for these services. However, young women face other obstacles like judgemental reactions from adult members of the community and health care services when obtaining contraceptives. Furthermore, the family planning policy has clearly indicated that contraceptives must be provided to all women of childbearing ages regardless of their marital status. However, use of contraceptives among sexually active young women in Namibia still stands at 53 per cent, a prevalence which is below the Namibian Vision 2030 rate of above 80 per cent. The low levels of contraceptive use probably reflect the spontaneity of young women's sexual activity as well as the many barriers young women face when they attempt to obtain contraception. To use contraceptives in Namibia, young women must overcome fears about rumoured side effects and 'bargain' with a health system that is not friendly and accommodating to adolescent clients.

Young women in Namibia are entitled to a wide range of choices of contraceptive methods and the freedom to obtain contraceptives without judgments; this contradicts their actual experiences in some areas. Young women in rural areas are also entitled to the same benefits as highlighted in the policies, but services are very poor in rural areas and need the attention of policy makers. There are contraceptive methods which are not offered or not available in rural areas, especially those like IUDs which require the services of professional doctors, and young women need to be referred to other health centres with such services. Referrals are inconvenient for young women as they require transport and permission from parents, which is not easy for young women in all cases. This study is therefore important in informing policy makers on the gaps in the family planning policy, reproductive health policy and other policies that incorporate components of young women's reproductive health and contraception needs. Some issues are clearly highlighted in existing policies, but they are not implemented accordingly.

This study concludes beyond the Health Belief Model parameters, which only provides a framework for understanding factors operating at the individual level to influence the decision to use reproductive health services. It does not examine factors operating beyond the individual level nor does it include the role of community and health system characteristics in shaping this decision. The present study reveals that whilst there is provision, the accessibility of existing reproductive health services for young women is poor in rural areas. Parents, nurses and the broader community are unsupportive and not fully aware of the sexual rights of young women. Nurses, especially in rural areas, are deemed to be judgmental and reluctant to provide contraceptives to young female scholars. Health facilities are also ranked by young women as user-unfriendly as most of them, as public spaces, lack confidentiality and privacy. The negative experiences of young women impact on their utilization

of reproductive health services and their use of contraceptives. Apart from disobliging parents, individual use of contraception is greatly influenced by individual and community characteristics. The educational level, marital status, number of children and work status are among the important individual factors affecting whether and what kind of contraception young women will use, adopting the ideas of Davis and Blake (1956). Other issues related to individual women concern whether she discusses family planning with her partner (spousal interaction) or parent (parental interaction), and whether she has access to the media and to health facilities.

The main questions this study has answered include:

What determines contraceptive use among young women in Namibia? Why is contraceptive use still low among young women in Namibia? Are there cultural, traditional, behavioural, social, economic or demographic barriers in using contraceptives? Do young women in Namibia make choices when considering contraceptive methods, and why? These questions were addressed and answered using the NDHS 2000 data by looking at sexually active non-pregnant young women, identifying barriers and determinants of contraceptive use. The focus groups conducted with young women helped in illuminating answers to a number of “why” questions.

The findings are summarised as follows:

- There was a large gap between knowledge and use of contraceptives among young women. Good knowledge of contraceptive methods did not necessarily result in high levels of contraceptive use. Ninety seven percent of young women knew about contraceptives but only 53% of those who are sexually active used it. Some methods were more known than others, and also some contraceptive methods were used more often or preferred than other methods. The most commonly known contraceptive method was the male condom followed by the

injection. The contraceptive method which women relied on most readily was the injection. This is because the injection can be used secretly, whereas condom use is dependent on cooperation with men.

- There are several determinants of contraceptive use among young women. A key determinant that emerged in this study was communication between parents (especially mothers) and their daughters on sexual issues. Considering the strict culture, tradition and religious influence on reproductive health, it was assumed and hypothesised that the involvement of mothers in the reproductive health of their daughters has negative influences on contraceptive use. Parents were assumed to be more traditional and not in support of their daughters, especially those who were not yet married, using contraceptives. The study, however, demonstrates more positive results towards contraception among young women who communicate with their mothers than was expected. Young women who discuss family planning with their mothers were among those who had a higher probability of using contraceptives. Young women in these cases use contraceptives because their parents discourage them from having unwanted and unplanned births. The study indicates, however, that only a small proportion of young women discuss family planning with their mothers, implying potentially significant possibilities which need to be further probed. This result stresses the importance of educating parents about sexual and reproductive health issues and fostering better relationships between parents and their daughters, which is likely to lead to stronger dialogue and greater social acceptance for girls to use contraceptives.
- Urban-rural differentials in the use of contraceptives were found to exist. Some contraceptive methods were more accessible in some

areas than in other areas. This is an indication of unequal distribution of services in the country. This differential affected the available choices of contraceptives for young women. While in urban areas young women could choose from a wide range of available contraceptives, in rural areas they were limited to specific methods such as the injection and male condom.

- Age differentials in contraceptive use among young women were also significant. The contraceptive needs of teenagers (15-19 years) and adult young women (20-24 years) are not the same. The demand for contraceptives such as the injection and the pill was higher for young adults (20-24 years) than for teenagers' women (15-19 years). This can be explained by the fact that most teenagers are still attending secondary school and still in care of either parents or hostel superintendent, which makes it difficult for them to seek for long term methods like injections or the pill from the nearest health centres. Hence, they opt for short-term methods like condoms, which are also easily accessible for them because they can be bought from shops without necessarily meeting the health provider.
- The influence of friends or peers was another factor that determined contraceptive use among young women. Young women who discussed family planning with their peers indicated a high prevalence of condom use. Talking among peers reinforced the positive value of contraceptive use, encouraging others to possibly learn more in terms of what to use and where it could be obtained. However, there was also a relationship between use of the condom and the age of the woman. Teenage women (15-19 years) had a higher prevalence of condom use than young women (20-24 years). Most teenagers were still in school and interacted more with their friends and peers. Many

were experimenting with sexual intercourse and most were not interested in steady romantic relationships. In comparison, young women (20-24 years) were in more stable relationships which they wanted to last and end in marriage. Some of them were already engaged to get married and others were married and thus not really using condoms in their relationships. The literature also suggests that condom use is higher in relationships that are unstable or transitory. When relationships become more resilient, partners are hesitant to use condoms.

- Whether young women use contraceptives or not was also influenced by whether they had access to the media. Access and ability to read newspapers or magazines was a significant determinant of contraceptive use. Reading newspapers or magazines allows young women to gain additional information. Radio is also a good source of information dissemination because it reaches a lot more people, and less literate, female listeners. In Namibia, the radio broadcasts dramas or programmes which sensitise people to use family planning methods. It broadcasts programmes which promote the use of condoms both because of its pregnancy prevention qualities and its ability to protect against STIs, including HIV/AIDS.
- The choice of contraceptives is determined by the number of children a woman has. Young women with at least one child chose long term contraceptive methods like injection and the pill, while more of those who do not have children chose condom. This can be explained by the fact that young women with at least one child have either experienced unplanned births and are trying to prevent further unplanned births by opting for longer-term methods or they are in marital relationships where condom use is not very common. In light with the above, the

results pointed that married young women who discuss family planning with their partners have a low probability of using condoms. This is attributed to the fact that when couples discuss family planning, they tend to develop trust and be faithful to each other in their sexual relationships.

- In church affiliated hospitals, regulations that prohibit or limit provision of contraceptives to young women contribute to the low use of contraceptives among them. However, even where access is not restricted by law, some health care providers have attitudes or prejudices against serving unmarried young women. Thus disconcerted health care providers tend to deter some young women from seeking contraceptives.
- Gender imbalances in relationships lead to poor communication between partners and further to low prevalence in use of contraceptives among young women. Women often feel that they are subordinates to men in relationships and, therefore, abide by men's demands. Some young women reported that they need their partners' approval to use contraceptives or to make the choice of a contraceptive method.
- Young women in the focus groups complained of the physical location of most family planning clinics or sections in health centres. They referred to facilities as not being youth-friendly in terms of place, access and even appearance. Operating hours in rural and urban areas were also inconvenient for young women, especially those who were in school.

- It was also apparent from focus group discussion that the convenience of a particular contraceptive method influence choice. Young women, especially those in urban areas opted for injection because of its convenience of not concerned about remembering to take a contraceptive method everyday like in the case of the pill or carrying a condom every time. In contrast to those living in rural areas, they felt that condoms are convenient for them as they are easy to get without necessarily visiting a health facility.

Table 5.1: Tabular representation of research findings: Contraceptive use and method choice, Namibia.

<p>A. Determinants of Contraceptive use, ranked from most to least significant.</p> <ul style="list-style-type: none"> • Level of education • Place of residence (urban or rural) • Communication with mother on sexually related issues • Communication with partner on sexually related issues • Access to media (print and radio) <p>B. Factors influencing low levels of contraceptive use, ranked from most to least significant.</p> <ul style="list-style-type: none"> • Poor communication on sexual and reproductive issues between mother and daughter, especially in rural areas • Negative judgements of elder community members and health care providers <p>C. Factors influencing choice of contraceptives, by rural-urban residence</p> <p><i>Rural women</i></p> <ul style="list-style-type: none"> • Access to health facility (in terms of distance and time taken) • Number of living children • Marital status • Age <p><i>Urban women</i></p> <ul style="list-style-type: none"> • Peer (friends) influence • Level of education • Convenience of a particular contraceptive method
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Indongo, 2007

5.2 Conclusion and policy implications

Parents' reluctance to talk about sexual and reproductive health with their children was a recurring theme in the study. Parents' participation in guiding their children's sexual and reproductive behaviour is not stressed sufficiently in both the national reproductive health policy and the family planning policy. Ideally, parents are expected to provide information and advice to their children about sexual and reproductive matters. However, given the social and cultural context in Namibia, parents are often reticent when dealing with sensitive issues with their children. Most parents especially those in rural areas, would not want their unmarried daughters to become sexually active, nor would they want them to endure an unwanted pregnancy. These findings suggest that parents, in particular mothers, need to be aware of the importance of reproductive health education if they are to play a vital role in avoiding unwanted pregnancies among young women who become sexually active. Higher levels of contraceptive practice by sexually active young women who wish to avoid pregnancy might decrease the incidence of unwanted births in Namibia.

The data provide us with evidence to support arguments that programmes must target the area of limited parent-child communication. There are young women, especially in urban areas, who perceive their parents to be supportive of contraceptive use and those who communicate with parents, especially mothers, about family planning. These women are more likely than others to use contraceptives. However, it was apparent from focus group discussions that mothers discuss family planning with their daughters who have advanced in education, especially at tertiary level, than those who are still attending primary or secondary school. There is need for programmes to stipulate clear guidelines on how mothers could communicate effectively with their daughters on sexual and reproductive health issues at all stages of

schooling, and at different ages. Policies and programmes should adopt several approaches to address the need for more education on reproductive health. In rural areas, most mothers do not teach their children about contraceptives for fear that this will encourage permissiveness and promiscuity. This tendency leaves young women in an information vacuum. It is already argued by earlier researchers elsewhere that sex education does not increase sexual activity and can in fact lead to postponement of sexual initiation and to preventive behaviour once sexual activity begins (Grunseit & Kippax, 1993). Carefully constructed education programmes that address the needs of young women, gain their trust and work through their many misconceptions and fears, would be more successful than the present silence.

Young people in Namibia encounter difficulties when attempting to access services. They were concerned that a family or community member would discover their visit to a clinic. Therefore, protecting privacy and confidentiality is of the utmost importance and programmes have to create opportunities for young people to gather together, with or without adults present, to discuss reproductive health issues. Once again, it should be emphasised that more attention should be paid to parent-child communication on questions of accessing health services. Good communication is an important parenting skill. It is the key to building self-esteem as well as mutual respect. A strong family relationship can help children develop self-esteem, resist peer pressure and act responsibly when making decisions about sexual intercourse. Effective parent-child communication is a cornerstone of strong and healthy families. Parents must learn ways to communicate more effectively with their young children. How and what they communicate about body image, peer pressure, reproduction, sexuality, love and intimacy could make a significant difference in the health and well-being of their children. Therefore, parents must be provided with the skills to socialize their children in sexual matters.

This can be incorporated into various forums such as parent meetings, community meetings and church activities. Programmes that build communication skills on sexual matters may be an important starting point. Thus, communities where either elders or health care providers can work with young women in extracurricular activities should be encouraged.

Although the Namibian government had reacted positively to the difficulties that young women face, the challenge is to ensure the translation of all policy objectives into effective programmes and activities. Current sexual and reproductive health services for young people are popularised through media campaigns, peer education and outreach programmes. Mass media found in Namibia include radio, newspapers, magazines and television. Of them all, the radio has the widest coverage. Thus radio programmes seem to be a suitable means of reaching a large number of people with health information. Fears and myths regarding the use of sexual and reproductive health services can be dispelled by media advertising (e.g. in raising awareness of confidentiality), increased community acceptance of young peoples' needs for special reproductive health services and strengthened links between young people, education and health sectors (Stone & Ingham, 2003). For example, visits to the local sexual health facilities could be incorporated in the school sex education classes, or service providers might consider inviting a young person's drama or media group to produce an educational video to distribute to schools and youth groups. However, embarrassment and fears about lack of confidentiality are sustained only through a social context in which young people's sexuality is stigmatised. Thus, comfort in using reproductive health services effectively will be fully achieved only when familiar and social contexts change. For example, parents and other adults need to be realistic and more open-minded about young people's emerging sexuality.

The teenage years are a time for sexual exploration and tendency to experiment with sex before marriage. Young people are learning about their bodies and experiencing new sensations. Often, it is only after having sex that they think about the possibility that they might be pregnant or infected. Parents may, therefore, benefit from guidance and advice on how to address the topic of sexual behaviour with their children, and schools might consider holding discussions during sex education classes about the consequences of engaging in sex and in taking care of one's sexual health. Comparative research on sexual and reproductive health among young women in different countries has already demonstrated that greater acceptance of young people's emerging sexuality is not associated with increased levels of sexual activity but is associated with improved sexual health (Darrock, 2001). Removing some of the barriers to effective use is as much a challenge to health care professionals as is improving knowledge and skills among young people.

Health information and services for young people, however, tend to be concentrated in urban areas, leaving remote rural areas largely under serviced. Further, current programmes tend to focus more on information provision than on services. In Namibia, programmes and information services are currently offered to young people by a range of governmental and non-governmental organizations. Some are long standing organizations while others operate as short term projects. Although young women understand the information provided to them, parents interpret them differently and this hampers the success of programmes.

Despite the above, several strategies need to be adopted by programme managers and policymakers to improve access to the reproductive health care of young women as well as to enhance the quality of their care by providing services. Focus group participants spoke of service delivery

concerns that indicated a need for moderate changes to clinic infrastructure and reproductive health policy. For example, more facility personnel and equipment could be added to improve service delivery; extended hours of operation could be provided to meet young women's needs and separate waiting rooms could be established for young people so that young women might be encouraged to practice family planning without embarrassment or stigmatisation. In summary, young women felt a need for more service outlets, better training of service providers and sensitisation of their parents. A further topic requiring study is the negative attitude of young men towards contraceptive use. Whilst women placed greater emphasis on parent-child communication there were related concerns about young men and their training needs.

A youth-friendly environment could help attract and serve young women who may be too embarrassed or intimidated to seek services. The convenience of location, clinic hours, degree of confidentiality and style of services are important in accessing services for young women. Thus the study reiterates that there is need to develop broader plans that include ways to link services with other socialising agencies such as youth clubs. Clinic schedules could also be reorganised to serve young women better and train staff in youth counselling. Providers, who are mostly adults, have personal, cultural and religious views about how young women ought to behave and this influences the way they assist young women. Due to this, most young women often hesitate to tell them that they are sexually active and to talk about contraception.

The study further concludes that there is a need to develop and evaluate youth friendly policies and services. Health policies at the national and clinic levels need to be more youth-friendly, and youth-friendly services need to be more carefully implemented, monitored and evaluated. Health care providers

need to be updated on how national health policies and regulations affect young people's care as well as what specific and detailed protocols, guidelines and standards for treating young people exist. Further research work is, therefore, recommended to help determine whether youth-friendly services are cost effective and whether investing in them significantly improves young peoples' reproductive health.

Negative attitudes of health providers were often given as the reason young women avoid clinical services, in particular, for family planning services. Thus, even if the family planning policy has clearly stipulated that contraceptives should be provided to young women, some health providers resist such directives and formulate their own guidelines which effectively limit access to young women. When considering how to address this challenge, it is important to note that service providers are products of societal cultures and that, in most societies, sex between unmarried people is taboo. This deeply ingrained attitude could translate into disapproval or hostility. To help overcome such resistance or inappropriate performance, projects need both to select health providers who are supportive of providing reproductive health services to young people and to ensure their training. Health care providers can be selected according to their attitude, interest and willingness to be trained.

There is also a need to educate health providers about young women's needs. This would improve providers' interpersonal skills for working with young people on sexual and reproductive health issues. Health care providers who are well trained to deal with young people could provide effective counselling to help young people make informed choices about abstinence, contraception, STI prevention and treatment and pregnancy care. Providers' interest in working with young people and their ability to develop respectful relationships with their young clients were, thus, found to be the key to

ensuring young people's utilisation of services. Young women are always active agents who are aware of their needs. They require, however, services that allow them to make these informed choices and, thus, take ownership of their sexual and reproductive lives.

A clinical implication of the findings is that if young women are to choose effective methods, health care providers must become more involved as sources of support, or in suggesting sources of support. For young women who cannot talk to their parents or partners about contraception, providers could suggest alternative sources of support, such as other adult relatives, peer counselling or support groups. Although health care providers support all young women in communicating with parents about contraception, they should be aware that differences in parent-child communication are often influenced by race and ethnicity and by fertility experience, rather than by age.

Expansion of contraceptive method choice is important because the effectiveness of the injectable method depends on proper administration and injections can only prevent pregnancy but cannot halt the spread of sexually transmitted infections including HIV/AIDS. Young women who rely on injectables may also become pregnant inadvertently in the intervals between doses if they have poor access to services as is the case for many young women living in remote rural areas who may rely on mobile clinics which may be poorly stocked. Thus reliance on injectable contraceptives, which is found to be particularly high among sexually active young women in this study sample, may help to explain why a large proportion of young women especially adolescents, still give birth as teenagers.

Condoms protect against unplanned pregnancies as well as STIs, including HIV/AIDS. Therefore, the study concludes that condom promotion

programmes could play an important role in efforts to reduce the incidence of reproductive health problems among young women. The use of condoms should be encouraged so as to promote safe sex among young women. Knowledge of facilities such as where to get condoms and other sexual and reproductive health services available for young women should also be strengthened. To achieve this, however, there is need for government agencies and NGOs to strengthen teacher training, introduce parent education and community outreach programmes. There is also need for vibrant dialogue on the cultural constructions that shape the gender norms determining sexual and reproductive health of young women. Many prevailing gender norms negatively affect access to reproductive health knowledge, information and services.

Changing existing gender norms can improve the quality of reproductive health care, particularly for young women. Incorporating gender into reproductive health programmes for young people can be an opportunity to develop programmes and services for them. Gender can be incorporated in SRH by developing sex education programmes that address the specific needs of girls, educating young women about their bodies and fertility cycles, encouraging males to become involved in reproductive health education programmes and services and providing men with information about male and female biologies and sexual rights and opportunities to discuss sexual issues. Young women are usually less experienced than their partners and they often experience greater pressure to please them. Thus, teaching young women how to resist pressure to have sex and how to negotiate contraceptive use will help them to protect themselves.

Young women and their parents are facing a culture radically different from that in which previous generations grew up. When most of today's older generation were adolescents, social roles and expectations were better

defined by the community-appointed teacher. It is, thus, impossible to return to those days or to protect young women from modern sexual influences. Therefore, it is vital that policymakers and programme planners and managers become responsive to these changing circumstances. The role played by community-appointed teachers must now be assumed by government agencies, non-governmental organisations, church groups, parent groups and youth groups. Although dissension is inevitable, these agencies and groups must work together to develop programmes to deal with the issues facing today's young people.

The study also concludes that female education beyond primary school should be encouraged. This is important because women's education has a great impact on contraceptive use. If women are encouraged to obtain higher levels of education, they are likely to be more knowledgeable on sexual issues and have the ability to make decisions on their sexual behaviour. Thus, increasing female education is, not only good in itself, but also, for improving the general status of women in Namibia.

The results suggest multiple policy approaches to improving contraceptive use and reducing the risk of unintended pregnancy and STDs among young women. Programmes should emphasize choices. One choice is to delay having sex for as long as possible because young women who delay sexual intercourse with their partners may be more likely to plan their first sexual encounter and thus be more prepared to practice contraception. For this to happen, young men also have to be engaged. Young women who discuss contraception with their parents or partners are more likely to use a method in the long run. This suggests that teaching young women to be vigilant about, and comfortable with, such discussions may be an effective way to improve contraceptive use. Indeed, sex education programmes that actively engage

young women in role playing to learn to negotiate contraceptive use are likely to show positive results.

The results also point to several potential areas for programming, policy and research aimed at improved sexual and reproductive health services, including contraceptive use among young women. Programming could be strengthened by paying attention to gender-specific socio-behavioural norms that influence their ability to control sexual decision-making and negotiation. Regarding pregnancy prevention, emphasis should be placed on behaviours such as unprotected sexual intercourse and poor communication between partners as well as poor communication with their mothers. Another important point of programmatic focus, as mentioned above, is increased male involvement in sexual and reproductive health matters. Male involvement has a potential influence on young women's reproductive well being. By involving males in sexual and reproductive health programmes, they will learn to practise healthy gender roles and responsibilities, including the responsibility to practise safe sex to protect their health and that of their partners. Sexuality and other emerging issues such as human rights should be integrated into population education and reproductive health education programmes. They are currently not emphasised sufficiently in Namibian programmes.

Population policy should be the responsibility of governments, and in designing policy measures to help officials cope with the problems arising from a society's particular fertility pattern, it is important to distinguish between those behavioural and biological factors that have a direct impact on fertility and those socio-economic and cultural factors that affect fertility only indirectly through the proximate determinants. An understanding of the relationship between the direct and indirect fertility determinants permits a clearer perception of specific opportunities for effective policy interventions. A young woman's education is one major socio-economic variable that has a

great impact on the intermediate variables and hence on fertility. It should, therefore, be considered seriously in fertility related policies.

5.3 Recommendations

The study has shown that use of contraceptives among sexually active young women is quite low, according to the 2000 data. Urgent policy issues should, therefore, be addressed if the Namibian vision 2030 contraceptive prevalence rate is to be achieved. The following are some recommendations that can be implemented, monitored and evaluated through relevant policy interventions.

- The Government of Namibia should initiate the Parent Education Programme on young peoples' sexual and reproductive health to enable parents to effectively communicate with their children.

The main purpose is to break down the poor communication between parents and children on sexual issues. A Parent Education Programme should be an educational programme that helps parents and other adults in the family to effectively educate young people about sex, changes of the body and pregnancy prevention. The Parent Education Programme should have a goal to improve parents' skills for educating and communicating with young people about sexual and reproductive health. This programme should be able to provide parents with the communication skills needed to respond to young peoples' questions, convey sexual values and attitudes and seize appropriate opportunities to initiate discussions about sexuality and other reproductive health issues.

The programme should also support parents to examine the positive and negative myths and values that influence their own and their children's attitudes and behaviour as they relate to gender equity, forming sexual

relationships and other reproductive health issues. The Parent Education Programme may be implemented within an institutional framework, which can exist within both the public and private sectors, to ensure broad impact and a high level of support for staff implementing these policies.

Appropriate settings for educational programmes should include parent-teacher associations, social or civic clubs, labour unions, religious groups and other organizations whose members are likely to be parents of young people. Brochures and simple booklets on key themes are also important resources to distribute to parents for them to refer to.

- Provision of reproductive health services to young women must be within the relevant country's legal framework. Laws should be clearly interpreted as to what services can be provided, under what circumstances and to whom. Cultural perspectives should also be considered in policy formulation.

When ambiguities exist, service providers can find themselves uncertain about particular actions, such as providing contraceptives to young unmarried clients. Although this research shows that a lot is known about young women's sexual and reproductive health, much at the same time remains unclear. Namibian young women remain vulnerable to HIV/AIDS because they do not believe they are at risk or their understanding of these risks does not prompt them to take action to protect themselves.

- The Government of Namibia needs to design youth friendly health services to make it easier for young women to obtain the sexual and reproductive health services they need. More mobile clinics should be established to reach underserved populations. A balance should also be established for resource allocation between urban and rural areas

(health directorates) so that service provision is comparable in all settings.

Considerable work remains to be done in Namibia to fully implement national policies on young peoples' health services. Priorities include ensuring the capacity to provide key services, strengthening the quality of care standards and orienting clinic staff to young peoples' sexual and reproductive health care, particularly in the area of counselling and appropriate ethical behaviour. This will require special training for clinic staff on young people's sexual and reproductive health needs, with special emphasis on the need for confidentiality. Thus, the Government of Namibia needs to improve Ministry of Health staff morale and motivation through measures such as appreciation, recognition, better wages and improved training opportunities. The Government of Namibia through the Ministry of Health and Social Services also needs to mobilise resources for expanding youth friendly health services to all regions of the country for implementation, monitoring and evaluation.

From the focus groups it was apparent that some of the more significant barriers to health service utilisation among Namibian young women appear to be psycho-social in nature. Increasing health service use will require changes in the attitudes and perceptions of young people at community level as well as some changes in values held by Namibian parents and adults in general. The need to enhance sexual and reproductive health education programmes in and out of school, is urgent to counter the high level of misunderstandings noted with regard to contraceptive use. This necessitates educational efforts outside the traditional classroom and clinic realm and within the structures of broader society.

Protecting the reproductive health of young people is of critical importance for the worlds' future economic and social well-being. Research and programme

experiences show that policy-makers and health care providers can increase young peoples' use of sexual and reproductive health services by supporting youth-friendly services within health facilities and by removing legal and institutional restrictions on unmarried young peoples' access to health services. However, although the making of youth-friendly services is important, other factors may have a more profound impact on young women's health-seeking behaviour. In particular, psycho-social and cultural beliefs might take precedence when young people are deciding where and when to go for reproductive health care. Therefore, before youth-friendly services projects are designed, it is critical to first examine the health seeking behaviour and beliefs, not only of young people but also of adults who influence young peoples' decision-making and, thereafter, any behaviour and belief found to conflict with project objectives should be addressed at community level as part of the larger project. Further efforts need also to be made to sensitize health professionals to young peoples' particular needs and to acknowledge their social and reproductive rights and abilities to make autonomous decisions and exhibit specific choices.

- The Namibian government must seek to expand educational opportunities for girls at least up to the secondary school level. The successful fulfilment of this need may require that education be made compulsory for all until the secondary school level. Such requirements will not only help to increase the age at marriage for women and promote more accurate perceptions concerning their fertility, but will also enhance women's capacity for fuller and more meaningful lives. Such compulsory education would necessitate a greater investment in education by the government but such an investment makes more sense than a non-qualitative expansion of maternal and child welfare services.

- There is an urgent need for interventions that can improve young women's abilities to address their sexual and reproductive health concerns. In addition to the parent education programme, school-based sexual and reproductive health education is one way to reach young women with the information that they need. If these initiatives incorporate community and parental involvement in both rural and urban areas, school based programmes would enable parents to contribute to their children's sexual and reproductive health education in partnership with schools. Young women could then get much reliable information and guidance that they themselves know they need.

One of the huge gaps identified in the Namibian case is that young women have nowhere to turn to for information and guidance. Despite the fact that there are basic services and initiatives in place, this need was repeatedly expressed by young women in this study. They fear talking to their parents, health care providers and to other adult members and, in most cases, their peer group discussions leave many questions unanswered. The fact that most information about reproductive health issues come from TV, radios and peers further highlights the lack of authoritative personal guidance in this matter. What is needed to fill the knowledge-use gap are interventions that offer appropriate messages with an emphasis on 'risk reduction'.

- There is generally high awareness of the family planning publicity presented through posters, television, health centres and films shown in local theatres. However, a perceived need exists for a medium that affords clear explanations with an opportunity to ask questions. Pamphlets and other materials available at hospitals, clinics and health centres are seen as less useful because they are impersonal and people have only limited time to read in those settings. It appears that

media coverage has created a widespread awareness of the national family planning programme. This does not, however, appear to be enough. Communication efforts should also inform people about methods and facilities, present choices and transmit messages that support child spacing, legitimize contraception and discourage early unwanted childbearing among young women.

Apart from emphasising parent-child initiatives, the findings of this study also suggest that reproductive health programmes need, and should, continue to create greater awareness of the risks of pregnancy and HIV infections among young women, and provide counselling on these risks. Traditionally, pregnancy prevention and STDs prevention have been addressed separately, but given the role of some contraceptives in protecting against both risks, providers should address them as interrelated problems. In addition, the challenge is to have health facilities with adequate medical staff and reproductive health services within easy reach of people in urban and rural places.

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Appendix 1

Consent form for research on use of contraceptive methods among young women in Namibia (to be administered to young women)

My name is Nelago Indongo from the University of Namibia. I am doing research as part of the fulfilment for a PhD degree at the University of Pretoria in the Department of Sociology. The title of my thesis is *Contraceptive Use among young women in Namibia: Determinants and Policy implications*. I would, therefore, like to formally ask you to participate in the focus group discussions to be held at your school/at the Youth Centre about the use of contraceptive methods, and about general issues relating to young women's sexual and reproductive health in Namibia. This research is seeking to examine young women's views on what determines or influences contraceptive use. In this regard I am specifically requesting young women (15-24 years) who have ever experienced sexual intercourse to participate in the group discussion.

Your participation in this study is entirely voluntary. You can choose not to be involved. If you do agree to participate in the group discussions, you may choose to withdraw from the discussion at any time or not to give your comments when you do not feel like commenting. Anonymity is assured. By this I mean that your real name and identity will not be revealed in the thesis and your transcribed responses will be destroyed upon completion of this study. In the course of the study, your consent form will be kept separately from your transcribed answers. The information that you contribute in the discussion will be integrated with the comments of others and analysed to offer general understandings of contraceptive use among young women in Namibia. At the end of the study there will be no way of identifying *who* said *what*. If you agree to participate in this study I would like to request that you sign the consent form in the space allocated below indicating that you are a willing informant in this study. If you have any questions about any aspect of this research (now, in the course of the study or even later) please do not hesitate to contact me at the following number 0812316077. I will be glad to answer all questions.

Thank you
Nelago Indongo

FORMAL ACKNOWLEDGEMENT OF CONSENT

I, on this day of2004, agree to be interviewed for the PhD research project on contraceptive use as explained above. I understand that I will be asked questions regarding my knowledge and experiences and what I think are important factors influencing contraceptive use among young women and general issues relating to young women's sexual and reproductive health in Namibia.

Signed
Date

Appendix 2

University of Pretoria

02 June 2004

To: The Principal/ Youth Officer
.....
.....

Re: **Request to Conduct Focus Groups Discussions with Young Women
(15-24 Years) At Your School/ Youth Centre.**

My name is Nelago Indongo, a Lecturer from the University of Namibia. I am doing research as part of the fulfilment for a PhD degree at the University of Pretoria, South Africa in the Department of Sociology. The title of my thesis is *'Patterns of Contraceptive Use among young women in Namibia: Determinants and Policy implications'*. I would therefore like to formally ask you to grant me permission to conduct focus groups discussions at your school/Youth centre with young women learners (15-24 years) about use of contraceptive methods, and about general issues relating to young women's sexual and reproductive health in Namibia during the period 01 July 2004 to 25 July 2004. This research is seeking to examine young women's views on what determines or influences contraceptive use. In this regard I am specifically requesting young women (15-24 years) who ever had experienced sexual intercourse to participate in the groups' discussion. Their participation in this study is entirely voluntary. Those who agree to participate will be required to sign the consent form and for those under age (15-17 years), their parents will be required to also sign the consent form. Information session will be organised with all eligible young women and their parents so that they can take informed decisions.

For further information please do not hesitate to contact me at 00264612063367 (office hours) or email me at nkanime@unam.na. Your urgent response will be highly appreciated.

Yours faithfully
Nelago Indongo (Mrs.)
Lecturer
Department of Statistics
University of Namibia

Appendix 3

Consent form for research on the use of contraceptive methods among young women in Namibia (for parents)

My name is Nelago Indongo from the University of Namibia. I am doing research as part of the fulfilment for a PhD degree at the University of Pretoria, South Africa in the Department of Sociology. The title of my thesis is *Contraceptive use among young women in Namibia: Determinants and Policy implications*. I would, therefore, like to ask for your formal permission to allow your child to participate in the focus group discussions to be held at her school/at the Youth Centre about the use of contraceptive methods, and about general issues relating to young women's sexual and reproductive health in Namibia. This research is seeking to examine young women's views on what determines or influences contraceptive use. In this regard I am specifically requesting young women (15-24 years) who have ever experienced sexual intercourse to participate in the group discussion.

Her participation in this study is entirely voluntary. She can choose not to be involved and can withdraw from the discussion at any time. Anonymity is assured. By this I mean that her real name and identity will not be revealed in the thesis and her transcribed responses will be destroyed upon completion of this study. She is also required to sign the consent form which will be kept separately from her transcribed answers. The information that she will contribute in the discussion will be integrated with the comments of others and analysed to offer general understandings of contraceptive use among young women in Namibia. At the end of the study there will be no way of identifying *who* said *what*. If you agree that your child should participate in this study I would like to request that you please sign the consent form in the space allocated below. If you have any questions about any aspect of this research (now, in the course of the study or even later) please do not hesitate to contact me at the following number 0812316077. I will be glad to answer all questions.

Thank you
Nelago Indongo

FORMAL ACKNOWLEDGEMENT OF CONSENT

I, on this day of2004, grant permission to my child(name) to be interviewed for the PhD research project on contraceptive use as explained above. I understand that she will be asked questions regarding her knowledge and experiences and what she thinks are important factors influencing contraceptive use among young women and general issues relating to young women's sexual and reproductive health in Namibia.

Signed
Date

Appendix 4

Discussion Guide

Introduction

- Welcome
- Reason for coming
- I would like your help
- Open expression of opinions
- Tape recorder
- Today, I would like to talk about contraceptives among young (15-24 years) in Namibia

Young women

- Sexual behaviour
- Sexual experiences
- Awareness of different contraceptive methods (traditional/modern)
- Attitude towards each method
- Perceived advantages/disadvantages of each method
- Sources of information on methods of contraception e.g. friends, mothers, partner, nurses etc.)
- Attitude towards these sources (Are they adequate?; How can they be improved?)

Contraceptive experience

- Are respondents themselves using contraceptives? Why/why not?
- What method are respondents using now? Why that method and not another?
- What are perceived advantages/disadvantages of this method?
- Who recommended this method?

Health facilities

- Awareness of these facilities
- Access to facilities
- Attitude toward clinics (administration procedures, methods available, environment, staff, etc.)
- Perceived advantages/disadvantages
- Ways in which services could be improved (administrative procedures, methods available, environment, staff, etc.)

Parental/community influence

- Discuss contraception with parent/elders (why/why not?)
- Are they in support of contraception for young women?
- Do your parents know that you are currently using contraceptives (why/why not?)
- How do you describe the reaction of other community members/church leaders towards contraception?

Appendix 5

The procedure used to construct a multiple classification analysis (MCA) table

Retherford and Choe (1993) have shown that the most convenient way to present the effects of the predictor variables on the response variable in multinomial logit regression is in the form of a multiple classification analysis table. This Appendix reproduces (from Retherford and Choe, 1993) the procedure use to construct an MCA table by using an example of a response variable with three categories and two predictor variables.

Suppose that the response variable is choice of using modern contraceptive methods:

p_1 = estimated probability of using the pill

p_2 = estimated probability of using injection

p_3 = estimated probability of using other methods

Suppose also that the predictor variables are education (no education, primary education and secondary or higher education) and place of residence (urban and rural):

$M = 1$ if primary, 0 otherwise

$H = 1$ if secondary or higher, 0 otherwise

$U = 1$ if rural, 0 otherwise

The interest is to examine how education and place of residence influence the choice of using modern contraceptive method. The multinomial logit model then consists of two equations plus a constraint:

$$\log [p_2/p_1] = a_2 + b_2M + c_2h + d_2U \quad (A1)$$

$$\log [p_3/p_1] = a_3 + b_3M + c_3h + d_3U \quad (A2)$$

$$p_1 + p_2 + p_3 = 1 \quad (A3)$$

where $a_2, b_2, c_2, d_2, a_3, b_3, c_3$ and d_3 are coefficients.

Equations (A1) and (A2) can be written as:

$$p_2 = p_1 \exp(a_2 + b_2 M + c_2 H + d_2 U) \quad (A4)$$

$$p_3 = p_1 \exp(a_3 + b_3 M + c_3 H + d_3 U) \quad (A5)$$

Also, we have the identity

$$p_1 = p_1 \quad (A6)$$

Recall that $p_1 + p_2 + p_3 = 1$, we get

$$1 = p_1 \sum \{ \exp(a_j + b_j M + c_j H + d_j U) \} + p_1 \quad (A7)$$

solving (A7) for p_1 , we obtain

$$p_1 = 1 / (1 + \sum \{ \exp(a_j + b_j M + c_j H + d_j U) \}) \quad (A8)$$

substituting (A8) into (A4) and (A5) and repeating (A8), we obtain

$$p_2 = \exp(a_2 + b_2 M + c_2 H + d_2 U) / (1 + \sum \{ \exp(a_j + b_j M + c_j H + d_j U) \}) \quad (A9)$$

$$p_3 = \exp(a_3 + b_3 M + c_3 H + d_3 U) / (1 + \sum \{ \exp(a_j + b_j M + c_j H + d_j U) \}) \quad (A10)$$

$$p_1 = p_1 = 1 / (1 + \sum \{ \exp(a_j + b_j M + c_j H + d_j U) \})$$

where the summations range from $j=2$ to $j=3$

Equations (A8), (A9) and (A10) are calculation formulae for p_1, p_2 and p_3 respectively. The MCA table is constructed by substituting appropriate combinations of one, zeros and mean values in equations (A8), (A9) and (A10).

Appendix 6

DHS Questionnaire

(only include questions that were used in this study, skip questions also applies)

Household

1. Region
2. Place of residence urban rural
3. How old were you at your last birthday? *Age in completed years-----*
4. Have you ever attended school? Yes No
5. What is the highest level of school you attended? Primary, secondary or higher?
 Primary
 Secondary
 Higher
6. What is the highest grade you completed? *Grade-----*
7. Do you read a newspaper or magazine almost everyday, at least once a week, less than once a week or not at all?
 Almost everyday
 At least once a week
 Less than once a week
 Not at all
8. Do you listen to the radio almost everyday, at least once a week, less than once a week or not at all?
 Almost everyday
 At least once a week
 Less than once a week
 Not at all
9. Do you watch television almost everyday, at least once a week, less than once a week or not at all?
 Almost everyday
 At least once a week
 Less than once a week
 Not at all

Reproduction

10. Have you ever given birth? Yes No
11. Total number of children born. -----
12. Total number of children alive. -----
13. Are you pregnant now? Yes No

Contraception

14. Which ways or methods have you heard about?

- Female sterilization
- Male sterilisation
- Pill
- IUD
- Injection
- Condom
- Female condom
- Diaphragm
- Rhythm
- Withdrawal
- Emergency contraception

15. Have you heard of any other ways or method that women or men can use to avoid pregnancy? Others: -----

16. Have you ever used anything or tried in any way to delay or avoid pregnant? Yes No

17. What have you used?

- Female sterilization
- Male sterilisation
- Pill
- IUD
- Injection
- Condom
- Female condom
- Diaphragm
- Rhythm
- Withdrawal

Emergency contraception

18. Are you currently doing something or using any method to delay or avoid getting pregnant? Yes No

19. Which method are you currently using?

(if more than one method mentioned, follow instructions for highest method on the list)

Female sterilization

Male sterilisation

Pill

IUD

Injection

Condom

Female condom

Diaphragm

Rhythm

Withdrawal

Emergency contraception

20. For how long have you been using (current method) without stopping?

Months-----

Years-----

Marriage and sexual activity

21. Are you currently married or living with a man?

Yes, currently married with certificate

Yes, married by custom

Yes, living with a man

No, not in union

22. How old were you when you first had sexual intercourse?

Never

Age in years-----

23. When was the last time you had sexual intercourse?

Days ago

Weeks ago

Months ago

Years ago

24. The last time you had sexual intercourse was a condom used?

Yes No

25. Aside from your own housework, are currently working?

Yes No

26. In the last few months, have you discussed the practice of family planning with your friends or relatives?

Yes No

27. With whom?

Husband/partner	<input type="checkbox"/>
Mother	<input type="checkbox"/>
Father	<input type="checkbox"/>
Sister	<input type="checkbox"/>
Brother	<input type="checkbox"/>
Friends/peers	<input type="checkbox"/>
Daughter	<input type="checkbox"/>
Son	<input type="checkbox"/>
Father-in-law	<input type="checkbox"/>
Mother-in-law	<input type="checkbox"/>