TRENDS AND DETERMINANTS OF CONTRACEPTIVE PREVALENCE IN NAMIBIA: FROM THE 90s TO THE NEW MILLENIUM

By:

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A thesis submitted in fulfillment of the requirements for the degree of Magister Scientiae in the Department of Statistics, University of the Western Cape.

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NOVEMBER 2008

KEYWORDS

Contra	ceptive		
Fertilit	ÿ		
Survey			
Knowl	edge		

Namibia

Women

Socio-economic factors

Demographic factors



ABSTRACT

Contraception is said to be one of the vital determinants of fertility (Bongaarts, 1978). African nations, especially those in sub-Saharan Africa have a history of high fertility levels and low contraceptive use. However, contraceptive methods have been used one way or another throughout human history, although, due to improvements, these methods have evolved over the years.

In Namibia, there tend to be a huge gap between women's knowledge of methods of contraception and usage thereof. For instance as per NDHS survey of 2000, 97 percent of married women knew of a contraceptive method, while 38 percent utilised them. This study aims at investigating knowledge and usage of contraceptives among women in union of reproductive age in an independent Namibia, 10 years after independence between 1992 and 2000. Socio-economic and demographic factors affecting contraceptive usage are examined in this study to determine their significance.

Secondary data from the NDHS's of 1992 and 2000 were utilised, targeting all women of reproductive age currently married, or in consensual union. SPSS was used in data analysis and the binary logistic regression model was utilised in testing the significance of socioeconomic and demographic factors.

The results reveal an increase of contraceptive prevalence of roughly 17 percent between the periods (from 27% to 44%), attributed to greater use of modern methods like injections and female sterilisation. Socio-economic and demographic variables found to have a significant effect on contraceptive use include: educational attainment, number of living children, health directorate, respondent and partners approval, desire for additional children and the discussion of family planning with partner.

It is suggested that continued family planning awareness programs should be intensified countrywide and male involvement projects should become a priority.

DECLARATION

I hereby declare that *Trends and determinants of contraceptive prevalence in Namibia: From the 90s to the new millennium* is my own work, that it has not been submitted for any degree or examination in any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Tuli Ta! Tango Tanga Nakanyala

Signed :			
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Date:	
Date	
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ACKNOWLEDGEMENTS

First and foremost, special gratitude goes to the almighty God for being the pillar of my strength throughout the whole process.

Secondly, this paper would not have been possible without the technical assistance and guidance of my supervisor, Ms. Nancy Stiegler. Her 'open-door policy' and persistence in making me perform to the best of my abilities is greatly appreciated.

Thirdly, special thanks to the Ministry of Agriculture, Water and Forestry (Namibia) for granting me a scholarship.

Last, but not least, my family and close friends for their undying love, encouragement and support, and to my fellow students that assisted one way or another to this study is also hereby acknowledged.

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TABLE OF CONTENTS

KEYWOR	DS	ii
ABSTRAC	Т	111
DECLARA	ATION	iv
ACKNOW	ZEDGEMENTS	V
LIST OF T	'ABLES	X1
LIST OF F	TGURES	XiV
ACRONY	MS AND ABBREVIATIONS	XV1
CHAPTER	R 1	1
	ction and setting to the study	
1.	Introduction	
1.1	Background	
1.2	Orientation	2
1.3	Statement of the problem	6
1.4	Purpose of the study	
1.5	Objectives of the study	
1.1	Research questions of the study	
1.7	Research methodology	
1.8	Definitions of key terms	7
1.9	Structural breakdown of the thesis	8
CHAPTER	R 2	9
Literatur	re Review: Theoretical framework and empirical evidence	9
2.1	Introduction	9
2.2	Methods of contraception	10
2.2.1	Modern methods	11
2.2.	1.1 Permanent methods	11
	a) Female sterilization	11

ŀ	b) Male sterilization	11
(c) The Intra-Uterine Devices (IUD)	12
2.2.1	1.2 Hormonal methods	12
2	a) Oral contraceptives (the Pill)	12
ł	b) Injectables	12
(c) Other hormonal methods	13
2.2.1	1.3 Barrier methods	13
2	a) Female condom	13
ł	b) Male condom	13
(c) Other barrier methods	14
2.2.2	Traditional methods	14
2.2.2	2.1 Rhythm method (periodic abstinence)	15
2.2.2	2.2 Withdrawal	15
2.2.2	2.3 Other traditional methods	15
2.3	Knowledge of contraception	15
2.4	Levels and trends in Contraceptive prevalence	16
2.5	Unmet need for family planning	20
2.6	Determinants of Contraceptive prevalence	20
2.6.1	1 Socio-economic factors	21
2.6.2	2 Demographic factors	22
2.6.3	3 Partner's influence	23
2.7	Contraceptive failure	24

CHAPTER .	3	27
Research ?	Design and Methodology	27
3.1	Introduction	27
3.2	Statement of the problem	27
3.3	Aim of the study	27
3.4	Objectives of the study	27
3.5	Research design	28
3.6 Population under study		28
3.7	Data and variables	28
3.8	Methods	30
3.9	Limitations of the study	31
	4	
4.1	Introduction	33
SECTI		
	Background characteristics of respondents	
1.1.1	O .	
1.1.2		
1.1.3	Number of living children	36
1.1.4	Place of residence	36
1.1.5	. Health directorate	36
1.1.6	. Discussed family planning with partner	36
1.1.7	. Current contraceptive user status	37
1.1.8	. Desire for additional children	37
1.1.9	. Religion	37
1.1.1	0. Women's occupation	37
	1. Partner's occupation	
	2. Partner's approval of family planning	

2.3	Knowledge about contraception	38
a)	By age group	39
b)	By number of living children	41
c)	By educational attainment	42
d)	By desire for additional children	44
e)	By place of residence	45
f)	By health directorate	46
g)	By women's employment status.	48
h)	By partner's approval of family planning.	49
i)	By discussed family planning with partner	51
j)	By partner's educational attainment.	52
k)	By partner's employment status	54
2.4	Use of contraception	55
a)	By age group	
b)	By educational attainment By health directorate	59
c)		
d)	By place of residence	
e)	By number of children alive	
f)	By discussion of family planning with partner	
g)	By partner's approval of family planning	
h)	By women's occupation.	
i)	By desire for additional children	72
SEC	TION 2	
2.1	Trends and differentials	75
	1. Age group	
	2. Desire for additional children	
	3. Place of residence	
	4. Educational attainment.	
	5. Health directorate	
	5. Partner's approval of family planning.	

1.7. Number of living children	76
1.8. Discussed family planning with partner	76
SECTION 3	
3.1 Regression: Contraceptive use	79
CHAPTER 5	84
Discussions and conclusions	84
BIBLIOGRAPHY	89
APPENDICES	QC



LIST OF TABLES

Table 1.1: Background characteristics, per 100 respondents, in 1992 and 2000
Table 1.2: Knowledge of contraceptive methods, per 100 women in union, in 1992 and 2000
Table 1.3: Knowledge of any contraceptive method by age group, per 100 women in union, in 1992
Table 1.4: Knowledge of any contraceptive method by age group, per 100 women is union, in 2000
Table 1.5: Knowledge of any contraceptive method by number of living children, per 100 women in union, in 1992 and 2000
Table 1.6: Knowledge of any contraceptive method by educational attainment, per 100 women in union, in 1992 and 2000
Table 1.7: Knowledge of any contraceptive method by desire for additional children in 1992 and 2000
Table 1.8: Knowledge of any contraceptive method by place of residence, per 10 women in union, in 1992 and 2000
Table 1.9: Knowledge of any contraceptive method by health directorate, per 100 women in union, in 1992 and 2000
Table 1.10: Knowledge of any contraceptive method by women's employment status per 100 women in union, in 1992 and 2000

Table 1.11: Knowledge of any contraceptive method by partner's approval of family
planning, per 100 women in union, in 1992 and 2000
Table 1.12: Knowledge of any contraceptive method by discussed family planning with partner, per 100 women in union, in 1992 and 2000
Table 1.13: Knowledge of any contraceptive method by partner's educational attainment, per 100 women in union, in 1992
Table 1.14: Knowledge of any contraceptive method by partner's educational attainment, per 100 women in union, in 2000 53
Table 1.15: Knowledge of any contraceptive method by partner's employment status
per 100 women in union, in 1992 and 200054
Table 2.1: Namibia 1992. Contraception: Current use by age, per 100 women in union.
Table 2.2: Namibia 2000. Contraception: Current use by age, per 100 women in
union57
Table 2.3: Namibia 1992 and 2000. Contraception: Current use by educational attainment, per 100 women in union Current use by educational strainment.
Table 2.4: Namibia 1992 and 2000. Contraception: Current use by health directorate per 100 women in union 61
Table 2.5: Namibia 1992 and 2000. Contraception: Current use by place of residence
per 100 women in union63

Table 2.6: Namibia 1992 and 2000. Contraception: Current use by number of children
alive, per 100 women in union64
Table 2.7: Namibia 1992 and 2000. Contraception: Current use by discussion of family
planning with partner, per 100 women in union
Table 2.8: Namibia 1992 and 2000. Contraception: Current use by partner's approval
of family planning, per 100 women in union
Table 2.9: Namibia 1992. Contraception: Current use by women's occupation, per 100
women in union
Table 2.10: Namibia 2000. Contraception: Current use by women's occupation, per
100 women in union
Table 2.11: Namibia 2000. Contraception: Current use by desire for additional children.
per 100 women in union
WESTERN CAPE
Table 2.12: Last source for acquiring contraceptives by contraceptive user, per 100
women in union, in 1992 and 2000
Table 3.1: Percentages currently using a modern method of contraception among
women in union in 1992 and 2000
women in union in 1772 and 2000
Table 4.1: Regression results (Odds ratios) for the likelihood of contraceptive use
among women in union by selected demographic and socio-economic factors in
Namibia, 1992 and 2000

LIST OF FIGURES

Figure 1.1: Map of Namibia and its neighbouring countries
Figure 1.2: Regions of Namibia
Figure 1.3: Health directorates of Namibia
Figure 2.1: Estimated trends in contraceptive prevalence, by Area in 1992 and 200017
Figure 2.2: Estimated contraceptive prevalence, by continent & region in 1992 and 2000
Figure 4.1: Percentage of women's knowledge of a contraceptive method by age group, in 1992
Figure 4.2: Percentage of women's knowledge of a contraceptive method by age group, in 2000
Figure 4.3: Percentage of women's knowledge of a contraceptive method by number of living children, in 1992 and 2000
Figure 4.4: Percentage of women's knowledge of a contraceptive method by educational attainment, in 1992 and 2000
Figure 4.5: Percentage of women's knowledge of a contraceptive method by desire for additional children, in 1992 and 2000
Figure 4.6: Percentage of women's knowledge of a contraceptive method by place of residence, in 1992 and 2000
Figure 4.7: Percentage of women's knowledge of a contraceptive method by health directorate, in 1992 and 2000

Figure 4.8: Percentage of women's knowledge of a contraceptive method by
employment status, in 1992 and 200049
Figure 4.9: Percentage of women's knowledge of a contraceptive method by partner's
approval of family planning, in 1992 and 200050
Figure 4.10: Percentage of women's knowledge of a contraceptive method by
discussed family planning with partner, in 1992 and 2000
Figure 4.11: Percentage of women's knowledge of a contraceptive method by partner's
educational attainment, in 1992 and 200054
Figure 4.12: Percentage of women's knowledge of a contraceptive method by partner's
work status, in 1992 and 2000
Figure 4.13: Percentage of last source of contraceptives by current contraceptive user,
in 1992 and 2000
UNIVERSITY of the
WESTERN CAPE

XV

ACRONYMS AND ABBREVIATIONS

AIDS Acquired Immunodeficiency Syndrome

CIA Central Intelligence Agency

DHS Demographic and Health Survey

FP Family Planning

HIV Human Immunodeficiency Virus

IUD Intra Uterine Device

LAM Lactational Amenorrhea Method

MCH Maternal and Child Health

MDGs Millennium Development Goals

MoHSS Ministry of Health and Social Services

NDHS Namibian Demographic and Health Survey

NPC National Planning Commission Secretariat

PPFA Planned Parenthood Federation of America

SPSS Statistical Package for Social Sciences

TFR Total Fertility Rate

UN United Nations

UNFPA United Nations Population Fund

WCU World Contraceptive Use

CHAPTER 1

Introduction and setting to the study

1. Introduction

1.1 Background

African Nations especially sub-Saharan countries have a history of higher fertility levels and lower contraceptive use than countries in other continents.

The World Contraception Use Report of 2002, that targets married women or those in a consensual union, established that contraceptive prevalence rates worldwide rose from 54 percent in 1990 to 63 percent in 2000. During the same period, sub-Saharan African region recorded contraceptive prevalence of roughly 20 percent (United Nations, 2006: xii).

Increase in contraceptive prevalence was mainly attributed to wider use of modern methods (United Nations, 2006: xii). However, increasing usage of contraception usage did not start at the same time in all African regions. Rapid increases in contraception in Northern and Southern Africa started in the 1970s, while in the rest of the region, the phenomenon only commenced in the late 80s (United Nations, 2006: xii).

It is against this background that the improvement of the health status of women is one of the key challenges facing developing countries worldwide and contraceptive prevalence is one of its core components. Countries that are members of the United Nations adopted the Millennium Declaration and the Millennium Development Goals (MDGs)¹ as a universal framework in achieving development by 2015. Improving maternal health is goal five of the MDGs. It is aimed at reducing the maternal mortality ratio by about 75 percent, between 1990 and 2015 (UN, 2007: 16). Furthermore, the 2007 MDGs Report stated that in developing countries, contraceptive usage between 1990 and 2005, increased marginally from 55 to 64 percent. However, in sub-Saharan Africa contraceptive prevalence remained the lowest during the 15-year period, at 21 percent. Contraceptive prevalence rate is one indicator in improving maternal health in Namibia as it is critical for birth control and prevention of sexually transmitted diseases such as HIV/AIDS (NPC, 2004: 21).

¹ Millennium Development Goals are 8 and were agreed upon by United Nations member countries and development institutions worldwide targeting various issues ranging from extreme poverty eradication to developing a global partnership for development by target date 2015.

About 137 million women in developing countries worldwide were said to have an 'unmet need'² for family planning, while another 64 million are said to be using traditional methods of contraception. Given the general contraceptive prevalence in Africa and worldwide, this study attempts to explore this issue within the Namibian context.

Fertility rates have declined considerably in Namibia according to the period covered by the Namibian Demographic and Health Survey (NDHS) from 1992 to 2000 (MoHSS, 2003). At the same time a substantial increase in contraceptive prevalence was experienced.

The NDHS of 2000 revealed that the total fertility rate (TFR)³ declined sharply from 5.4 to 4.2 births per woman for the 3-year period prior to, 1992 and 2000 respectively. Moreover, it states that currently about 97 percent of Namibian women are aware of at least one contraceptive method, while contraceptive prevalence increased from 23 percent in 1992 to 38 percent in 2000.

1.2 Orientation

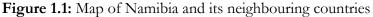
Namibia is a country located in the southern part of Africa bordering with Angola and Zambia to the north, Botswana and Zimbabwe to the east, the Atlantic Ocean to the west and South Africa to the south. Namibia gained independence from South Africa in 1990. It used to be known as South West Africa, before becoming the Republic of Namibia.

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² Bongaarts (1992: 126) refers to the 'unmet need population' as those individuals or couples able to produce (fecund) children involved in sexual practices and wishing to avoid getting pregnant, but are not practicing contraception.

³ Haupt and Kane (2004: 15) defined Total Fertility Rate (TFR) as the total number of children a woman would conceive by the time she ends childbearing, if the fertility rates for a given year applied to her during her reproductive life.



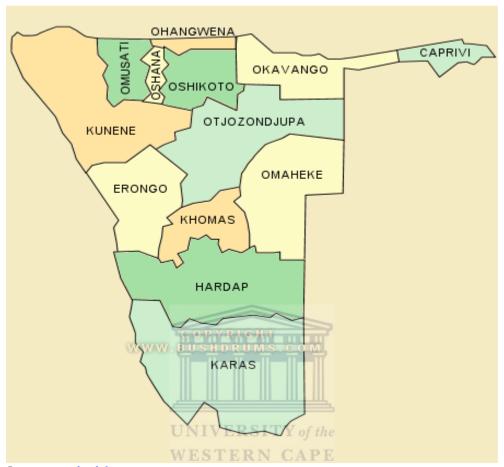


Source: The World Factbook, 2008

Namibia covers a land area of about 825,418 km² and is considered one of the least densely populated nations worldwide, equivalent to 2.5 persons per km² (Wikipedia, 2008). Namibia's climatic conditions range from being desert hot, dry, erratic and sparsely distributed rainfall (CIA, 2008). Windhoek, the capital city, is situated in the central region of Khomas.

Namibia is divided into 13 political regions, namely: Ohangwena, Omusati, Oshana, Oshikoto, Kavango, Caprivi, Kunene, Otjozondjupa, Erongo, Khomas, Omaheke, Hardap and Karas (See map below).

Figure 1.2: Regions of Namibia



Source: www.bushdrums.com, 2007

The 2001 Population and Housing Census of Namibia stated that the population stood at about 1.8 million (NPC, 2003: 4). Currently the population can be estimated at being around 2 million, taking into consideration the effects of excess deaths due to AIDS (CIA, 2006). The 2001 Census Report also found that over 51 percent of the Namibian population is female and the overall sex ratio stood at 94 males per 100 females. The majority of the country's population is black (88%), white constitute 6 percent and mixed races 7 percent (CIA, 2008).

English is Namibia's official language despite the majority of people with Oshiwambo (48%) as their home language. Some 11 percent of households speak Afrikaans and Nama/Damara, respectively, 10 percent Kavango and 8 percent mainly speak Otjiherero.

In Namibia, the Ministry of Health and Social Services had divided the country into four health directorates, namely; northwest, northeast, south and central. Obeid (2001) stated that the four directorates are tasked with the administration of the public health services in the country. It is of utmost importance to include the health directorates in the study, as it will shed more light on the contraceptive situation in the respective wards. The northwest directorate comprises of Oshana, Oshikoto, Ohangwena and Omusati region, northeast: Caprivi and Kavango, Central: Kunene, Erongo and Otjozondjupa, South: Khomas, Omaheke, Hardap and Karas regions.

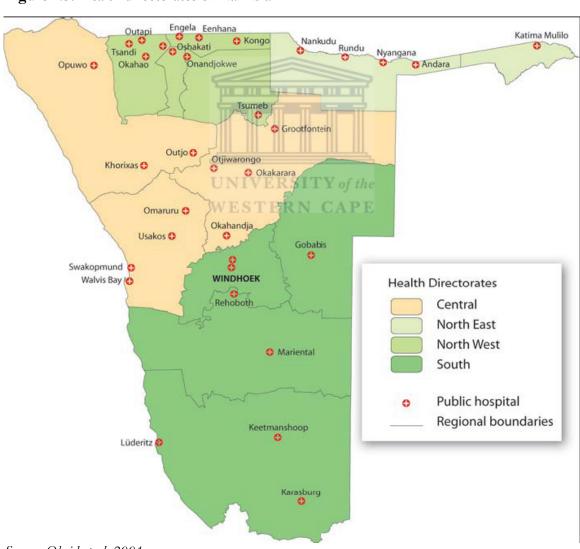


Figure 1.3: Health directorates of Namibia

Source: Obeid et al, 2001.

1.3 Statement of the problem

The Namibian Demographic Health Survey report of 2000 showed that there tend to be a wide gap between women's knowledge of contraceptive methods (97%) and actual contraceptive usage (38%) among those in union between 15 and 49 years. This nullifies the notion that low contraceptive use can be attributed to women being unaware of family planning methods.

As a result, this raises questions regarding what factors determine knowledge and contraceptive usage in Namibia as this helps in understanding who use contraceptives and who does not and the reasons associated with this use or non-use of contraception.

1.4 Purpose of the study

This study aims at investigating knowledge and usage of contraceptives among women in union of reproductive ages in an independent Namibia, 10 years after independence, between 1992 and 2000.

Demographic and socio-economic factors that might play a role in contraceptive use are examined in this study to determine their significance. This is vital for policymakers to assess the level and awareness of birth control and the effectiveness of policies and programmes such as family planning.

1.5 Objectives of the study WESTERN CAPE

- To provide a theoretical framework on contraception and its importance and to offer insights on its prevalence in Namibia.
- To determine key factors affecting contraceptive usage.
- To examine the trend in contraceptive usage between 1992 and 2000 at aggregate and regional level.
- To assess progress of national policies and strategies on birth controls.
- To provide recommendations on what can be done in addressing the issue at hand.

1.6 Research questions of the study

- What is the level and trend of awareness and usage of contraceptive methods in Namibia?
- What are the key factors affecting knowledge and contraceptive usage in Namibia?

1.7 Research methodology

This study mainly utilised version 15.0 of SPSS, in analysing the data. This statistical tool is

one of the most widely used and easy to use statistical packages. In addition, the raw NDHS

data files for 1992 and 2000 were received as SPSS files. The NDHS data was selected as it

provided in-depth statistical information on the demographics of women, their preferences

and attitudes towards contraception (family planning).

Two main approaches were utilised using SPSS in order to ascertain the trends and

determining factors that might have an impact on contraceptive use in Namibia. They

included direct analysis (cross tabulations) and the binary logistic regression model.

The direct analysis method mainly aimed at investigating the association between women's

knowledge and current use of contraceptives, and the various socio-economic and

demographic factors.

The binary logistic regression model is a form of regression used to statistically test the

significance of independent variables, when the dependent variable is dichotomous. In this

study the dependent variable refers to current users and non-users of contraceptives, while

the independent variable refers to the various socio-economic and demographic factors

chosen.

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1.8 Definitions of key terms

Herewith follows the main concepts used in this study.

Women of reproductive (childbearing) age: Women aged 15 to 49 years old.

Women of reproductive age in union: This refers to women between the ages of 15 and

49 years old either married or living together (consensual union) with partners.

Contraceptive: A device, drug, sexual practice or surgical method used in the prevention of

pregnancies.

7

Unmet need for family planning: This term refers to those women able to produce (fecund) and involved in sexual act, but do not want to conceive, despite not being on contraception.

Sub-Saharan Africa: This refers to the geographical area in Africa situated south of the Sahara desert.

Fecund: This term refers to those women with the ability to produce children.

1.9 Structural breakdown of the thesis

Chapter one as presented in the preceding pages, offers an overview of the investigated research problem. It provides the background to the study, as well as the aims and objectives of the research. Chapter two presents the review of key consulted literature and covered topics such as: methods of contraception, levels and trends in contraceptive prevalence, unmet need for family planning, determinants of contraceptive prevalence and contraceptive failure. Chapter three provides the research methodology adopted in this study. Chapter four presents the results of the study. Chapter five presents a discussion of the results of the study and conclusion of the key findings. In addition, the list of consulted literature follows thereafter.

CHAPTER 2

Literature Review: Theoretical framework and empirical evidence

2.1 Introduction

The previous chapter provides an overview of the objectives and methodology of the study. It was identified that a wide gap exists between women's knowledge (97%) of contraceptives and actual contraceptive usage (38%) (MoHSS, 2003). Hence, the notion that low contraceptive use, is a result of women being unaware of family planning methods is questionable. Family planning programmes have been implemented in most of the countries worldwide as a joint effort in limiting population growth (UNFPA, 1989).

The United Nations Population Fund (1989: 1) stated that family planning is an important element of maternal and child health care (MCH). Its services include birth spacing and prevention of further births, as well as assisting couples unable to conceive.

This chapter explores diverse consulted literature, mainly focusing on Africa and other developing regions, highlighting pertinent issues on contraception. It aims at shedding more light on the various types of contraceptives available worldwide; women's awareness of contraceptive methods, the proportion of women that have used them and the methods popularly used. It also explores how contraceptive use has changed over the years and the various factors (socio-economic and demographic) that could have an impact on the use of contraceptives. The issue of women's willingness to halt childbearing, but not using contraceptives (the unmet need population) and the reliability of the methods will also be considered.

The theoretical setting of birth control was pointed out by Adewuyi (1979) [cited in Oyedokun and Obafemi (2007: 3)] and centered around two schools of thought: the socioeconomic development and the socio-psychological currents.

The socio-economic development school was of the belief that developed countries that are currently well-off within the socio-economic context encountered higher fertility before achieving their current lower fertility levels. During the development process of developed countries, they shifted away from the traditional mentality of extended families and kinship

system's having overall say on procreation to individuals making their own decisions regarding their lifestyles.

The socio-psychological school is more aimed at women and it tends to associate culture to a laboratory experiment whereby individuals could be manipulated to act in a certain way as dictated by the researcher conducting the experiment. This school of thought is also of the opinion that the proponents of the socio-economic development school were dated. For example, during the period of increased socio-economic progress of developed countries, they also encountered high population growth. However, accelerated population growth was more prominent in developing countries than what prevailed in developed countries. Another opinion was to set up a family planning programme during the early stages of socio-economic progress of the developing countries (Oyedokun and Obafemi, 2000).

2.2 Methods of contraception

The Free Dictionary (2008) described a *contraceptive* as a device, drug, surgical method or sexual practice that is capable of preventing a pregnancy.

Contraceptive methods have been used one way or another throughout human history, even though the methods have evolved over the years. Pre-20th century methods were not as safe and effective as those available nowadays (PPFA, 2002). For instance, centuries ago, Chinese women drank mercury or lead in order to control their fertility and these methods often led to sterility or death.

Lutalo et al. (2000: 219) in his study of Rakai district of Uganda was in agreement that women were substituting less effective methods (traditional) for more effective modern methods of contraception. He further said that there was an increase in use of modern methods, while significant declines were observed in usage of calendar method, periodic abstinence and extending abstinence.

Bongaarts (1978: 3) reported that contraception was one of the important intermediate fertility variables. The growing percentage of women using effective family planning methods is a primary cause of the rampant declines in fertility in most developing countries (Robey et al., 1992: 2). For example, in general for every 15-point increase in newly married couples using contraception average fertility falls by roughly one birth.

At this juncture, it is important to differentiate between methods that can be categorised as *modern* and those as *traditional*.

2.2.1 Modern methods

The United Nations (2006: 69) pointed out that these methods of contraception are the most effective in pregnancy prevention and they can be obtained either through family planning programmes, pharmaceutical supplies or at medical institutions. They can be categorised into: permanent (surgical), hormonal and barrier methods.

2.2.1.1 Permanent methods

a) Female sterilisation

This method is also known as "tubal ligation" and it is a surgical process conducted on females to prevent eggs from reaching the uterus by tying, cutting or blocking the fallopian tubes (Knowmycycle.com, 2008).

This is the most used contraceptive method worldwide and one-fifth of married or in union women of reproductive age are sterilised (UN, 2006: 47). Moreover, the report stated that it is more common in Asia, Latin America and the Caribbean, North America, Australia and New Zealand. The prevalence in Oceania is over 20 percent, compared to Africa and Europe where the prevalence is below 5 percent. Despite its low prevalence in Africa, Southern African region reported female sterilisation at 14 percent (UN, 2006: 47).

Ross and Frankenberg (1993: 59) indicated in their worldwide study that female sterilisation is more prevalent than male sterilisation, but sterilisation in general is mostly conducted among those with two or more children.

b) Male sterilisation

The male sterilisation is also known as "vasectomy". It is a surgical process that prevents sperm from reaching the penis from the testicles by sealing, tying or cutting the tubes (Knowmycycle.com, 2008).

The United Nations (2006: 49) stated that worldwide roughly 3.6 percent of women mentioned that their partner has been sterilised and male sterilisation is more common in more developed nations than in less developed nations at 5.6 and 3.2 percent respectively.

c) The Intra-Uterine Devices (IUD)

These devices are T-shaped, inserted into the uterus by a health professional and have to be replaced periodically (Knowmycycle.com, 1998). Some IUD's can prevent pregnancies for up to five years. There are hormonal and non-hormonal IUDs⁴. Hormonal progestin impregnated IUD's, such as Mirena interferes with sperm movement by thickening cervical mucus, while non-hormonal (Copper IUD's like Paraguard) stops fluids within uterine cavity by impairing the viability of sperm⁵.

This method is rated second in usage, with a worldwide prevalence of 14 percent and it is utilised more in less developed countries than in more developed countries with prevalence of 15 and 8 percent respectively (UN, 2006: 49). IUD prevalence is high in Asia and Europe and rarely used in Africa, North America and Oceania, ranging between 1 and 5 percent.

2.2.1.2 Hormonal methods

a) Oral contraceptives (the Pill)

The pill is taken by female to prevent a pregnancy from occurring by hindering ovulation, as hormone activity in the brain and ovaries are curbed (Knowmycycle.com, 1998).

This method is ranked third worldwide, as it is used by about 7 percent of women of childbearing age, married or in union (UN, 2006: 50). In addition, the prevalence of oral pill is higher among more developed countries (16%) than in less developed countries (6%). However, at country level the pill is more popular than female sterilisation and IUD, especially in developing countries (UN, 2006: 50).

b) Injections

These are hormones injected into women's veins every 1 to 3 months (Knowmycycle.com, 2008; Delvin, 2008).

The United Nations (2006: 55) said that hormonal injection methods are not as widely available as other modern methods and are prevalent among 2.3 percent of women of reproductive age, married or in union, worldwide. Unlike other methods, these methods are mostly used in less developed regions than in more developed regions at 2.7 and 0.2 percent,

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⁴ http://en.wikipedia.org/wiki/IUD

⁵ http://www.endotext.org/female/female8/ch01s08.html

respectively. In the African continent, Southern African region recorded the highest use of injections of 21 percent, while the lowest levels are found in Eastern Africa at 6 percent.

c) Other hormonal methods

Other less utilised hormonal methods includes: the vaginal ring, contraceptive patch, implant and emergency contraception. They are defined as follows:

The *vaginal ring* is a soft, transparent ring with hormones that is inserted into the vagina for 3 weeks and the *contraceptive patch* as a patch that is attached to the skin once a week, releasing hormones through the skin into the bloodstream (Knowmycycle.com, 2008).

An *implant* is a hormone emitting contraceptive implanted under the arm, right above the elbow of a woman and may prevent pregnancies for up to 5 years, for example Norplant (Health Central Network (2001-2008). Last but not least, the *emergency contraception* or "morning after pill" is a high dose of female hormones estrogen and progestin taken to prevent pregnancy after having unprotected sex or incase of a contraceptive failure⁶⁷. It is licensed to be used within 3 days after intercourse.

2.2.1.3 Barrier methods

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a) Female condom

This is a protective device inserted internally by a woman before intercourse, to prevent semen from entering her body in preventing pregnancies and sexually transmitted infections⁸.

b) Male condom

This is a protective elastic sheath that is worn over a man's penis during sexual act to prevent sperm from entering the female reproductive tract (Knowmycycle.com, 1998).

Rated as the fourth most used contraceptive method worldwide, it is used by about 5 percent of couples where the woman is of reproductive age and it accounts for 8 percent of total contraceptive use (UN, 2006: 53). Like most contraceptive methods, it is more

⁷ http://www.tqnyc.org/NYC030420/Types%20of%20Contraceptives.html

13

⁶ http://en.wikipedia.org/wiki/Birth_control

⁸ http://en.wikipedia.org/wiki/Female_condom

prevalent in more developed regions than in less developed regions (13% and 3% respectively). In Africa condom prevalence is at 1 percent (UN, 2006: 53).

c) Other barrier methods

The other barrier methods comprise of cervical caps, diaphragm, spermicides (in the form of foams, jellies, cream or contraceptive sponge) and they are used by a mere 0.5 percent of currently married or in union women worldwide (UN, 2006: 56). Moreover, these methods are mostly prevalent in more developed nations than in less developed nations (2.3% and 0.1% respectively) (UN, 2006: 56).

Knowmycycle.com (2008) defined other barrier methods as follows9:

The *diaphragm* is a molded soft plastic shaped device also placed over the cervix, and should only be left in place for 6 hours after intercourse, not longer than a full day.

Spermicides refer to chemicals inserted into the vagina before sexual intercourse to destroy the sperm, and they include:

- a) Gels and jellies, that offers protection during one sexual act and does not exceed 6 hours.
- b) Foams are inserted into the vagina an hour in advance, before sexual act.
- c) Suppositories do not last for more than an hour and the protection starts 10-15 minutes after insertion.
- **d) Sponge:** device containing a spermicide and is placed in the vagina covering the Cervix.

2.2.2 Traditional methods

These are natural methods of contraception and they comprise mainly periodic abstinence (rhythm or calendar method) and withdrawal (*coitus interruptus*). Other methods include douching, the lactational amenorrhoea method (LAM), postpartum abstinence, as well as some questionable methods believed to prevent pregnancies in some quarters of the world such as amulets, herbs, charms, spells and so forth (UN, 2006: 69).

14

 $^{^9}$ Knowmycycle.com (2008) is a website dedicated to providing women with information about the menstrual cycle and birth controls

2.2.2.1 Rhythm method (periodic abstinence)

This method is intended to avoid having unprotected sex during fertile times of the menstrual cycles (Knowmycycle.com, 2008).

It is mainly used by roughly 4 percent of women of childbearing age that are married or in union, while it accounts for 6 percent of all contraceptive use (UN, 2006: 54). In addition, 4.5 percent of couples in more developed regions used it in comparison to 3.6 percent in less developed regions (UN, 2006: 54). In Africa, rhythm method prevalence was recorded at 3 percent in Southern Africa and at 8.4 percent in Middle Africa (UN, 2006: 54).

2.2.2.2 Withdrawal

This process involves the removal of the penis from the vagina before ejaculation occurs (Knowmycycle.com, 2008).

This method is utilised by about 2.4 percent of couples of reproductive age married or in union and worldwide it accounts for 4 percent of all contraceptive use (UN, 2006: 55).

In addition, 8 percent of withdrawal prevalence was recorded in developed regions in comparison to developed regions (1.5%) (UN, 2006: 55). Specifically, this method is common in Eastern and Southern Europe as it is practiced by 16 percent of couples of reproductive age (UN, 2006: 55).

2.2.2.3 Other traditional methods

WCU (2002: 56) states that other traditional methods include postpartum abstinence, douching and folk methods (amulets, charms, spells, herbs etc.) and at the worldwide level they are utilised by 0.7 percent of women married or in union of childbearing age.

Lactational amenorrhoea method (LAM) is also another natural traditional method and it refers to extended breast-feeding to postpone ovulation and menstruation in order to space their pregnancies (Planned Parenthood, 2008). LAM is used by less than 0.1 percent of women married or in union worldwide, while there is no variation on its prevalence among the regions (UN, 2006: 56).

2.3 Knowledge of contraception

India was the first country worldwide to introduce a family planning programme in the early 50s and almost all currently married women know of at least one modern contraceptive method (Westley and Retherford, 2000: 3). Moreover, 98 percent were familiar with female

sterilisation, 80 percent with male sterilisation, 80 percent with the pill and 71 percent know of IUDs and condoms. On the African front, Kenya was the first country in sub-Saharan Africa to introduce a national family planning programme in 1967 (Ulrich, 1994: 13).

Back in 1988, the majority of the results of the developing nations Demographic and Health Survey (DHS) reveal that over three-quarters of women were able to name at least one method of contraception without being further probed (Oyedokun and Obafemi, 2007: 2). They further highlighted that in Nigeria married women's ability in identifying at least one family planning method (modern or traditional) even after being probed rose from 44 percent in 1990 to 64 percent in 1999, as per Nigerian DHS of 1999.

Tawiah (1997: 141) pointed out that in Ghana, the share of currently married women familiar with a contraceptive method increased by 11.4 points between 1979 and 1988, from 68 to 79.4 percent. However, in numerous sub-Saharan African countries most married women were unable to even name a single modern method of contraception after continuous probing (Oyedokun and Obafemi, 2007). For instance in Namibia, the 2000 Namibian DHS (NDHS) reported that 98 percent of married women know of a modern method of contraception, slightly higher than all women (97%) and one-third of all women know of a traditional method (MoHSS, 2003: 57). However, males were more knowledgeable (99%). Among all women, the three most recognised methods were male condom (93%), injections (92%) and the pill (89%). The least known methods were vaginal contraceptives, emergency contraception and male sterilisation, known by 20%, 21% and 31% of all women respectively.

According to a study conducted by Oni and McCarthy (1991: 50) on males in Llorin, Nigeria, it revealed that men know more (97%) about contraceptives, especially the male condom and oral contraceptives. In addition, the condom was the most used method as 43 percent of educated men from higher socio-economic groups had used it (Oni and McCarthy, 1991: 50).

2.4 Levels and trends in Contraceptive prevalence

Contraceptive prevalence is defined as the proportion of all women from 15 to 49 years married or in union who use contraception.

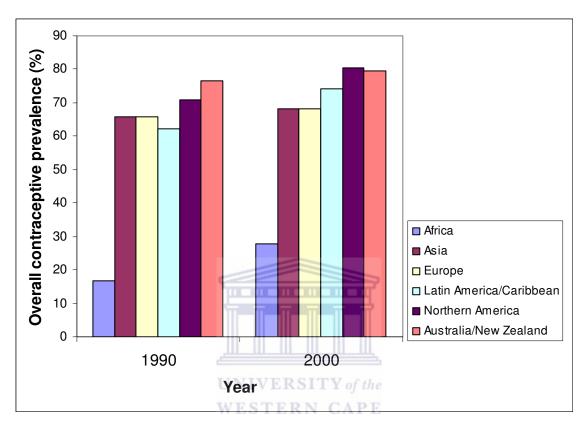


Figure 2.1: Estimated trends in contraceptive prevalence, by Area in 1990 and 2000

Source: UN, World Contraceptive Report (2003)

Figure 2.1 shows that global trends had wide variations across regions of the world, with Europe and Australasia with no marked difference in contraceptive prevalence between 1990 and 2000, while huge yearly increase of 1 percent reported in Northern America (UN, 2006: 17). Furthermore, it reported that contraceptive prevalence increased rapidly in less developed countries (Africa, Latin America and Caribbean) by 1 percent on average per year. However in Asia, contraceptive prevalence rose more slowly at about 0.8 percent a year. Ross and Frankenberg's (1993: 7) findings mentioned that there has been an increase in contraceptive prevalence over the years worldwide and this is mostly due to the increased use of modern methods rather than an increase of traditional ones. In contrast, results from the 1994 DHS of Bolivia and other Latin American countries reveal that 47 percent of women were using contraceptives and only a mere 14 percent were using modern methods (mostly IUD) (Najera et al. 1998: 2).

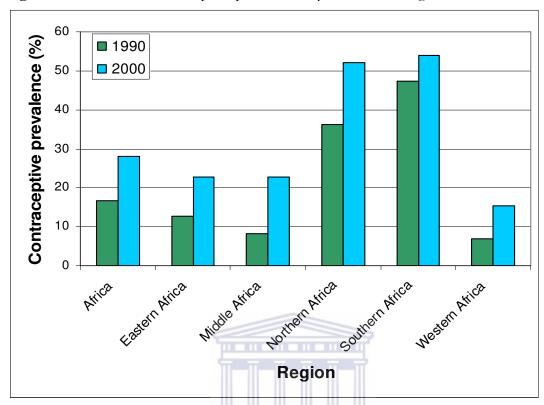


Figure 2.2: Estimated contraceptive prevalence, by continent & region in 1990 and 2000

Source: UN, World Contraceptive Report (2003)

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In Africa, rapid increases of contraceptive prevalence were mostly experienced in the regions of Eastern, Middle and Northern Africa; although by 2000 Eastern and Middle Africa attained fairly low levels of contraceptive usage (UN, 2006: 17). Furthermore, southern Africa experienced the highest contraceptive prevalence in both periods, but lowest annual change.

UN (2006: 29) report cited Caldwell and Caldwell (2002) on the notion that most African countries slow uptake of family planning was attributed to weak support from governments, inadequate resources, weak absorptive capacity and relatively recent programme implementation.

According to Chang et al. (1987: 331) in reviewing trend in family planning practice in Taiwan from 1961 to 1985, by 1985 married women between 35 and 39 years had the highest proportion of sterilisation (35%).

Sub-Saharan Africa experienced the lowest contraceptive prevalence in comparison to other regions in Africa. However, Weinberger's (1991: 25-29) in his report on world contraceptive behaviour before 1990 revealed that the majority of Southern African countries such as:

Namibia, South Africa, Botswana, Swaziland and Zimbabwe incurred moderate contraceptive use levels, ranging from 20 to 48 percent. Most of contraceptive practice is attributed to reasonably effective clinic and supply methods (Weinberger, 1991: 25-29).

Ebigbola and Ogunjuyigbe (1998) said that "a positive relation exists between women's access to source of information and contraceptive prevalence".

Regarding the specific contraceptive methods, Westley and Retherford (2000: 4) in their survey conducted in India indicated that cases of female sterilisation have increased, especially among women of around 26 years old. Moreover, 75 percent of all married women using contraceptives are either sterilised or their husband is and this is in contravention with the government's efforts in promoting birth spacing methods (Westley and Retherford, 2000: 3).

On the other hand, condoms use in several nations is attributed to its price, education, availability and accessibility and other socio-economic, cultural and religious factors (Pillai and Kelley, 1994: 295). In addition, some countries even charged high duties on importation of condoms driving up prices or curtailing condom stock. For instance, in some parts of Africa contraceptive use may be compromised due to their strict traditional beliefs against contraception.

The Ministry of Health and Social Services Report (2003: 62) stated that contraceptive use in 2000 among currently married women in Namibia stood at 44 percent, lower than among all sexually active women (52%). Moreover, injections were commonly used, while male condoms were less likely used by married women.

In addition data comparisons between 1992 and 2000 showed that among currently married women, use of any contraceptive method increased from 29 to 44 percent and for modern methods from 26 to 43 percent. This increase is mainly attributed to increases in the use of injections and male condoms (MoHSS, 2003: 66). The increase in condom use was associated with the rise in HIV/AIDS prevention programmes as well as increased condom availability. Furthermore, traditional methods are said to have been on a decline during the 8-year period.

In many countries worldwide, urban areas were the first priority in receiving family planning services before rural areas (Weinberger, 1991: 25-39). Hence the huge rise in urban/rural variation levels of current contraceptive prevalence, as services were not provided at the

same time. For instance, in Latin America, early family planning programmes were of a small-scale, and targeted urban areas, specifically the urban-middle class with an unmet need for family planning (Weinberger, 1991: 25-39).

2.5 Unmet need for family planning

Bongaarts (1991: 295) defined an unmet need or Knowledge Attitude Practice (KAP-gap) as the proportion of women married or in union who do not want to conceive anymore children and are not using birth controls.

"In developing countries women with an unmet need for family planning constitute a huge proportion of married women and this is more prevalent in sub-Saharan Africa, while less widespread in countries studied located in Latin America and Asia" (Casterline et al., 1997: 173). Unmet need was more important among men than among women in seven of the nine European countries studied (Klijzing, 2000: 74). It further enlightened that unmet need increases as age and family sizes increase, thus proposing an unmet need for limiting births rather than spacing them.

Casterline and Sinding (2000: 696) cited McCauley et al. (1994) and Germain (1997) to show that unmet need in developing countries is one of the indicators of the violation of women's reproductive health rights and also one of the underlying principles for women empowerment. In addition, they stated that about 20 to 25 percent of births occurring in developing countries were unwanted, while the number of unwanted pregnancies was even much higher (Casterline and Sinding, 2000: 696).

The United Nations (2004: 63) stated the key reasons given for unmet need for family planning in most countries include: lack of knowledge of family planning, fear of side-effects of contraceptive methods, cost of contraception, low perceived risk of conceiving, social, cultural, economic and health concerns (Bongaarts and Bruce, 1995).

2.6 Determinants of Contraceptive prevalence

The National Research Council (1993) pointed out that factors affecting contraceptive use through their effect on the demand and supply of births could be grouped into the following categories, namely: national, regional, community, kinship and household and at individual

level. For instance, factors at the national level include the social policy environment, economic situation, government and donor support to family planning.

It is of utmost importance to investigate the various factors that has an effect on use of contraceptives among women in union, as this is the core objective of this study. Therefore the factors affecting contraceptive use at the individual level are broadly subdivided into socio-economic and demographic factors and they are herewith discussed.

2.6.1 Socio-economic factors

Weinberger (1991: 25-39) in his analysis of data of 105 countries from the World Fertility Survey (WFS) showed that almost half of all women (48%) with secondary education were using contraception compared to 16% than were uneducated.

The National Research Council (1993: 213) agreed that female education is an important determinant of contraceptive use at individual, regional and national level in sub-Saharan Africa. However, changes in contraceptive prevalence associated with female schooling are lower in Africa than in other regions such as Latin America (National Research Council, 1993: 213).

In Ghana, empirical results of 1988 concur that the higher the education levels of a married woman, the higher the contraceptive use (Tawiah, 1997: 148). For instance, 28.7 percent of currently married women with higher education were using contraception in comparison to those with primary (12.1%). Moreover, attainment of secondary education was said to improve women's status, effectiveness to contraceptive use and will eventually lower fertility and achieve better health.

In Kenya, a socio-economic hypothesis propose that low rates of contraceptive use is expected in regions where women have low education, limited access to health and family planning programmes and limited employment in the formal-sector (Njogu, 1991: 87). In addition, region of residence is important in the identification of ethnic and cultural boundaries in determining those that are more accepting of contraceptive methods.

Tawiah (1997: 147) utilising a logistic regression model for Ghana's DHS data, concluded that the key explanatory variables affecting current use of contraception was women's approval of family planning, discussion of family planning with partner and their education level. However, the model showed no significant difference between current contraceptive

use of married women with primary education and their uneducated counterparts. In Namibia, the situation was not that different, as according to the 2000 NDHS, two-thirds of sexually active women with secondary education were currently using a method of contraception (MoHSS, 2003: 65). Women in all educational groups commonly used injections, while male sterilisation and the IUD were more likely to be used by sexually active women with secondary education. Contraceptive prevalence increases with the number of children, from 42 percent of childless women to 62 percent with three children and then reduces to 21 percent with four or more children.

2.6.2 Demographic factors

Generally demographic factors include age, region, number of living children, rural-urban residence and ethnicity to mention a few.

A study conducted in Britain and Germany found age to be a determinant of contraceptive use as it reflects the impact of reproductive status as those women postponing pregnancies were using mainly oral contraceptives, while those that had ceased childbearing mostly opted for IUD or sterilisation (Oddens, 1997: 463).

The National Research Council's (1993: 33) report using DHS data for some sub-Saharan countries ascertained that use of modern contraceptives was higher in urban than in rural areas. It further stated that migration to urban areas exposes women to access family planning and health services.

On specific contraceptive methods used in rural and urban areas, Lutalo et al. (2000: 225) in his study of Rakai district in Uganda stated that the ever use of condoms was higher than in other rural areas in 1995, as it was reported by 26 percent of women and 36 percent of men. Other rural districts such as Lira and Soroti reported proportions of condom use below 10 percent (5% and 10% respectively) and it is due to partner's objection and condom unavailability.

In Ghana, according to the study by Tawiah (1997: 147) in 1988, results revealed that women's age, religion, ethnicity, place of residence, desire for more children and marital status were insignificant regarding current use of contraception. The reason for the insignificant effect of ethnicity and religion on current use of contraception was attributed to a higher number of women with higher education.

Use of contraceptive did not start at the same time and on average in Sub-Saharan countries it commenced increasing gradually among women married aged 20 to 39 years and then decrease thereafter (National Research Council, 1993: 36). Nonetheless, current contraceptive use may differ by country. For example, in Botswana and Kenya it is highest among women of 25 to 40 years, while in Zimbabwe it is highest among those aged 20 to 34 years.

As with most researches conducted in other African countries, Namibia seemed to be in agreement that differentials exists in contraceptive prevalence among women between rural and urban residences. The Namibian Demographic Survey (NDHS) of 2000 showed that there were differentials in sexually active women's contraceptive use in urban and rural areas and among the 13 political regions (MoHSS, 2003: 64). 58 percent of sexually active urban women are more likely to use family planning methods than rural women (46%) and this is attributed to improved health facilities, greater mass media and higher education in urban areas.

To sum up, most empirical results of most authors conducted in sub-Saharan nations are of the opinion that a huge gap does exist in contraceptive use among women residing in urban and rural residences. Improved family planning services available in urban areas is a result of higher utilisation of contraception, than in rural areas.

2.6.3 Partner's influence

A husband's approval of family planning is crucial, especially in traditional societies such as Bangladesh, where men are seen as a women's guide regarding coital decisions (Kamal, 2000: 43). Therefore effective targeting of males is vital for future success of family planning programmes.

Pillai and Kelley (1994: 294) were in agreement that the lack of men's participation in birth control in developing countries is one of the greatest barriers to population control thus, family size remains high and contraceptive use remains low. Moreover, family planning programmes tends to ignore the role that men play in birth control, therefore only focusing on women. For instance, one-third of couples in developing countries practicing contraception use a method that involves male participation or co-operation (Pillai and Kelley, 1994: 294).

In making decisions concerning contraceptive use, timing and desired number of children, the male partner may play an important role (Bankole and Singh, 1998: 15).

Delamater & MacCorquedale, 1978; Kar et al., 1979; Burger & Inderbitzen, 1985 quoted in Oddens (1997: 462) stated that in Britain and Germany, communication with partner's on contraception occurs frequently and communication problems mainly transpire among the relatively inexperienced young contraception users.

Having profiled the possible determinants of use of contraceptives worldwide, it is important at this juncture to also highlight the possible failures associated with contraceptives. Contraceptives are not 100 percent effective and therefore incorrect or irregular applications can lead to failures.

2.7 Contraceptive failure

According to the UNFPA (1989: 9) in its review and assessment of population activities worldwide, it showed that on equilibrium, traditional contraceptive methods are more susceptible to frequent failures than modern methods and that abortion is usually one way of compensating for failure in methods. Furthermore, the incidence of abortions is more prominent in countries that rely mostly on traditional methods than in those whose large proportions of their populations use modern contraceptive methods (UNFPA, 1989: 9). For example, in the 24 developed countries studied in mid-1983 in which more than 30 percent of the population depends on traditional methods, 4 have abortion rates of more than 30 per 1,000 fertile-age women.

Countries hugely dependent on modern methods of contraception are not exempted from failure in contraceptive use, as abortion as a backup for method failure remains at significant levels, despite being lower than in countries reliant on traditional methods (UNFPA, 1989: 9). For example in Hungary and USA with contraceptive prevalence levels over 60 percent and relying less on traditional methods, annual abortion rates still surpass 25 per 1,000 women aged 15 to 44 years.

Bairagi and Rahman (1996: 21) stated that in developing countries contraceptive failure leads to roughly 20 million unintended pregnancies each year. In Matlab, Bangladesh, contraceptive failure was associated to the quality of community health workers performance

in using temporary methods, except injections. In addition, women's background characteristics were also associated, although they differ by method type (Bairagi and Rahman, 1996: 21).

Contraceptive failure rates vary by contraceptive method whereby, higher for condoms and calendar method, almost non-existent for sterilisation, low for injections and very low for the pill when used properly, and much lower for improved IUD's (Ross and Frankenberg, 1993: 49).

UNFPA (1989: 40-41) cited Fathalla's (1989) paper presented at the International Conference on Better Health for Women and Children Through Family Planning in Nairobi classified different contraceptive methods into five categories according to their effectiveness, health risks and benefits:

- a) Complete abstinence is completely effective and does not carry any health risks.
- b) Withdrawal and periodic abstinence method are not highly effective, but bears no health risks or benefits.
- c) Male and female barrier methods such as condom, spermicides and diaphragm are not highly effective methods and they are therefore associated with no health risks and noncontraceptive health benefits.
- d) Hormonal contraception methods such as pills, implants and injections are highly effective, but have certain health risks and non-contraceptive health benefits.
- e) The IUDs and male and female sterilisation are also highly effective methods, but have some health risks and no non-contraceptive health benefits associated with.

In this chapter, diverse literatures on other developing and developed nation's experiences were consulted regarding their experiences on contraceptive prevalence. The types of contraceptive methods (modern and traditional) mostly utilised worldwide were highlighted. Worldwide, female sterilisation, IUD's and Oral contraceptives were the most utilised among women in union. Knowledge of at least one method of contraception and actual usage among women has been on an increase in most African countries in recent years. However, Sub-Saharan Africa experienced lower contraceptive prevalence, in comparison to other African regions. Increase in contraceptive usage has mainly been attributed to increased use of modern contraceptives rather than traditional ones.

Huge proportion of unmet-need for family planning population is more concentrated in sub-Saharan Africa, than in other parts of the world.

Other countries, especially developing countries experiences on the probable socioeconomic and demographic factors that might have an impact on contraceptive use are provided.



CHAPTER 3

Research Design and Methodology

3.1 Introduction

The previous chapter provided an in-depth review of consulted literature. This chapter aims at presenting a detailed description of the research framework and procedures used in conducting this study. However, this study did not involve the collection of primary data, but utilised existing data from the Demographic and Health Surveys (DHS).

3.2 Statement of the problem

The study explores the levels and trends in contraceptive use in Namibia between 1992 and 2000 and the various socio-economic and demographic factors that might have an impact on knowledge and contraceptive prevalence among women of childbearing age in union.

3.3 Aim of the study

The aim of the study is to ascertain the key determinants of contraceptive use in Namibia. The factors explored are either socio-economic or demographic factors. The socio-economic factors include: level of educational attainment and employment. On the other hand, the demographic factors include: age, region, rural/urban residence, religion, ethnicity, number of living children, desire for additional children, discussion of family planning with partner and partner's influence.

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3.4 Objectives of the study

The key objectives of this study were to determine the main factors affecting contraceptive usage in Namibia and to analyse the trends in contraceptive usage between 1992 and 2000 at regional and aggregate level. Moreover, it is also aimed at assessing national policies and strategies regarding family planning and thereby providing necessary recommendations.

3.5 Research design

Tati (2007: 39) defined a research design as a plan of action that a researcher has to undergo when studying the research problem.

This study is of a quantitative nature as it hugely relies on secondary data from the Namibian Demographic and Health Surveys (NDHS) of 1992 and 2000. Hence, it is a descriptive and comparative research. Also known as "statistical research", descriptive research offers a description of data as well as information regarding the population or phenomenon under study¹⁰. Wikipedia (2008) defined a comparative research as a process of comparing two or more subjects under investigation in discovering patterns between them. This type of research design is relevant to this study, as the study examines the determinants of contraceptive prevalence in Namibia, by comparing the NDHS data for two surveys.

3.6 Population under study

The studied population is women of childbearing age (15 to 49 years old) and the target population are those currently "in union" in Namibia. Those currently "in union" refers to women married and those cohabiting with partners, but are not legally married.

In 1990, eligible women that were interviewed as per NDHS were 5,847 from 4,101 households. Moreover, only 2297 were reported as being in current union. Some 10 years later in 2000, the number of women interviewed increased to 6,755 women from 6,392 households, with 2,827 of them being in union.

3.7 Data and variables

Demographic and Health Surveys (DHS) through its DHS programme has collected, analysed and disseminated representative and accurate data on population, nutrition, health and HIV through over 200 surveys conducted in more than 75 countries worldwide¹¹. Namibia is one of those countries that conduct DHS.

The DHS programme is financed by USAID and executed by Macro International incorporated. DHS are subdivided into standard and interim. Standard DHS comprises of

¹⁰ http://en.wikipedia.org/wiki/Descriptive_research

http://www.measuredhs.com/

large samples of between 5 000 and 30 000 households, while the latter constitutes small samples ranging between 2 000 and 3 000 households.

DHS consist of three types of core questionnaires, namely: household, women and men. The questionnaires aim to capture the basic indicators to allow comparability among nations, but are flexible enough to allow countries the inclusion of other issues pertinent to them.

The NDHS sample was designed to be nationally representative as it is based on the master sample drawn from a list of enumeration areas created for the 1991 population census. The aim of the NDHS was to provide comprehensive information on fertility and mortality, maternal and child health, family planning, fertility preferences, and on knowledge and behaviour concerning HIV/AIDS (MoHSS, 2003: 3). However, this study mainly focused on family planning and other aspects associated with it. Data analysis therefore utilises and compares data from the 1992 and 2000 NDHS. Information attained from the women's questionnaire was captured.

The individual women's datasets for both surveys were already created using Statistical Package for Social Sciences (SPSS), by the Ministry of Health and Social Services. SPSS is one of the most currently used data analysis tool. All women who are not currently in union were filtered out of the analysis as women currently in union were the base of analysis.

Demographic factors include: age, discussion of family planning, number of living children, desire for additional children, rural/urban residence, health directorate, respondents approval of family planning and partner's approval of family planning. Socio-economic included women's educational attainment, partner's educational attainment, women and partner's occupations.

A host of new variables were created, recoded from existing variables. For instance current contraceptive use was a key variable and it has been recoded into current contraceptive users and non-current contraceptive users. Women's current contraceptive use status was also the dependent variable, with "0" allocated to non-current contraceptive users and "1" representing current contraceptive users.

Women's ages were divided into 5-year aged groups ranging between 15 and 49 years. Women's level of educational attainment was divided into those with no education "0", completed primary "1", secondary "2" and tertiary "3".

Women's knowledge of contraception was represented by "0" Knows no method, "1" knows any traditional method and "2" knows any modern method. On the other hand, women's current occupation was recoded into: "0" didn't work, "1" professionals/managers/clericals, "2" sales and services, "3" agriculture, "4" skilled and unskilled manual and "5" don't know.

3.8 Methods

Two main approaches were used in the analysis using SPSS, namely: direct analysis in the form of cross tabulations of women's background characteristics and their profiles according to current contraceptive behaviour, and the logistic regression model.

The first section of the results provides a detailed list of respondent's background characteristics in 1992 and 2000. Basically, number of occurrences (frequencies) and proportions of identified women's characteristics were derived to provide insights on the respondents. Cross tabulations were run in examining the association between contraceptive knowledge, contraceptive use and the various socio-economic and demographic factors.

The second method used for data analysis is the binomial (or binary) logistic regression using SPSS. This is a form of regression which is used when the dependent variable is dichotomous and the independent variables are of any type. Logistic regression is used in predicting the dependent variable on the basis of a categorical independent variable ¹². Moreover, logistic regression variables do not need to be normally distributed, nor having a linear relationship.

The chosen method is appropriate in the sense that the dependent variable, current contraception status is dichotomous, as it comprises of: current contraceptive users and non-current contraceptive users. Independent variables includes the various socio-economic and demographic factors chosen, that includes: age group, educational attainment, health directorate, place of residence, women's occupation, number of living children, discussion of family planning with partner, partner's approval of family planning and the desire for additional children.

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 $^{^{12}\} www 2. chass.ncsu.edu/garson/PA765/logistic.htm.$

The first sub-category under each factor is set as the reference category, meaning that the rest of the categories have to be compared to it. The results of the binary logistic regression model are then presented in the form of odds ratios. Odds ratios signify the effect of a unit change in the independent (explanatory) variable on the indicator of women using contraceptives. Furthermore, odds ratios greater than one shows more likelihood of contraceptive use than that of the reference category, while odds ratios less than one indicate the opposite.

The backward stepwise LR method was used in fitting the model to the data and it involves the inclusion of variables at the beginning, but at each step it checks their significance. In testing the significance of a variable, t-values were derived for all variable coefficients. A 5 percent level of significance was used as a deciding measure in determining whether a variable should be retained in the model.

The logistic regression model is as follows: Logit $(p_i) = \text{Ln } (p_i/[1 - p_i]) = b_i | x_i$ Whereby:

p_i is the probability that some women in union are current contraceptive users.

b_i is the estimated regression coefficients

x_i's are the independent covariates

The odds ratio $(p_i/[1 - p_i])$, represents the odds of those women in union with certain characteristics of using contraceptives.

3.9 Limitations of the study

First and foremost, the respondent's responses to the question of whether they are currently using contraceptives have been self-reported and these claims were not validated.

Namibia is divided into 13 political administrative regions; however these demarcations were non-existent during 1992 when the first NDHS was conducted. Moreover, during the 1992 survey, the four health directorates were the key area of analysis and the 13 regions were only incorporated in the 2000 survey. Hence, it would have been interesting in presenting a

trend regional analysis of contraceptive use which is not possible. Health directorates proved to be compatible for comparability.

Another important variable is 'children ever born' which was only collected in the 2000 survey, but not in the 1992 survey. This variable is important in the assessment of fertility patterns.

DHS surveys are transversal in the sense that they are conducted at a certain point of time and a respondent could change her mind on using contraceptives thereafter. Despite the above-mentioned limitations, this study aims at shedding more light on contraception in Namibia.



CHAPTER 4

Results

4.1 Introduction

This chapter presents the findings of the study and it is divided into three sections, utilising the NDHS data of 1992 and 2000. Section one provides the background characteristics, knowledge and current usage of contraception among women in union. Section two captures the trends and differentials, while section three tests the significance of the various socioeconomic and demographic factors' influence on current contraception use status by utilising the binary logistic regression model between the two periods.

Tables and graphs are used in illustrating the grouped statistical information.

SECTION 1

1.1 Background characteristics of respondents

Women in union (married and living in consensual union) were primary targets of this study and are reported at 2,297 and 2,827 in 1992 and 2000, respectively.

Herewith follows the various key characteristics of women in union as represented in Table 1.1 below.

Table 1.1: Background characteristics, per 100 respondents, in 1992 and 2000

	1992	2000
	%	0/0
Age		
15-19	4.2	3.5
20-24	14.6	13
25-29	18.4	17.4
30-34	20	21.5
35-39	16.8	18.1
40-44	15.2	15.4
45-49	10.8	11.1
Total	100.0	100.0
Mean age	33.03 years	33.42 years
Number	2297	2827

Educational attainment		
None	61	41.4
Primary	30.6	43.2
Secondary	5.7	11.2
Tertiary	2.7	4.2
Total	100.0	100.0
Number	2297	2827
Number of living children		
None	8.6	8.4
1-3	49.1	55.3
4 and above	42.4	36.3
Total	100.0	100.0
Number	2297	2827
Place of residence		
Urban	35.3	47.4
Rural	64.7	52.6
Total	100.0	100.0
Number	2297	2827
Health directorate		
Northwest	29.7	29.5
Northeast	31.5	12.2
Central UNIVER	SITY 12.3e	26.9
South WESTER	N C/26.5	31.4
Total	100.0	100.0
Number	2297	2827
Discussed family planning with partner		
Never	50.8	32.7
Once or twice	29.9	36.3
More often	19.4	30.9
Total	100.0	100.0
Number	2297	2827
Current contraceptive user		
Non-user	73.1	52.9
User	26.9	47.1
Total	100.0	100.0
Number	2297	2827
Desire for additional children		
Wants more	67.9	37.6
Undecided	5.8	4.6
Wants no more	26.3	57.7

Total	100.0	100.0
Number	2297	2827
Religion		
Roman Catholic	29.1	25.4
Protestant	68.7	70.9
No religion	2.1	2.1
Other religion	0.2	1.7
Total	100.0	100.0
Number	2297	2827
Partner's occupation		
Didn't work	0	10.4
Prof/tech/manage/cleric	15	17.5
Sales and services	11	12.5
Agriculture	21.4	22.7
Skilled and unskilled manual	30.7	35.6
Don't know	21.9	1.4
Total	100.0	100.0
Number	2297	2827
Partner approves family Planning		
Disapproves	31.8	18.4
Approves	50.9	63.4
Don't know UNIVER	SITY 17.3c	18.2
Total WESTER	N C100.0	100.0
Number	2297	2827

1.1.1. Age

More women (20%) were reported being between the ages of 30 to 34 years in both 1992 and 2000 (See table 1.1). Notably, the proportion of women below 30 years old declined during the period, while for those above increased. For instance, women between 15 and 19 years old constituted 4.2 percent in 1992 and in 2000, 3.5 percent. On the other hand, those between 35 and 39 years increased from 16.8 percent in 1992 to 18.1 percent in 2000.

1.1.2. Educational attainment

Women's educational attainment levels were divided into: no education, completed primary, secondary and tertiary education. The percentage of women that never attended school, nor completed primary was reported in 1992 at 61 percent, but declined to 41 percent in 2000.

However, the proportion of those that completed primary to tertiary education rose in 2000, with those that completed primary with highest increase of 12.6 percent between periods.

1.1.3. Number of living children

In both 1992 and 2000, most women were reported having one to three children alive, with 49 percent recorded in 1992 and 55 percent in 2000. Women with four children declined to 36 percent in 2000, as opposed to 42 percent in 1992. There was no significant change in the proportion of women that were reported having no children alive, as it remain around 8 percent, in both periods.

1.1.4. Place of residence

In 1992, the majority of women (65%) were living in rural areas compared to 35 percent residing in urban areas. By 2000, the gap has been narrowed as 53 percent were reported residing in rural areas, as opposed to 47 percent in urban settings. This shows that the proportions of women reported in urban areas increased by 12 percent and declined by 13 percent for those in rural areas.

1.1.5. Health directorate

Namibia is divided into four health directorates, namely; northwest, northeast, central and south. In 1992, the majority of women (32%) were reported as being from the northeast and few from the central directorate (12%). The situation changed in 2000 as more women were reported from the south (31%) and the lowest were from the northeast (12%). This could be attributed to internal migration of women from rural areas to the city, mainly to the capital city Windhoek located in the southern directorate.

1.1.6. Discussed family planning with partner

Out of all women interviewed in 1992, about half of them were reported as having never discussed family planning with their partners. However in 2000, the situation improved as only 33 percent of women were reported as admitting to not having ever discussed family planning with partners. Discussions of family planning with partners have become widely practiced, especially among those women that discuss family planning with their partners more often from 19.4 percent in 1992 to 30.9 percent in 2000.

1.1.7. Current contraceptive user status

Current contraception status of women was sub-divided into users and non-users of contraceptives. 73 percent of women interviewed in 1992 were not using contraceptives, while the rest were using some. However in 2000, the proportion of women not using contraceptives declined to 53 percent and that of users increased to 47 percent.

1.1.8. Desire for additional children

Women were divided into three sub-categories, namely, those that want more children, those undecided and those that want no more children. In 1992, 68 percent reported wanting more children, while 26 percent did not want any more. The situation changed in 2000, as more women (58%) did not want to have anymore children in comparison to 38 percent that still wanted more.

1.1.9. Religion

The religious affiliations of women interviewed were grouped into: Roman Catholics, Protestants, other religion and no religion. The majority of women in Namibia are Christians, with Protestants constituting 69 and 71 percent in 1992 and 2000 respectively. Women belonging to the Roman Catholic Church came second and were recorded at 29 and 24 percent, in 1992 and 2000 respectively. Those that admitted to practicing no religion remained at 2.1 percent in both years.

1.1.10. Women's occupation

Over 60 percent of women interviewed in 1992 were unemployed, while the majority employed was mostly concentrated in agriculture, professionals, skilled and unskilled manual fields (around 11 percent). In 2000, 52.6 percent of women were unemployed, while out of those employed; most of them were doing skilled and unskilled manual work (18%).

1.1.11. Partner's occupation

In 1992, most women reported their partner's as employed, with the majority doing manual skilled and unskilled work (31%). In addition, 21 percent of the women do not know their partner's employment status and none mentioned that their partner is unemployed. In 2000, 36 percent of women also reported that their partner's were involved in skilled and unskilled

manual work, while 10 percent said their partner's did not work. Furthermore, only a mere 1.4 percent of women in 2000 were reported not knowing their partner's working status, as they stood at 21.9 percent in 1992.

1.1.12. Partner's approval of family planning

During both periods, more than half of the women reported that their partner approves of family planning. The figures stood at 51 and 63 percent in 1992 and 2000, respectively.

The proportion of those women whose partner's disapproves declined significantly from 31 percent in 1992 to 18 percent in 2000. A large fraction of women (less than 19%) do not know their partner's stance on the matter.

2.3 Knowledge about contraception

Table 1.2: Knowledge of contraceptive methods, per 100 women in union, in 1992 and 2000

	1992	2000
Know of any contraceptive method	0/0	9/0
Knows none	ER 9.4	TY of 1.9
Knows traditional WES	T = 0.1	CAPO
Knows modern	90.5	98.1
Total	100.0	100.0
Number	2297	2827

Table 1.2 above presents the proportion of women in union regarding their knowledge of contraceptive methods in 1992 and 2000. It shows that in both periods, over 90 percent of women know of at least one modern method of contraception, while knowledge of traditional methods was very minimal. Knowledge about traditional contraceptive methods was reported at below 1 percent in both periods. This contradicts with results found in other countries, for example in rural Uganda almost all women knew of traditional methods, such as prolonged breastfeeding and other traditional beliefs (Turner, 1991: 154).

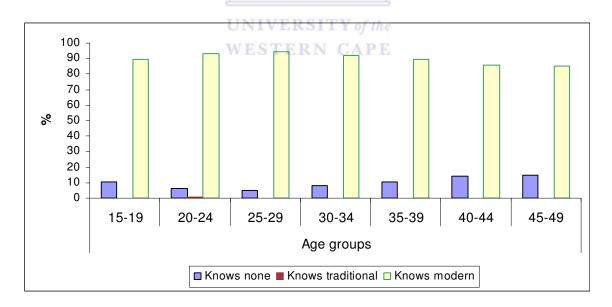
The percentage of women not knowing of any contraceptive method declined substantially, by 7.5 percent between the periods.

a) By age group

Table 1.3: Knowledge of any contraceptive method by age group, per 100 women in union, in 1992

Knowledge of any	Age groups							
contraceptive								
method	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Knows none	10.4	6.3	5.2	7.8	10.3	14.3	14.6	
Knows traditional	0.0	0.6	0.2	0.0	0.0	0.0	0.0	
Knows modern	89.6	93.2	94.5	92.2	89.7	85.7	85.4	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	96	336	422	459	387	350	247	

Figure 4.1: Knowledge of a contraceptive method by age group, per 100 women in union, in 1992



According to Table 1.3 above, in 1992 women between 25 to 29 years have relatively more knowledge regarding modern methods of contraception (95%) than those in other age groups. Those at the extreme age group 45 to 49, were reported at lowest of 85 percent. 15 percent of women aged 45 to 49 years do not know of any contraceptive method, while a

lesser percentage (5%) fall between 25 to 29 years. Proportion of women between age groups 20 to 24 and 25 to 29 years who knew about traditional methods was at 0.6 and 0.2 percent, respectively. In general younger women tend to be more exposed to information on contraception, especially modern as they are at the beginning of their childbearing period. Figure 4.1 shows a bar chart depicting the percentage of women's knowledge of a contraceptive group by age group in 1992.

Table 1.4: Knowledge of any contraceptive method by age group, per 100 women in union, in 2000

Knowledge of any	Age groups							
contraceptive								
method	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Knows none	3.1	1.6	1.0	1.8	2.2	2.1	2.5	
Knows traditional	0.0	0.0	0.0	0.0	0.0	0.0	0.3	
Knows modern	96.9	98.4	99.0	98.2	97.8	97.9	97.1	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	98	367	492	609	511	436	314	

Table 1.4 above shows that in 2000, more women aged 25 to 29 years also knew about modern methods (99%), while those younger (15-19) knew slightly less (96.9%). The proportion of women with no knowledge of contraceptive methods was lower, below 5 percent in 2000. Only a mere 0.3 percent of women aged 45 to 49 years knew about a traditional method. Women aged 25 to 34 years are usually at their prime, having acquired as much knowledge regarding modern contraceptives than younger or older women.

Figure 4.2: Knowledge of a contraceptive method by age group, per 100 in women, in 2000

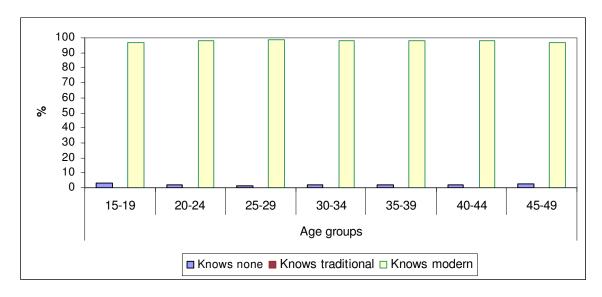


Figure 4.2 shows a bar chart illustrating the percentage of women's knowledge of a contraceptive group by age group in 2000.

b) By number of living children

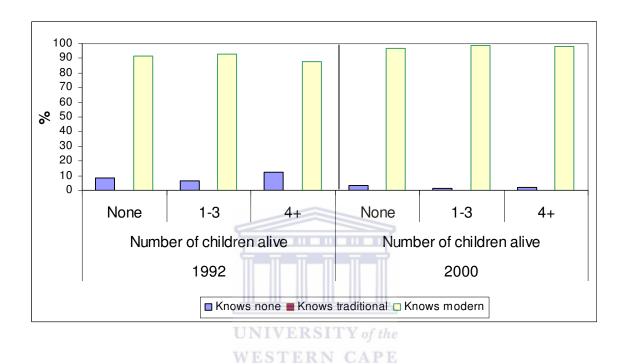
Table 1.5: Knowledge of any contraceptive method by number of living children, per 100 women in union, in 1992 and 2000

Knowledge of any		1992		2000			
contraceptive	Numb	er of child	dren alive	Number of children alive			
method	None	1-3	4+	None	1-3	4+	
Knows none	8.6	6.7	12.6	3.0	1.6	2.0	
Knows traditional	0.0	0.3	0.0	0.0	0.0	0.1	
Knows modern	91.4	93.1	87.4	97.0	98.4	97.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Number	197	1127	973	237	1564	1026	

Table 1.5 above shows that 93 percent of women with one to three children alive in 1992 know a modern method of contraception, compared to a lesser proportion of those with four or more children (87%). Of all women interviewed, only 0.3 percent of those with two to three children knew of a traditional method. In 2000, most women having or not having any living children were reported knowing about modern methods, constituting around 98 percent. A mere 0.1 percent of those with four and more children alive were the only ones

informed about traditional methods, while those with no children (3%) had no knowledge of any method.

Figure 4.3: Knowledge of a contraceptive method by number of living children, per 100 women, in 1992 and 2000



c) By educational attainment

Table 1.6: Knowledge of any contraceptive method by educational attainment, per 100 women in union, in 1992 and 2000

Knowledge of		1992				2000			
any		Education	on attainmen	t	Education attainment				
contraceptive									
method	None	Primary	Secondary	Tertiary	None	Primary	Secondary	Tertiary	
Knows none	13.9	2.7	0.0	1.6	3.5	0.8	0.3	0.8	
Knows traditional	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	
Knows modern	85.9	97.2	100.0	98.4	96.4	99.2	99.7	99.2	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number	1401	703	130	63	1170	1222	316	119	

In 1992, all women interviewed with secondary education knew of a modern method, while 86 percent did not know of any method (See Table 1.6 above). Both proportions of women with no education and secondary education's knowledge of a traditional method stood at 0.1 percent. However, in 2000 women with secondary education (99.7%) had more knowledge of modern methods, while those with no education (96.4%) had the lowest. No woman that completed any level of education was reported knowing of a traditional method. As expected, the share of uneducated women not knowing of any contraceptive method was highest at 3.5 percent, while there was no difference among those with primary and tertiary education (0.8%).

Figure 4.4: Knowledge of a contraceptive method by educational attainment, per 100 women in union, in 1992 and 2000

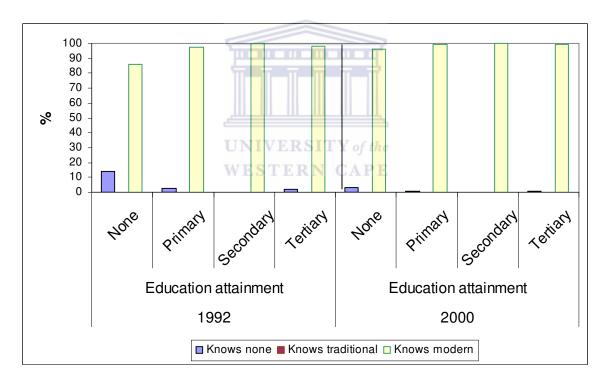


Figure 4.4 depicts a bar chart of the percentage of women's knowledge of a contraceptive by educational attainment in 1992 and 2000.

d) By desire for additional children

Table 1.7: Knowledge of any contraceptive method by desire for additional children in 1992 and 2000

		1992		2000			
Knowledge of any	Desire	for additional	children	Desire for additional children			
contraceptive method	Wants more	Undecided	Wants no more	Wants more	Undecided	Wants no more	
Knows none	10.6	12.6	7.0	2.2	9.7	1.2	
Knows traditional	0.2	0.0	0.0	0.0	0.0	0.1	
Knows modern	89.1	87.4	93.0	97.8	90.3	98.7	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Number	1100	119	512	920	113	1411	

Figure 4.5: Knowledge of a contraceptive method by desire for additional children, per 100 women in union, in 1992 and 2000

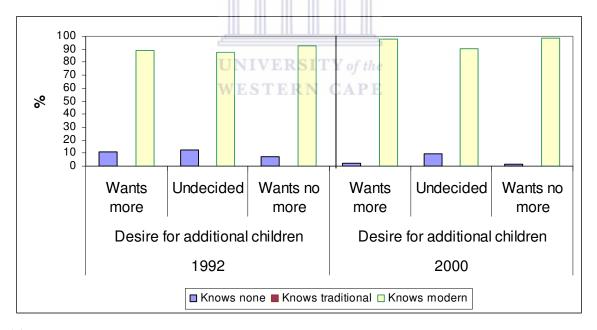


Table 1.7 and figure 4.5 shows a bar chart showing the percentage of women's knowledge of a contraceptive by desire for additional children in 1992 and 2000.

Among all women interviewed knowing a modern contraceptive method, those with no desire for additional children (93%) exceed those that want more (89.1%), while those undecided were less (87.4%). Moreover, only a proportion of women that desired more

children (0.2%) knew of a traditional method. In 2000, almost the same were prevalent with more women desiring additional children (98.7%) superseding the rest, while those unsure knew less (90.3%) about modern methods. Regarding knowledge about traditional methods, only 0.1 percent of women desiring for more children were reported.

e) By place of residence

Table 1.8: Knowledge of any contraceptive method by place of residence, per 100 women in union, in 1992 and 2000

Knowledge of any	1992	2	2000			
contraceptive	Place of re	sidence	Place of residence			
method	Urban	Rural	Urban	Rural		
Knows none	4.7	11.9	0.5	3.1		
Knows traditional	0.1	0.1	0.0	0.1		
Knows modern	95.2	88.0	99.5	96.8		
Total	100.0	100.0	100.0	100.0		
Number	811	1486	1339	1488		

Figure 4.6: Knowledge of a contraceptive method by place of residence, per 100 women in union, in 1992 and 2000

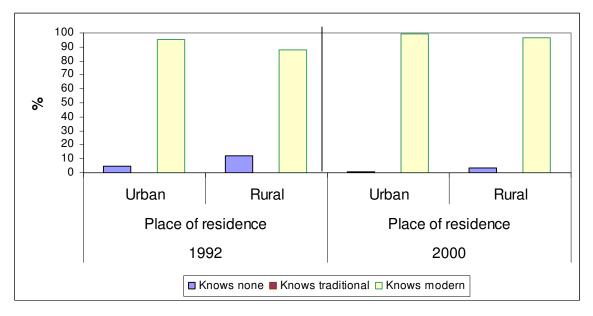


Figure 4.6 illustrates the percentage of women's knowledge of a contraceptive by place of residence in 1992 and 2000.

The majority of women residing in urban areas (95.2%) were more knowledgeable about modern contraceptive methods than their rural counterparts in 1992 and this increased to 99.5 percent in 2000 (See table 1.8 above). In 1992, women residing in rural and urban areas with knowledge of any traditional method stood at 0.1 percent. However in 2000, no women in urban areas reported knowledge of any traditional method, while the proportion of those in rural areas with knowledge remained at 0.1 percent.

A huge gap of 7.2 percent existed among those residing in both types of residences with no knowledge of contraception in 1992, but in 2000 it was reduced to 2.6 percent.

f) By health directorate

Table 1.9: Knowledge of any contraceptive method by health directorate, per 100 women in union, in 1992 and 2000

Knowledge of any contraceptive method		1992				2000				
	Health directorate				Health directorate					
	Northwest	Northeast	Central	South	Northwest	Northeast	Central	South		
Knows none	17.9	5.1	11.7	3.8	2.2	5.0	1.5	0.7		
Knows traditional	0.0	0.4	0.0	0.0	0.0	0.2	0.0	0.0		
Knows modern	82.1	94.5	88.3	96.2	97.8	94.7	98.5	99.3		
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
Number	682	724	283	608	537	419	881	990		

Figure 4.7: Knowledge of a contraceptive method by health directorate, per 100 women in union, in 1992 and 2000

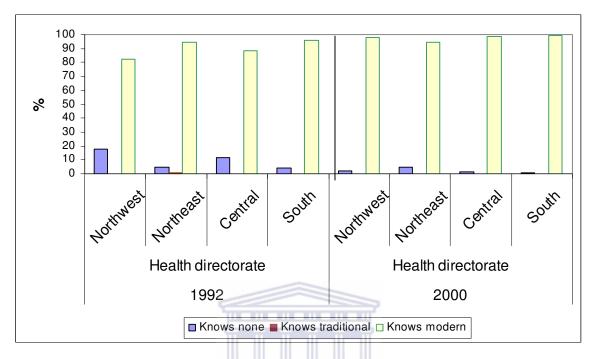


Figure 4.7 shows a bar chart of the percentage of women's knowledge of a contraceptive by place of residence in 1992 and 2000.

96.2 percent of women located in the southern directorate are more knowledgeable about modern methods, while few reside in the northwest (82%) in 1992 (See table 1.9 above). Only women residing in northeast reported knowing of traditional methods (0.4%) and this reduced to 0.2 percent in 2000. Knowledge improvement prevailed in 2000 as the higher proportion of women with no knowledge of contraceptive methods reduced to a peak of 5 percent in the northeast and was at its lowest of 0.7 percent for the south.

The southern directorate in 2000 had a higher proportion (99.3%) of women that know of modern contraceptives, while less was located in the northeast (94.7%).

g) By women's employment status

Table 1.10: Knowledge of any contraceptive method by women's employment status, per 100 women in union, in 1992 and 2000

Knowledge of any		1992	2000		
contraceptive	Emplo	yment status	Employment status		
method	No	Yes	No	Yes	
Knows none	10.9	6.5	3.0	0.3	
Knows traditional	0.1	0.1	0.1	0.0	
Knows modern	88.9	93.3	96.9	99.7	
Total	100.0	100.0	100.0	100.0	
Number	1466	825	1569	1200	

Table 1.10 above shows that the proportion of women employed with knowledge about modern contraceptives was higher than for those unemployed, recorded at 93.3 and 99.7 percent in 1992 and 2000, respectively. Regarding knowledge of traditional methods, there was no difference among all women in 1992 as both were reported at 0.1 percent, but in 2000 those employed knew of none. Unemployed women not knowing of any contraceptive method were higher during both periods, but reduced by 7.9 percent, while those employed also declined by 6.2 percent.

Figure 4.8: Knowledge of a contraceptive method by employment status, per 100 women in union, in 1992 and 2000

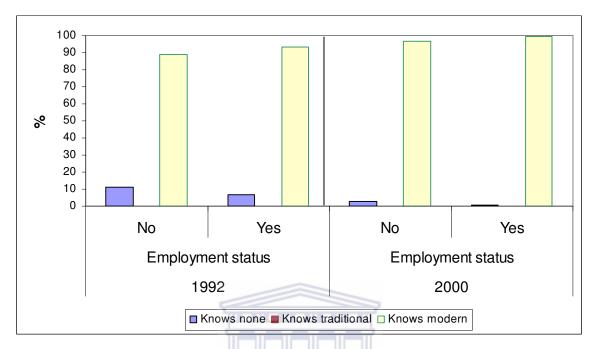


Figure 4.8 presents a bar chart depicting the percentage of women's knowledge of a contraceptive by employment status in 1992 and 2000.

h) By partner's approval of family planning

Table 1.11: Knowledge of any contraceptive method by partner's approval of family planning, per 100 women in union, in 1992 and 2000

		1992		2000			
Knowledge of any	Partners	approval of	FP	Partners approval of FP			
contraceptive			Don't			Don't	
method	Disapproves	Approves	know	Disapproves	Approves	know	
Knows none	14.1	4.2	19.4	3.5	0.8	4.1	
Knows traditional	0.0	0.3	0.0	0.0	0.1	0.0	
Knows modern	85.9	95.6	80.6	96.5	99.2	95.9	
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Number	675	1080	366	517	1778	510	

Women reported knowing of a modern contraceptive method and with partner's approving of family planning was highest and it increased by 3.6 during the 8-year period, from 95.6 to 99.2 percent (See table 1.11 above). Moreover, only those women with partner's approving

of family planning knew of a traditional method and they declined from 0.3 percent in 1992 to 0.1 percent in 2000. Of notable interest, a higher proportion of women in both periods seem not to know what their partner's stance on family planning is. For instance, those that knew of a modern method, but do not know whether their partner's approve or disapprove of family planning rose from 80.6 percent in 1992 to 95.9 percent in 2000.

Figure 4.9: Knowledge of a contraceptive method by partner's approval of family planning, per 100 women in union, in 1992 and 2000

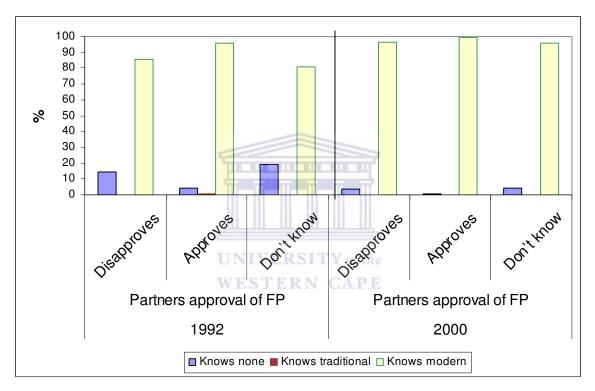


Figure 4.9 shows a bar chart of the percentage of women's knowledge of a contraceptive by partner's approval of family planning in 1992 and 2000.

i) By discussed family planning with partner

Table 1.12: Knowledge of any contraceptive method by discussed family planning with partner, per 100 women in union, in 1992 and 2000

		1992		2000			
Knowledge of any	Discus	sed FP wit	h partner	Discussed FP with partner			
contraceptive method	Never	Once or twice	More often	Never	Once or twice	More often	
Knows none	15.7	3.3	5.4	3.3	2.0	0.3	
Knows traditional	0.0	0.2	0.5	0.1	0.0	0.0	
Knows modern	84.3	96.5	94.2	96.6	98.0	99.7	
Total	100.0	100.0	100.1	100.0	100.0	100.0	
Number	1078	634	411	917	1018	867	

Most women that know of modern contraceptives (96.5%) and discussed family planning once or twice with their partners were highest in 1992, while those that never discussed stood at 84.3 percent (See table 1.12 above). However in 2000, those knowing a modern method and discuss family planning most of the time with their partners were higher at 99.7 percent. The proportion of women with no knowledge of contraceptives and never discussed them with partners declined considerably by 12.4 percent, between the periods.

Figure 4.10: Knowledge of a contraceptive method by discussed family planning with partner, per 100 women in union, in 1992 and 2000

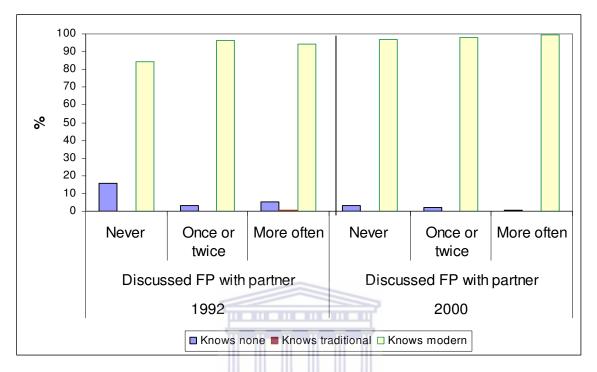


Figure 4.10 depicts a bar chart of the percentage of women's knowledge of a contraceptive by discussed family planning with partner in 1992 and 2000.

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j) By partner's educational attainment

Table 1.13: Knowledge of any contraceptive method by partner's educational attainment, per 100 women in union, in 1992

Knowledge of any	1992							
contraceptive	Partner's educational attainment							
method	None	Primary	Secondary	Tertiary	Don't know			
Knows none	14.7	2.9	0.0	1.3	14.7			
Knows traditional	0.2	0.1	0.0	0.0	0.0			
Knows modern	85.1	97.0	100.0	98.7	85.3			
Total	100.0	100.0	100.0	100.0	100.0			
Number	1235	726	166	75	75			

Table 1.14: Knowledge of any contraceptive method by partner's educational attainment, per 100 women in union, in 2000

Knowledge of any contraceptive	2000							
	Partner's educational attainment							
method	None	Primary	Secondary	Tertiary	Don't know			
Knows none	3.0	1.4	0.7	0.7	0.0			
Knows traditional	0.1	0.0	0.0	0.0	0.0			
Knows modern	96.9	98.6	99.3	99.3	100.0			
Total	100.0	100.0	100.0	100.0	100.0			
Number	1119	1063	401	141	79			

In 1992, all the women interviewed that knew of a modern contraceptive method has partners that completed secondary education (See table 1.13 below). However, in 2000 those with knowledge of modern methods did not know of their partners educational levels. Only a proportion of women whose partners have never completed school knew of a traditional method (0.1%) in 2000 (See table 3.13 below). In 1992 only those women with uneducated partners and those with partners with primary education constituted 0.2 and 0.1 percent, respectively.

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Figure 4.11: Knowledge of a contraceptive method by partner's educational attainment, per 100 women in union, in 1992 and 2000

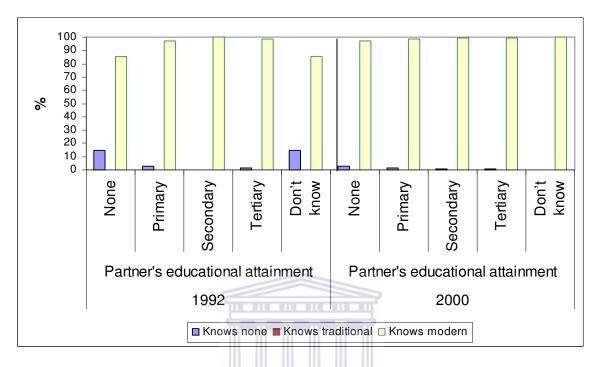


Figure 4.11 shows a bar chart illustrating the percentage of women's knowledge of a contraceptive by partner's educational attainment in 1992 and 2000.

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k) By partner's employment status

Table 1.15: Knowledge of any contraceptive method by partner's employment status, per 100 women in union, in 1992 and 2000

		1992		2000			
Knowledge of any	Partn	er's work	x status	Partner's work status			
contraceptive	Didn't Don't				Didn't	Don't	
method	Worked	work	know	Worked	ed work kn		
Knows none	8.4	0.0	13.8	5.9	1.3	2.6	
Knows traditional	0.1	0.0	0.0	0.3	0.0	0.0	
Knows modern	91.5	0.0	86.3	93.7	98.7	97.4	
Total	100.0	0.0	100.0	100.0	100.0	100.0	
Number	1712	0	480	2431	286	38	

In 1992, no women reported that their partner is unemployed, but in 2000 98.7 percent stated it (See table 1.14 below). In addition, there has been a rise in the proportion of women

knowing about modern contraception but don't know their partners employment status, increasing by 11.1% between 1992 and 2000. On the other hand, the proportion of women not knowledgeable about contraception and clueless of their partners work status decreased tremendously from 13.8 percent in 1992 to 2.6 percent in 2000.

Figure 4.12: Knowledge of a contraceptive method by partner's work status, per 100 women in union, in 1992 and 2000

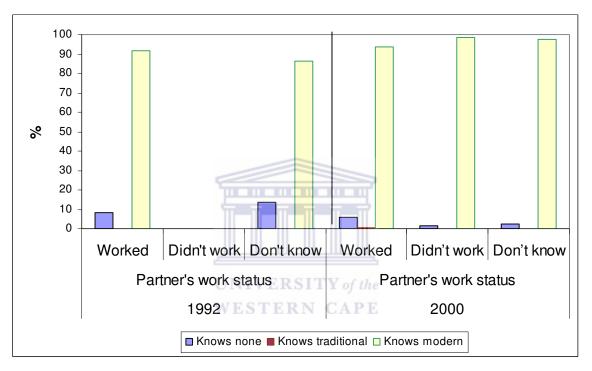


Figure 4.12 shows a bar chart of the percentage of women's knowledge of a contraceptive by partner's work status in 1992 and 2000.

2.4 Use of contraception

This section tends to explore the profiles of women in union between 15 and 49 years, according to their contraceptive behaviour in Namibia in 1992 and 2000. Proportions of women have been subdivided into current users of various contraceptive methods and non current users with reasons and without reasons not to use contraceptives.

The various contraceptive methods includes: the pill, IUD, injections, diaphragm/foam/jelly, male and female condom, female and male sterilisation, periodic abstinence, withdrawal, herbs and others. Non user's main reasons included sterility,

pregnancy and desire for a child within next 2 years. Moreover, those without a reason not to use contraceptives (unmet need population) were also included.

Current use of contraception among users and non-users was then associated to the following characteristics: age group, educational attainment, health directorate, place of residence, number of living children, discussion of family planning with partner, partner's approval of family planning, women's occupation and desire for additional children.

a) By age group

Table 2.1: Namibia 1992. Contraception: Current use by age, per 100 women in union

	1992								
		Age group							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	All ages	Number
Pill	7.4	9.7	9.5	11.4	7.0	3.7	2.8	7.9	179
IUD	0.0	1.1	2.5	2.5	2.1	1.2	0.9	1.8	40
Injections	7.4	10.2	10.0	7.1	8.5	3.7	0.9	7.3	166
Diaphragm/Foam/Jelly	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1
Condom	0.0	0.0	0.2	0.7	0.0	0.3	0.0	0.2	5
Female sterilisation	0.0	1.1	1.8	4.6	9.3	11.8	17.4	6.5	147
Male sterilisation	0.0	0.0	0.0	0.2	0.0	0.0	1.4	0.2	4
Periodic abstinence	0.0	0.3	1.1	0.9	1.3	0.3	0.0	0.7	16
Withdrawal	0.0	0.0	0.2	0.0	0.5	0.6	0.5	0.3	6
Herbs	4.2	5.1	3.0	1.8	1.6	0.3	1.4	2.3	53
Total Users	19.0	27.5	28.3	29.2	30.6	21.9	25.3	27.2	617
No sexual intercourse	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Sterile	0.0	1.7	3.0	5.9	11.6	19.0	26.6	9.4	214
Want a child within 2 yrs	29.5	30.1	31.8	28.4	25.8	28.5	18.3	28.0	637
Pregnant	20.0	17.9	13.4	13.0	10.6	7.2	2.8	11.9	270
No reasons	31.6	22.7	23.4	23.3	21.4	23.3	27.1	23.6	538
Total Non-users	81.1	72.4	71.6	70.6	69.4	78.0	74.8	72.9	1659
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Population size	95	352	440	437	387	347	218	2276	2276

Table 2.2: Namibia 2000. Contraception: Current use by age, per 100 women in union

					20	00			
		Age group							
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	All ages	Number
Pill	7.5	8.8	7.8	11.1	9.3	6.0	4.0	8.2	251
IUD	0.0	0.3	0.4	1.3	1.8	1.3	0.9	1.0	31
Injections	21.7	25.4	26.7	20.0	17.6	10.2	4.9	18.3	557
Condom	4.7	5.0	7.4	4.3	2.7	5.6	3.1	4.7	143
Female sterilisation	0.9	0.8	2.0	7.0	12.3	17.7	25.3	9.8	297
Male sterilisation	0.0	0.3	0.6	0.0	1.4	1.0	1.2	0.7	21
Periodic abstinence	0.0	0.0	0.2	0.0	0.5	0.0	0.6	0.2	6
Withdrawal	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.1	2
Female condom	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.1	2
Other	2.8	0.5	0.6	0.7	0.9	0.6	0.3	0.7	22
Total Users	37.6	41.4	45.9	44.4	46.7	42.6	40.3	43.8	1332
No sexual intercourse	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Sterile	0.9	1.3	3.0	8.6	15.3	22.5	31.2	12.3	374
Want a child within 2 yrs	17.9	16.1	15.4	15.7	11.4	10.4	5.2	13.0	397
Pregnant	17.0	14.4	11.2	11.1	5.5	2.7	0.9	8.3	253
No reasons	26.4	27.0	24.6	20.1	21.0	21.7	22.2	22.6	688
Total Non-users	62.2	58.8	54.2	55.5	53.2	57.3	59.5	56.2	1712
		WES	LEKN	CAP					
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Population size	106	397	501	675	561	480	324	3044	3044

Table 2.1 and 2.2 above shows the proportions of women currently using and not using contraceptives by age in 1992 and 2000. In 1992, 27 percent of women aged 15 to 49 years old were current users of contraceptives. The pill was the most utilised method of contraception and closely followed by injections (7.9% and 7.3%, respectively). Women between 30 and 34 years old were the major users of the pill (11.4%), while injections were more popular by women in their early 20s (10.2%). Herbs were quite utilised in 1992, especially among women between 20 and 24 years old (5%). The least utilised methods were condoms and male sterilisation, used by a mere 0.2 percent of women.

The proportion of non-users of contraceptives in 1992 was reported at about 73 percent among women 15 to 49 years old. 28 percent of women had a desire for an additional child within 2 years, this is highly common among women in their 20s (On average, 31%). 24 percent of women constituted the unmet need population. Out of all younger women reportedly not using contraceptives, the majority (31.6%) were without a reason. Moreover, the proportion of pregnant women was reported at about 12 percent, with high figures also reported among younger women (20%).

Ten years later, the gap between users (44%) and non contraceptive users (56%) was lessened, respectively, among women of all ages. Injections became the most used mode of contraceptives (18%) among women of all ages, followed by female sterilisation (9.8%). Injections were more preferred as they are considered as more effective and easy to use and have low likelihood failure rates than other methods, such as the pill (Ulrich, 1994: 12 & Bairagi and Rahman, 1996: 21). Female sterilisation was reported at a rapid increase of double figures among women aged 35 years and above. Cases of use of female condoms were reported in 2000, unlike in 1992 and were utilised by 0.3 percent of women in their early 20s and by 0.2 percent of those in their late 30s.

Regarding the non-users of contraceptives in 2000, there was no significant change among those who provided no reasons (unmet need population) as they remained at about 23 percent. Desire for additional children seems to have become infamous among women, as the proportion reduced by two-fold to 13 percent, in comparison with 28 percent in 1992.

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b) By educational attainment

Table 2.3: Namibia 1992 and 2000. Contraception: Current use by educational attainment, per 100 women in union

None Primary Pill 3.8 10.3 IUD 0.2 2.5 Injections 5.5 10.9 Diaphragm/Foam/Jelly 0.0 0.1 Condom 0.0 0.4 Female 6.9 sterilisation 0.0 0.3 Female 0.0 0.0 condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 10.0 10.0		1992		2000				
Pill 3.8 10.3 IUD 0.2 2.5 Injections 5.5 10.9 Diaphragm/Foam/Jelly 0.0 0.1 Condom 0.0 0.4 Female 5.5 10.9 Sterilisation 0.0 0.4 Female 0.0 0.0 Sterilisation 0.0 0.0 Periodic 0.0 0.0 abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 26.1 23.2	ucational atta	ional attainment			Edu	cational atta	inment	
IUD 0.2 2.5 Injections 5.5 10.9 Diaphragm/ Foam/Jelly 0.0 0.1 Condom 0.0 0.4 Female sterilisation 4.9 6.9 Male sterilisation 0.0 0.3 Female condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	Secondary	econdary Tertiary	Number	None	Primary	Secondary	Tertiary	Number
Injections	21.6	21.6 26.3	179	4.9	8.8	14.5	14.4	251
Diaphragm/ Foam/Jelly 0.0 0.1 Condom Female sterilisation 4.9 6.9 Male sterilisation 0.0 0.3 Female condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 0.0 0.0	9.2	9.2 5.3	40	0.3	0.5	4.1	1.0	31
Condom 0.0 0.4 Female sterilisation 4.9 6.9 Male sterilisation 0.0 0.3 Female condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	6.5	6.5 3.9	166	15.9	22.0	15.6	10.3	557
Female sterilisation 4.9 6.9 Male sterilisation 0.0 0.3 Female condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	0.0	0.0	1	0.0	0.0	0.0	0.0	0
Male sterilisation 0.0 0.3 Female condom 0.0 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 0.0 0.0	1.3		5	3.2	4.8	8.2	7.5	143
Female condom 0.0 0.0 Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	13.1		147	8.9	9.3	11.6	16.4	297
Periodic abstinence 0.8 0.4 Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 20.0 20.0	0.7	0.7	4	0.1	0.3	2.9	3.4	21
Withdrawal 0.2 0.1 Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 20.1 23.2	0.0	0.0	0	0.0	0.1	0.0	0.0	2
Herbs 3.4 1.2 Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	0.0	0.0	16	0.1	0.1	0.3	1.4	6
Other 0.0 0.0 Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 20.0 20.0	0.0	0.0 2.6	6	0.1	0.1	0.0	0.0	2
Total Users 18.8 33.1 No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 20.1 23.2	0.0	0.0	53	0.0	0.0	0.0	0.0	0
No sexual intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non-	UN 0.0	UN 0.0 ERS 0.0	Y of the0	1.1	0.7	0.0	0.0	22
intercourse 0.0 0.0 Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 26.1 23.2	52.4	52.4 57.8	CAP 617	34.6	46.7	57.2	54.4	1332
Sterile 8.6 8.5 Want a child within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 26.1 23.2	0.0	0.0	0	0.0	0.0	0.0	0.0	0
within 2 yrs 33.8 22.8 Pregnant 12.6 12.3 No reasons 26.1 23.2 Total Non- 26.1 23.2	15.7		214	11.6	11.0	15.6	21.2	374
No reasons 26.1 23.2 Total Non-	11.8	11.8	637	15.1	12.6	8.4	12.3	397
Total Non-	8.5	8.5 2.6	270	9.0	8.8	6.9	2.1	253
	11.8	11.8 9.2	538	29.9	20.9	12.1	6.8	688
users 81.1 66.8	47.8	47.8 42.0	1659	65.6	53.3	43.0	42.4	1712
Total 100.0 100.0	100.0	100.0 100.0		100.0	100.0	100.0	100.0	
Population size 1297 750	153		2276	1172	1347	379	146	3044

Table 2.3 above presents the proportions of contraceptive users and non-users by level of educational attainment in 1992 and 2000. Overall, the majority of women reported as users of contraceptives were educated. For instance, those with tertiary education were reported at 58 percent in 1992, but reduced to 54 percent in 2000. However, the proportion of uneducated users doubled from 19 percent in 1992 to 35 percent in 2000.

In 1992, the share of women with secondary and tertiary education, were mostly using the pill (22% and 26%, respectively). In addition, uneducated women (6%) and those with primary education (10.9%) were using injections. In 2000, the percentage of women with tertiary education, using the pill was reported at 14 percent, while for those with lower education qualifications and those with none, used injections, at 22% and 16 percent, respectively.

With regard to uneducated non-users, those with a desire for additional children within 2 years were at 34 percent in 1992, but this reduced by half in 2000. The proportion of those uneducated women without a reason not to use increased from 26 percent to 30 percent between the periods. However, the unmet population remained at around 12 percent in both 1992 and 2000.

c) By health directorate

Table 2.4: Namibia 1992 and 2000. Contraception: Current use by health directorate, per 100 women in union

			1992					2000		
		Не	ealth direct	orate Health directorate						
	North west	North east	Central	South	Number	North west	North east	Central	South	Number
Pill	2.9	5.9	9.6	13.4	179	4.8	9.4	10.9	7.1	251
IUD	0.8	0.1	1.0	4.5	40	1.7	0.3	1.0	1.0	31
Injections Diaphragm/Foam/	0.7	5.5	13.4	12.4	166	10.5	26.0	20.0	17.7	557
Jelly	0.0	0.0	0.0	0.1	1	0.0	0.0	0.0	0.0	0
Condom	0.3	0.0	0.0	0.4	5	10.7	0.3	6.0	2.4	143
Female sterilisation	3.4	1.6	6.8	13.7	147	4.5	2.0	9.9	14.7	297
Male sterilisation	0.0	0.0	0.0	0.6	4	0.0	0.0	1.4	0.6	21
Female condom	0.0	0.0	0.0	0.0	0	0.0	0.0	0.1	0.1	2
Periodic abstinence	1.1	1.0	0.3	0.1	16	0.0	0.3	0.4	0.1	6
Withdrawal	0.3	0.3	0.0	0.3	6	0.2	0.0	0.0	0.1	2
Herbs	0.0	7.8	0.0	0.0	53	0.0	0.0	0.0	0.0	0
Other	0.0	0.0	0.0	0.0	0	0.0	4.6	0.4	0.0	22
Total Users	9.5	22.2	31.1	45.5	617	32.4	42.9	50.1	43.8	1332
No sexual		WI	STER	N CA	PE					
intercourse	0.0	0.0	0.0	0.0	0	0.0	0.0	0.0	0.0	0
Sterile Want a child within 2	5.2	5.3	12.3	15.9	214	6.8	5.6	12.5	16.9	374
yrs	38.2	37.2	20.5	13.0	637	15.3	21.1	12.4	9.8	397
Pregnant	16.3	11.8	13.7	7.2	270	12.2	8.1	7.9	6.9	253
No reasons	30.7	23.3	22.3	18.2	538	33.3	22.4	17.1	22.6	688
Total Non-users	90.4	77.6	68.8	54.3	1659	67.6	57.2	49.9	56.2	1712
Total	100.0	100.0	100.0	100.0		100.0	100.0	100.0	100.0	
Population size	615	677	292	692	2276	516	393	994	1141	3044

In 1992, a higher proportion of women using contraceptives were reported to be residing in the southern health directorate (46%), while few were from the northwest (10%). On the contrary, half of the women were from the central directorate, while those from the northwest increased to 32 percent in 2000 (See table 2.4 above). In 1992, most of the contraceptive users residing in the south were mainly using female sterilisation (13.7%), in

central region 13.4 percent used injections and from the northeast, 7.8 percent mainly used herbs.

In 2000, the proportion of those in northwest used mainly the male condom (10.7%), those in northeast, central and south used injections (26, 20 and 18 percent, respectively). The female condom was utilised by a mere 0.1 percent of women staying in the southern directorate in 2000. This shows that the female condom was only utilised in the city (Windhoek), as it falls within the southern directorate.

Regarding non-users of contraception, the northwestern health directorate reported the highest proportion of women (90 %) in 1992, but it declined to 68 percent in 2000. The risk of unwanted pregnancies was relatively high in all the directorates as the unmet need population ranged between 17 and 33 percent. The proportion of women without a reason not to use contraceptives was much higher in the northwest area and it increased from 31

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percent in 1992 to 33 percent in 2000.

62

d) By place of residence

Table 2.5: Namibia 1992 and 2000. Contraception: Current use by place of residence, per 100 women in union

		1992			2000	
	Pl	ace of resi	idence	Pla	ice of resi	dence
	Urban	Rural	Number	Urban	Rural	Number
Pill	12.8	4.6	179	9.2	7.3	251
IUD	3.3	0.7	40	1.4	0.6	31
Injections	11.5	4.5	166	19.0	17.6	557
Diaphragm/Foam/Jelly	0.1	0.0	1	0.0	0.0	0
Condom	0.4	0.1	5	5.3	4.1	143
Female sterilisation	10.6	3.7	147	11.6	7.9	297
Male sterilisation	0.4	0.0	4	1.0	0.4	21
Female condom	0.0	0.0	0	0.1	0.0	2
Periodic abstinence	0.7	0.7	16	0.3	0.1	6
Withdrawal	0.3	0.2	6	0.1	0.0	2
Herbs	0.3	3.6	53	0.0	0.0	0
Other	0.0	0.0	0	0.1	1.3	22
Total Users	40.4	18.1	617	48.1	39.3	1332
		UNIVI	ERSITY	f the		
No sexual intercourse	0.0	W 0.0 T	ERN CA	0.0	0.0	0
Sterile Want a child within 2	13.5	6.7	214	13.7	10.8	374
yrs	18.8	34.1	637	11.7	14.4	397
Pregnant	9.4	13.5	270	7.0	9.6	253
No reasons	17.8	27.5	538	19.3	25.9	688
Total Non-users	59.5	81.8	1659	51.7	60.7	1712
Total	100.0	100.0		100.0	100.0	
Population size	905	1371	2276	1541	1503	3044

Table 2.5 above shows the proportion of women users and non-users of contraceptives by place of residence in 1992 and 2000. In 1992, 40% of the females residing in urban areas were users compared to only 18% in rural areas. In 2000, the gap was lessened as figures were reported at 48 and 39 percent in urban and rural areas, respectively. In 1992, the pill was the most utilised of all contraceptive methods in urban area, used by a proportion of 13 percent, followed by female sterilisation and injections at 12 percent each. In addition, the pill and injections were most popular in rural areas, utilised by 5 percent of women.

On the other hand, in 2000 injections were reported as mostly used in both urban and rural areas, used by a proportion of 19 and 18 percent of women, respectively. The few cases of usage of the female condom (0.1%) were reported in urban area. With respect to non-users of contraceptives, proportions of rural women were reported at 82 percent in 1992 and at 61 percent in 2000. Of all the reasons given for the non-use of contraceptives, there has been a notable decline by half in the proportion of women residing in rural areas desiring another child, from 34 percent in 1992 to 14% in 2000.

e) By number of children alive

Table 2.6: Namibia 1992 and 2000. Contraception: Current use by number of children alive, per 100 women in union

		1	992				2000	
	Nu	mber of	childre	n alive	N	umber of	f childre	n alive
	None	1-3	4+	Number	None	1-3	4+	Number
Pill	5.2	9.7	6.0	179	5.6	9.6	6.7	251
IUD	0.5	2.2	1.5	40	0.0	1.3	0.7	31
Injections	1.4	9.1	6.3	166	6.0	20.7	17.5	557
Diaphragm/Foam/Jelly	0.0	- 0.1	0.0	ITY of th	0.0	0.0	0.0	0
Condom	0.0	0.3	0.1	5	7.5	5.0	3.5	143
Female sterilisation	1.4	5.4	9.1	147	2.2	7.8	14.7	297
Male sterilisation	0.0	0.3	0.1	4	0.0	1.0	0.4	21
Female condom	0.0	0.0	0.0	0	0.0	0.1	0.1	2
Periodic abstinence	0.5	0.8	0.7	16	0.0	0.2	0.3	6
Withdrawal	0.0	0.3	0.3	6	0.0	0.1	0.0	2
Herbs	0.0	3.0	2.0	53	0.0	0.0	0.0	0
Other	0.0	0.0	0.0	0	0.0	0.6	1.0	22
Total Users	9.0	31.2	26.1	617	21.3	46.4	44.9	1332
No sexual intercourse	0.0	0.0	0.0	0	0.0	0.0	0.0	0
Sterile	5.2	7.1	13.4	214	5.6	10.4	17.0	374
Want a child within 2								
yrs	53.8	27.5	22.5	637	31.5	14.5	6.1	397
Pregnant	16.5	12.8	9.5	270	19.9	7.8	6.2	253
No reasons	15.6	21.4	28.5	538	21.7	20.8	25.8	688
Total Non-users	91.1	68.8	73.9	1659	78.7	53.5	55.1	1712
Total	100.0	100.0	100.0		100.0	100.0	100.0	
Population size	212	1170	894	2276	267	1710	1067	3044

Between 1992 and 2000, women users of contraceptives with and without living children were on an increase, with a three-fold increase reported among those women without living children (See table 2.6 above). In 1992, among proportions of women with 1 to 3 living children and those with no children alive, most of them were on the pill (9.7 and 5.2%, respectively). Moreover, among those with 4 or more living children, female sterilisation was common method (9.1%). In 2000, injections were widely used by 21 percent of women with 1 to 3 children and by 18 percent of those with 4 and more children. In addition, the proportion of those with no living children was mostly utilising male condoms (7.5%).

There has been a reduction in the overall proportion of women non contraceptive users with and with no living children between 1992 and 2000. For instance, those non-users with many children reportedly declined from 74 percent in 1992 to 55 percent in 2000. A notable change was experienced in the percentage of women who wanted a child within 2 years with 4 and more children as it decreased tremendously to 6 percent in 2000, from 23 percent in 1992.

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f) By discussion of family planning with partner

Table 2.7: Namibia 1992 and 2000. Contraception: Current use by discussion of family planning with partner, per 100 women in union

		19	92			20	000	
	Γ	Discussed FI	with par	tner	Γ	Discussed F	P with par	rtner
		Once or	More			Once or	More	
	Never	twice	often	Number	Never	twice	often	Number
Pill	5.0	11.8	13.7	179	5.9	7.7	11.0	251
IUD	1.1	2.2	3.5	40	0.6	0.9	1.5	31
Injections	6.7	9.3	9.9	166	14.1	19.5	21.2	557
Diaphragm/Foam/Jelly	0.1	0.0	0.0	1	0.0	0.0	0.0	0
Condom	0.0	0.8	0.0	5	3.3	4.8	5.9	143
Female sterilisation	0.0	0.0	0.0	147	10.4	9.0	9.9	297
Male sterilisation	0.0	0.0	0.0	4	1.0	0.6	0.5	21
Female condom	0.0	0.0	0.0	0	0.1	0.1	0.0	2
Periodic abstinence	0.4	1.0	1.4	16	0.3	0.0	0.3	6
Withdrawal	0.1	0.6	0.2	6	0.0	0.2	0.0	2
Herbs	2.1	3.7	2.4	53	0.0	0.0	0.0	0
Other	0.0	0.0	0.0	0	0.6	0.7	0.8	22
Total Users	15.5	29.4	31.1	617	36.3	43.5	51.1	1332
		UNIVE	KSIIY	of the				
No sexual intercourse	0.0	W F _{0.0} T E	R 10.0 C	PF_0	0.0	0.0	0.0	0
Sterile	4.5	1.6	2.8	214	14.3	11.2	11.5	374
Want a child within 2								
yrs	38.4	26.0	29.0	637	16.0	12.9	10.4	397
Pregnant	13.7	14.2	13.2	270	7.6	9.6	7.3	253
No reasons	27.9	28.8	23.8	538	25.6	22.7	19.7	688
Total Non-users	84.5	70.6	68.8	1659	63.5	56.4	48.9	1712
Total	100.0	100.0	100.0		100.0	100.0	100.0	
Population size	914	626	424	2276	930	1113	972	3044

Table 2.7 above presents the proportions of women using and not using contraceptives by discussion of family planning with partner in 1992 and 2000. The share of women users of contraceptives that never discussed family planning with their partner increased between 1992 and 2000. Those women using contraceptives who discussed family planning more often with their partner have increased from 31 percent in 1992 to 51 percent in 2000. Those that never discussed contraceptives with their partner doubled between the periods. In 1992,

the highest proportion of women that discussed family planning with their partner was mostly on the pill (12.5% on average). However, for the fraction of those that has never discussed family planning with their partner's injections was the primary method of utilisation (6.7%). Ten years later, injections were popular, reportedly used by 14% of those that has never discussed; 20 % that discuss sometimes and 21 % that discusses family planning more often with partners.

The proportion of women non-users was more prevalent in 1992 than in 2000, as it exceeded 60 percent with those that never discussed family planning with partner's topping 85 percent. Conversely, in 2000 those non-users that never discussed family planning with their partner have constituted 64 percent. Non-users without a reason not to use contraceptives declined relatively between the periods, with the greater decline (14%) attributed to those that discussed family planning with partners a couple of times.



g) By partner's approval of family planning

Table 2.8: Namibia 1992 and 2000. Contraception: Current use by partner's approval of family planning, per 100 women in union

		1992				2000)	
	Pa	rtner approv			Partner approves of FP			
	Disapproves	Approves	Don't know	Number	Disapproves	Approves	Don't know	Number
Pill	3.5	14.8	1.0	179	4.3	10.3	4.4	251
IUD	0.5	3.1	1.3	40	0.4	1.4	0.4	31
Injections Diaphragm/Foam/	4.0	12.2	3.3	166	8.8	21.5	16.2	557
Jelly	0.0	0.1	0.0	1	0.0	0.0	0.0	0
Condom	0.2	0.4	0.0	5	3.7	5.1	3.8	143
Female sterilisation	0.0	0.0	0.0	147	7.9	10.6	8.4	297
Male sterilisation	0.0	0.0	0.0	4	0.0	1.0	0.2	21
Female condom	0.0	0.0	0.0	0	0.0	0.1	0.0	2
Periodic abstinence	0.5	1.0	1.0	16	0.2	0.2	0.2	6
Withdrawal	0.2	0.4	0.3	6	0.4	0.0	0.0	2
Herbs	1.8	2.7	4.3	53	0.0	0.0	0.0	0
Other	0.0	0.0	0.0	0	1.5	0.5	1.0	22
Total Users	10.7	34.7	11.2	617	27.2	50.7	34.6	1332
No sexual intercourse	0.0	W 0.0 T	0.0	CARE	0.0	0.0	0.0	0
Sterile Want a child within	3.4	2.5	5.3	214	11.2	12.9	10.8	374
2 yrs	45.4	24.9	31.0	637	21.3	10.3	15.2	397
Pregnant	14.4	12.8	15.5	270	12.0	7.3	8.0	253
No reasons	26.2	25.2	37.0	538	28.3	18.8	31.4	688
Total Non-users	89.4	65.4	88.8	1659	72.8	49.3	65.4	1712
Total	100.0	100.0	100.0		100.0	100.0	100.0	
Population size	623	1036	303	2276	534	1985	500	3044

Table 2.8 above shows that of the proportion of women using contraceptives, those that had partner's approval of family planning was the highest and increased between 1992 ad 2000 (From 35% to 51%). According to the methods of contraception in 1992, the share of women with partner's approval of family planning was reportedly higher among those on the pill (15%). On the other hand those with disapproving partner and those with no clue of their partner's stance relied on injections and they stood at 4 and 3 percent, respectively.

In contrast, 2000 was a year whereby injections were common despite the partner's approval status and for those with partner's approval doubled to 22% from 12 %.

Regarding the proportion of non-users, the majority was those that had partner's disapproving of family planning and they declined from 89 percent in 1992 to 73 percent in 2000. Partner's approval of family planning seems to be a pertinent component as the figures for the proportion of those women that did not utilise contraceptives due to sterility, fluctuated from 2.4 percent in 1992 to 12.9 percent in 2000.

h) By women's occupation

Table 2.9: Namibia 1992. Contraception: Current use by women's occupation, per 100 women in union

				1992			
			Wom	en's occupatio	n		
	Never worked	Prof/tech/ manage/cleric	Sales and services	Agriculture	Skilled and unskilled manual	Don't	Number
Pill	6.6	14.8	14.6	8.5	4.2	0.0	177
IUD	0.8	4.8	2.4	3.8	0.8	0.0	40
Injections	5.9	UNI9.0ERSI	TY17,1 the	12.3	5.9	16.7	166
Diaphragm/Foam/Jelly	0.1	W = 0.0	0.0pE	0.0	0.0	0.0	1
Condom	0.1	0.3	2.4	0.0	0.4	0.0	5
Female sterilisation	5.5	9.7	14.6	7.3	5.5	16.7	147
Male sterilisation	0.1	1.0	0.0	0.0	0.0	0.0	4
Periodic abstinence	0.6	1.0	0.0	0.4	1.3	0.0	16
Withdrawal	0.1	1.3	0.0	0.0	0.0	0.0	6
Herbs	3.1	0.6	0.0	0.4	2.5	0.0	53
Total Users	22.9	42.5	51.1	32.7	20.6	33.4	615
No sexual intercourse	0.0	0.0	0.0	0.0	0.0	0.0	0
Sterile Want a child within 2	8.8	12.3	14.6	10.0	8.0	16.7	214
yrs	30.0	21.3	9.8	23.1	34.0	16.7	637
Pregnant	13.1	9.4	4.9	9.2	11.3	16.7	270
No reasons	25.1	14.5	19.5	25.0	26.1	16.7	538
Total Non-users	77.0	57.5	48.8	67.3	79.4	66.8	1659
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Population size	1416	310	41	260	238	6	2274

Table 2.10: Namibia 2000. Contraception: Current use by women's occupation, per 100 women in union

			200	0			
			Women's od	ccupation			
	Never worked	Prof/tech/ manage/cleric	Sales and services	Agriculture	Skilled and unskilled manual	Don't know	Number
Pill	7.9	13.0	7.8	3.3	5.6	14.3	251
IUD	0.5	2.8	2.0	0.8	0.2	0.0	31
Injections	17.7	14.2	20.7	23.3	21.7	14.3	557
Diaphragm/Foam/Jelly	0.0	0.0	0.0	0.0	0.0	0.0	0
Condom	4.9	6.5	5.1	0.8	3.2	0.0	143
Female sterilisation	7.0	15.8	9.4	1.7	12.7	28.6	297
Male sterilization	0.5	2.1	0.4	0.0	0.0	0.0	21
Female condom	0.1	0.0	0.0	0.0	0.2	0.0	2
Periodic abstinence	0.1	0.4	0.0	0.8	0.2	0.0	6
Withdrawal	0.1	0.0	0.0	0.0	0.0	0.0	2
Herbs	0.0	0.0	0.0	0.0	0.0	0.0	0
Other	0.9	0.0	0.4	4.2	0.5	0.0	22
Total Users	39.7	54.8	45.8	34.9	44.3	57.2	1332
		UNIVERSI	TY of the				
No sexual intercourse	0.0	WESOOERN	0.0	0.0	0.0	0.0	0
Sterile	10.2	18.8	10.9	2.5	13.9	28.6	374
Want a child within 2 yrs	14.1	10.9	12.9	18.3	11.6	0.0	397
Pregnant	9.6	3.9	10.2	13.3	7.4	14.3	253
No reasons	26.3	11.8	20.3	30.8	22.8	0.0	688
Total Non-users	60.2	45.4	54.3	64.9	55.7	42.9	1712
Total	100.0	100.0	100.0	100.0	100.0	100.0	
Population size	1513	570	256	120	567	7	3044

Table 2.9 and 2.10 above presents the proportion of women current users and non-users of contraception by women's occupation in 1992 and 2000, respectively. Women's occupation has been grouped into six general categories, namely: never worked, professionals/technicians/managers/clericals, sales and services, agriculture, skilled and unskilled manual and those that don't know.

In 1992, half of contraceptive users were employed in sales and services, while the lowest (21%) were doing skilled manual and unskilled manual labour. Most of the women's proportion that has never worked (6.6%) and those in the professional's category (14.8%) were reported on the pill. For the rest of the women in other occupations, injections were commonly used.

On proportion of non-users, 79 percent were employed in skilled and unskilled manual work and less were under sales and services (49%). 34 percent of skilled and unskilled manual women labourers desire a child within 2 years, while 20 percent of those in sales and services had an unmet need. In 2000, 55 percent of users fall within the professionals group, while 40 percent never worked. Injections were the most utilised method among all women unemployed and those working in other fields, except specialists. Specialists (Professionals et al) were reportedly using female sterilisation (15.8%), as they were mostly career orientated and thus, have limited childbearing.

With regard to non-users, 65 percent of women were employed in the agricultural field, while 45 percent were in the professional's category. The proportion of non-users without a reason not to use remained higher still ranging between 12 and 31 percent across all occupations. However, women non-users, employed in professional fields without a reason to use contraceptives were lowest at 12 percent.

i) By desire for additional children

Table 2.11: Namibia 2000. Contraception: Current use by desire for additional children, per 100 women in union

		19	092			20	00	
		Desire for add	itional childre	n	Ι	Desire for addi	tional childr	en
	Wants more	Undecided	Wants no more	Number	Wants more	Undecided	Wants no more	Number
Pill	7.0	9.5	16.0	179	8.0	4.3	13.1	251
IUD	1.2	0.0	5.0	40	0.5	2.1	1.9	31
Injections Diaphragm/Foam/	4.8	14.7	17.9	166	18.4	10.6	28.5	557
Jelly	0.0	0.0	0.2	1	0.0	0.0	0.0	0
Condom	0.2	0.0	0.4	5	5.2	18.1	5.8	143
Female sterilisation	0.0	0.0	0.0	147	0.0	0.0	0.0	297
Male sterilisation	0.0	0.0	0.0	4	0.0	0.0	0.0	21
Female condom	0.0	0.0	0.0	0	0.0	0.0	0.2	2
Periodic abstinence	0.7	2.1	0.9	16	0.1	0.0	0.4	6
Withdrawal	0.2	0.0	0.7	6	0.1	0.0	0.1	2
Herbs	3.4	3.2	1.1	53	0.0	0.0	0.0	0
Other	0.0	0.0	0.0	0	1.2	0.0	0.8	22
Total Users	17.5	29.5	42.2	617	33.5	35.1	50.8	1332
No sexual		WEST	ERN C	APE				
intercourse	0.0	0.0	0.0	0	0.0	0.0	0.0	0
Sterile Want a child within	0.0	0.0	0.0	214	0.0	0.0	0.0	374
2 yrs	47.6	0.0	0.0	637	40.1	0.0	0.0	397
Pregnant	13.4	14.7	16.0	270	10.1	10.6	11.4	253
No reasons	21.4	55.8	41.8	538	16.4	54.3	37.8	688
Total Non-users	82.4	70.5	57.8	1659	66.6	64.9	49.2	1712
Total	100.0	100.0	100.0		100.0	100.0	100.0	
Population size	1339	95	457	2276	990	94	1251	3044

Table 2.11 above presents the proportions of women current users and non-users of contraception by desire for additional children in 1992 and 2000. Women's desire for no more children among contraceptive users seems to have become a norm as its share was highest in both periods (42 and 51 percent, respectively). In 1992, injections and pills were more commonly used, reported at 18 and 16 percent, respectively among those women with

no desire for additional children. Seven percent of those wanting no more children used the pill; while for those still undecided (15%) injections were mostly utilised.

In 2000, half of the users had no desire for additional children, while 34 percent wanted more children. In addition, among those with a desire and no desire for additional children utilised mainly injections (18 and 29 percent, respectively). However, for those yet undecided on whether to have or cease child bearing, the majority (18%) were using the male condom.

No cases of male and female sterilisation were reported among women on the issue of desiring additional children.

Total non-users of contraceptives were higher among women desiring for additional children (82%) and at 58 percent among those with no desire in 1992. In 2000, the figures declined to 67 and 49 percent, respectively. No women reported sterility as a reason for non-usage of contraceptives. Moreover, only a proportion of women with a desire for additional children were reporting wanting a child within 2 years and they declined from 48 percent in 1992 to 40 percent in 2000.

Table 2.12: Last source for acquiring contraceptives by contraceptive user, per 100 women in union, in 1992 and 2000

	1992	2000
	User	User
Last source for users	%	0/0
Govt clinic/pharmacy	80.9	83.7
Govt home/comm delivery	1.7	1.4
Private clinic/delivery	13.4	11.7
Private pharmacy	3.4	2.2
Shop/Church/friend	0.2	0.8
Other	0.4	0.2
Total	100.0	100.0
Number	528	1278

Figure 4.13: Last source of contraceptives, per 100 current contraceptive users, in 1992 and 2000

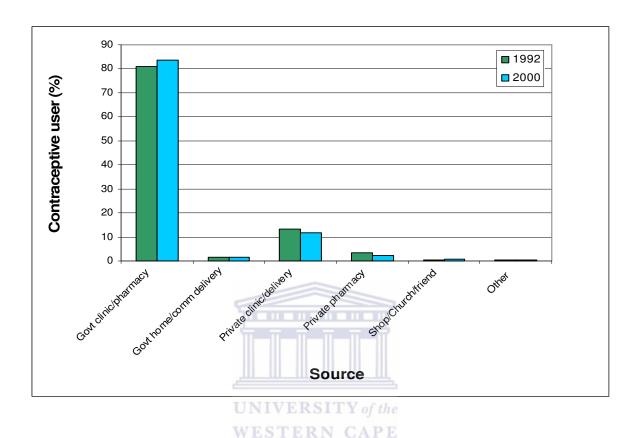


Table 2.12 and Figure 4.13 above illustrate the last source of contraceptives by current female contraceptive users in 1992 and 2000. In Namibia, contraceptives are available from a wide array of places, ranging from government institutions, private institutions, shops etc. It shows over 80 percent of all women using contraceptives lastly obtained contraceptives from government clinics and pharmacies during 1992 and 2000. The least source for obtaining contraceptives in 1992 were from shops, churches and friends (0.2%), while in 2000 it was from other sources (0.2%) not specified (see table 2.12).

SECTIOON 2

2.1 Trends and differentials

This section captures the trends and differentials among women in union currently using modern methods of contraception by various socio-economic and demographic characteristics between 1992 and 2000.

Table 3.1 presents the proportions of women in union that were currently using a modern method of contraception in 1992 and 2000. The data presented in the table shows a mixed pattern. Changes according to demographic and socio-economic factors are hereby analysed:

1.1. Age group

No significant changes were recorded in the percentages of women according to the 5-year age groups using modern contraceptives between the 8-year periods. There have been slight increases and decreases of below 2 percent. Increases were experienced in the 15 to 19, 30 to 34, 40 to 44 and 45 to 49 age groups, while declines were reported in the rest of the age groups.

1.2. Desire for additional children

Most women interviewed were of the opinion of limiting births and this increased from 47.5 percent in 1992 to 58.2 percent in 2000, while the preference of wanting more children declined by about 8.9 percent between the periods. There were still few women that were undecided on whether to have more or stop childbearing and they declined by 1.7 percent during the two periods.

1.3. Place of residence

Over 60 percent of women using modern contraceptive methods were residing in urban areas in 1992, while over 50 percent were living in rural areas in 2000. The change between the periods shows that there has been a huge improvement in rural areas as women were sensitised about modern methods of contraception and commenced using them.

1.4. Educational attainment

Out of all women with different levels of education, the proportion of those with no education is the only one that sustained an increase, from 34.5 percent to 40.7 percent during the 8-year period. Those with primary education remained at 43 percent, while those with secondary and tertiary levels declined by 3.4 and 2.9 percent, respectively.

1.5. Health directorate

Women from the central health directorate had the highest percentage increase in usage of modern contraceptives that increased from 16.6 percent in 1992 to 31.3 percent in 2000, than in other directorates. However, the south had the highest rates of contraceptive prevalence, but this declined considerably by 22.3 percent, from 57.7 percent to 35.4 percent between the two periods.

1.6. Partner's approval of family planning

A huge majority of women had partner's that approves family planning in both 1992 and 2000, but it declined from 82.3 percent to 64.1 percent. Between the periods, it has arisen that there's a growing trend of women not knowing their partner's views on family planning and this increased by three-fold from 4.4 percent to 17.8 percent.

1.7. Number of living children

Regarding women with no children, their percentage increased from 3.3 percent to 8.3 percent between the two periods. Those with any number of children declined, with those between one and two children declining the most from 58.7 percent in 1992 to 55.5 percent in 2000.

1.8. Discussed family planning with partner

There has been no significant change on the proportions of women with respect to discussing family planning with their partners. Those that discuss it more often with their partners increased by a mere 1.5 percent from 29.9 percent in 1992 to 31.4 percent in 2000. However, those that discuss it sometimes, they declined from 39.3 percent to 36.3 percent during the two periods.

Table 3.1: Percentages currently using a modern method of contraception among women in union in 1992 and 2000

			Absolute	Relative
	1992	2000	Change (3)	Change (4)
	(1)	(2)	(2)-(1)	(3)/(1) X 100
Age				
15-19	2.6	3.4	0.8	30.8
20-24	14.4	13.0	-1.4	-9.7
25-29	19.6	17.6	-2.0	-10.2
30-34	21.4	21.6	0.2	0.9
35-39	19.4	18.0	-1.4	-7.2
40-44	13.3	15.4	2.1	15.8
45-49	9.4	11.0	1.6	17.0
Total	100.0	100.0		
Number	2297	2827		
hean		q q		
Desire for additional children		Ш		
Wants more	46.5	37.6	-8.9	-19.1
Undecided	6.0	4.3	-1.7	-28.3
Wants no more	ER 51747.5	the 58.2	10.7	22.5
Total	100.0	100.0		
Number	2297	2827		
Place of residence				
Urban	65.5	48.0	-17.5	-26.7
Rural	34.5	52.0	17.5	50.7
Total	100.0	100.0		
Number	2297	2827		
Total	100.0	100.0		
Number	2297	2827		
Educational attainment				
None	34.5	40.7	6.2	18.0
			0.2	
Primary	43.5	43.7		0.5
Secondary	14.8 7.2	11.4	-3.4	-23.0
Tertiary		4.3	-2.9	-40.3
Total	100.0	100.0		
Number	2297	2827		

Region					
Northwest		9.2	18.9	9.7	105.4
Northeast		16.4	14.3	-2.1	-12.8
Central		16.6	31.3	14.7	88.6
South		57.7	35.4	-22.3	-38.6
Total		100.0	100.0		
Number		2297	2827		
Partner approves Family Pl	anning				
Disapproves		13.3	18.1	4.8	36.1
Approves		82.3	64.1	-18.2	-22.1
Don't know		4.4	17.8	13.4	304.5
Total		100.0	100.0		
Number		2297	2827		
Number of living children					
None		3.3	8.3	5.0	151.5
1-3	1	58.7	55.5	-3.2	-5.5
4 and above		38.0	36.2	-1.8	-4.7
Total		100.0	100.0		
Number		2297	2827		
	UNIVER	SITY of	the		
Discussed Family Planning	g with partner	N CA	PE		
Never		30.7	32.2	1.5	4.9
Once or twice		39.3	36.3	-3.0	-7.6
More often		29.9	31.4	1.5	5.0
Total		100.0	100.0		
Number		2297	2827		

SECTION 3

3.1 Regression: Contraceptive use

Table 4.1 below presents the results of the binary logistic regression model of the demographic and socio-economic factors to determine which ones have an effect on current contraceptive use among women in union in Namibia. It shows the odds ratios for 1992 and 2000 NDHS data, as well as for the change between the two periods. The odds ratios (exp [b]) for a certain independent variable represent the factor by which the odds (event) change for a one-unit change in the independent variable ¹³. For all factors, the first category has been assigned as the reference category. The odds ratio values of less than one implies that individuals in that category have a lower probability of reporting current use of contraceptives than individuals in the reference category. Moreover, a value greater than one imply an increase in the likelihood of reporting current use of contraceptives.

Variables imputed in the model included: age group, educational attainment, health directorate, place of residence, women's occupation, number of living children, discussed family planning with partner, husband approves of family planning, desire for additional children, respondent approves family planning, husband's occupation and husband's educational attainment. Out of those variables, place of residence, women's occupation and partner's occupation emerged statistically insignificant in both periods. On the other hand, partner's educational attainment was also found to have no significant effect on current contraceptive use in 2000.

Table 5.2 shows that in 1992 women 40 years and older were less likely to report current usage of contraceptives when compared to our reference category (15-19). In addition, the odds of women between 40 and 44 years were much greater than those aged 45 years and above. Women between 20 and 39 years old were found to have no significant effect on current usage of contraceptives in comparison to those younger.

In 2000 more women (25-49) were less likely to be current users of contraceptives than those in the reference category. Women of 20 to 24 years old had no significant effect on current usage of contraceptives with respect to those in those younger.

Educational attainment was found to play an important role in the current usage of contraceptives among women in both periods. The notion that the higher the women's level

¹³ http://ww2.chass.ncsu.edu/garson/PA765/logistic.htm

of education completed the more likely they are in being current contraceptive users was validated as the odds of women with tertiary education was highest in both periods (7.564 and 4.366, respectively). However, the probability of women with tertiary education reduced tremendously by three, between the periods in comparison to those uneducated.

According to the four health directorates in 1992, women from the southern directorate are 8 times more likely to report current usage of contraceptives than those in the northwestern directorate (reference category). Women residing in the northeastern directorate attained the lowest odds (3.893) in 1992. In 2000, the odds were much lower with those in central directorate more likely (OR = 2.326) to be using contraceptives, than those in the northwest. In addition, women from the southern directorate (OR = 1.485) reported the lowest probability of being current users of contraceptives.

The more the number of living children a woman has, the more she is likely to be a current user of contraceptives; this is confirmed by the following results. In 1992, women that had four and more living children were 11 times more likely to be currently using contraceptives, compared to those with no children (reference category). The odds for women with four and more children alive declined roughly by half than those with no living children, in 2000.

On discussing of family planning with partners, it was found that women that does that once or twice were more likely (OR = 1.532) to be using contraceptives than those that never discussed family planning with partner in 1992. Discussion of family planning more often with partner was found to have no significant effect on current usage of contraceptives. Eight years later those women that discussed family planning more often with partner's had a higher probability (OR = 1.516) of who had used contraceptives than those in the reference category. Furthermore, those women that discuss family planning once or twice with partner had no significant effect on current use of contraceptives.

Respondent's approval of family planning was also established as having a significant effect on current usage of contraception in both periods. In 1992, respondents that approved of family planning were 5 times more likely to be current users of contraception, than those that disapproved. However, in 2000, the odds of respondents approving of family planning declined to 1.538.

In 1992, women with partner's who approved family planning were twice more likely to be current users of contraceptives than those with disapproving partners. Once again in 2000, women with approving partners were more likely (OR = 2.084) to be using contraceptives.

Additionally, women that didn't know whether their partners approve of family planning were also more likely (OR = 1.557) to report current use of contraception than those with disapproving partners.

The results reveal that women with no desire for additional children were more likely to be current users of contraceptives, in comparison to those who desired more children in both periods. However, the odds were much higher in 1992 (1.642) than those reported in 2000 (1.438). Those women undecided about using contraceptives had no significant effect on the current usage of contraceptives in both periods.

With regard to partner's educational attainment, those women with partners that has completed secondary education in 1992, were more twice likely to currently use contraceptives. Other educational levels were found to be statistically insignificant. In 2000, partner's educational attainment in general had no significant effect on current usage of contraception among women.

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Table 4.1: Regression results (Odds ratios) for the likelihood of contraceptive use among women in union by selected demographic and socio-economic factors in Namibia, 1992 and 2000.

_	1992	2000	Change (1992-2000)
Variable	Odds ratio	Odds ratio	Odds ratio
Age group			
15-19 (r)	1.000	1.000	1.000
20-24	1.049	0.691	-0.358***
25-29	0.846	0.583**	-0.263***
30-34	0.731	0.603*	-0.128***
35-39	0.771	0.270**	-0.501***
40-44	0.412**	0.368**	-0.044***
45-49	0.114***	0.187***	0.073*
Educational attainment			
None (r)	1.000	1.000	1.000
Primary	1.452**	1.808***	0.356***
Secondary	3.669***	3.840***	0.171***
Tertiary	7.564***	4.366***	-3.198***
Health directorate			
Northwest (r)	1.000	1.000	1.000
Northeast	3.893***	1.863***	-2.030***
Central WE	7.123***	2.326***	-4.797***
South	7.957***	1.485***	-6.472***
Number of living children			
None (r)	1.000	1.000	1.000
1-3	7.506***	3.868***	-3.638***
4 and above	11.145***	4.776***	-6.369***
Discussed FP with partner			
Never (r)	1.000	1.000	1.000
Once or twice	1.532**	1.183	-0.349
More often	1.325	1.516**	0.191***
Partner approves FP			
Disapproves (r)	1.000	1.000	1.000
Approves	1.983***	2.084***	0.101***
Don't know	0.958	1.557**	0.599***
Desire for additional children			
Wants more (r)	1.000	1.000	1.000
Undecided	1.540	0.983	-0.557
Wants no more	1.642**	1.438***	-0.204***

Respondent approves FP			
Disapproves (r)	1.000	1.000	1.000
Approves	4.534***	1.538**	-2.996
Don't know		1.209	1.209
Partners educational attainment			
None	1.000		
Primary	1.334		
Secondary	2.340**		
Tertiary	2.121		
Don't know	1.178		
-2 Log likelihood	1413.709	2758.955	1345.246

Source: 1992 and 2000 Namibian Demographic and Health Survey Notes: "r" – reference category; * p<0.10; *** p<0.05; **** p<0.001 according to Wald's chisquare test for significance of regression coefficient;

n/a = not significant



CHAPTER 5

Discussions and conclusions

This study investigated how the various demographic and socio-economic factors impact on contraceptive prevalence in Namibia, ten years after independence. Namibia obtained its independence in 1990, from a colonial regime that denied citizens, especially non-whites access to information, education, resources and opportunities. As a result a democratically-elected government was enacted that aimed at improving the inhabitant's standard of life. In exploring contraceptive use 10 years after independence, the latest data attained from the NDHS for 1992 and 2000, among women in union, aged 15 to 49 was utilised.

The socio-economic and demographic factors explored included: age, health directorate, place of residence (urban/rural), number of living children, desire for additional children, discussion of family planning, women's educational level completed, partner's educational level completed, women's approval of family planning, partner's approval of family planning,

women and partners occupation.

Namibian women could be classified as highly knowledgeable about at least one method of contraception. Over 90 percent of the women were reported as knowing of at least one modern method of contraception, in comparison to traditional methods. In the early 90s women in their 20s and mid 30s were more knowledgeable about contraception, but later no marked differences were notable among all women. Family planning information became widely available to women in the current years, through host of sources such as health facilities, non-governmental institutions and educational institutions. Condoms, injections and the pill were the most recognised, unlike vaginal contraceptives, emergency contraception and male sterilisation. In addition, women's knowledge of traditional methods is very minimal.

The contraceptive prevalence rate in Namibia among women in union was 27 percent in 1992, and almost doubled to 44 percent in 2000. Increasing the contraceptive prevalence rate is one of the objectives of Namibia's 1995 Family Planning Policy and it is also an indicator in the achievement of increased maternal health, which is goal five of the MDGs. The

establishment of a free Family Planning Services Care Unit in almost all government health facilities led to the increase in the rate of contraceptive prevalence (NPC, 2002). In addition, comprehensive reproductive health services are provided in roughly 60 percent of all the health facilities.

The various contraceptive methods used in Namibia ranged from the pill, Intra-Uterine Devices, injections, diaphragms/foams/jellies, sterilisation, male and female condoms, periodic abstinence, withdrawal and herbs. However, modern contraceptive methods were mostly preferred (90%) than the traditional methods. In addition, as part of the government's family planning services, male condoms, the pill and injections are provided freely at health facilities. Modern methods of contraception are said to be the most effective birth controls and are available through family planning programmes, pharmaceutical supplies and other medical organisations.

The findings further revealed that the pill, followed by injections were the most popularly used in the early 1990, but years later most women opted for injections and female sterilisation. The switch could be attributed to the latter methods being more effective in limiting and spacing births. Female condoms were only launched in Namibia during late 2000 and therefore at the time of the 2000 NDHS, only a handful of women could access and utilise them. For the majority of contraceptive users, government clinics and pharmacies were the most utilised source of contraceptives due to their greater accessibility.

The model reveal that women in their 40s in 1992 and those between 25 and 49 years in 2000 were more likely to be current users of contraceptives than those below 20 years. These results are consistent with findings from other sub-Saharan countries such as Botswana, Zimbabwe and Kenya (NRC, 1993). Lower usage of contraceptives among younger women was attributed to lower desire in starting families and reduced frequency of sexual activity, while among women over 40 is due to declining fecundity (MoHSS, 2003).

The higher the level of education attained by women, the more they are likely to be current contraceptive users. This proves that educated women, other than their uneducated counterparts, especially those with tertiary qualifications are the majority users of contraceptives. Education leads to increased socio-economic status, increased knowledge of fertility and changes attitudes and perceptions about fertility control (Indongo, 2007).

Furthermore, it also leads to a situation of women exerting authoritative influence on partners on the use of contraceptives.

At the health district level, women residing in the northwestern health directorate were less likely to be current users of contraceptives, than those located elsewhere in Namibia. This is not surprising as about half of the Namibian population is concentrated in the northwestern area which is mostly rural and the population is sparsely distributed. In all health directorates, except northwest the pill was the most preferred method in the early 90s, however in 2000 injections became the most utilised. On the contrary, the majority of women residing in the northwest was currently either sterilised or on the pill in the earlier years, but later reported using male condoms and injections. According to family planning workers at one Clinic in the northwest area injections were recommended for older women, while the pill were proposed to younger women (Shemeikka et. al. 2005).

Interestingly, the place of residence (rural/urban) was found to have no significant effect on current contraceptive use. Generally, urban women has a higher probability of being current contraceptive users than rural women and this is echoed by findings from other sub-Saharan countries (NRC, 1993) and other African countries such as, Ghana (Lutalo et al. 2000). This is attributed mostly to improved access to family planning services, health services, better education opportunities and mass media in urban settings than in rural areas. No differences in method choice existed between rural and urban women, as pills were initially preferred, but a switchover to injections occurred later.

The model also revealed that the more living children women had, a higher degree of being current users of contraceptives occurred. Namibia is quite a fertile nation, over the three-year period (1989-1992) estimated at roughly 42 live births per 1,000 population and the total fertility rate of 5.4 children over their childbearing period, assuming constant fertility at current levels. In addition, women wanting no more children were more likely to be current contraceptive users in comparison to those with a desire to expand their families.

Overall, women that at least discussed family planning with partners were more likely to use contraceptives than those that never discussed family planning. This is further substantiated by the revelation that Namibian women with partner's that approves of family planning had a higher probability of being current users of contraceptives than those with disapproving

mates. Men are primary decision-makers regarding fertility and if they aren't open to using contraceptives this greatly limits women's discussions and approval of contraceptive use (Oyedokun, 2007). Involvement of partners is a crucial component in improvement of family planning and therefore in Namibia as part of its reproductive health services programme, a Male Involvement Project was established (NPC, 2002). At the forefront of this project are male nurses who have direct contact with other men within health facilities. Other groups with great number of male participants such as; police services, sports and defence forces are also targeted.

The majority of women were currently reported as non-users of contraceptives and the reason for non-use ranged from being sterile, wanting a child within 2 years, pregnant and no reason. Women of all ages mostly reported wanting a child as the main reason for non-use of contraception, followed by the unmet need population in 1992. However in 2000, no reasons (unmet need population) for non-use of contraceptives were the key reason, while pregnancy was reported among few women. These results are in agreement with findings observed from other developing countries as stipulated in Casterline et al (1997). Firstly, a possible reason accruing to high unmet-need population to space or limit births could be attributed to the misconception that couples in unions (especially, married couples) cannot utilise contraception. Secondly, there are still a greater number of women facing opposition from husbands on fertility control and weak motivation in taking charge of their reproductive preferences (Bongaarts, 1991).

In conclusion, a percentage increase in contraceptive prevalence of roughly 17 percent, among women in union occurred in Namibia between 1992 and 2000. However, a huge gap still exists between actual knowledge of a contraceptive method and current contraceptive usage, as over 90 percent of the women knows of a contraceptive method. Like most developing countries in Africa, the pill and injections were the most utilised modern methods, with the latter being lately preferred. Female sterilisation has also recently taken momentum especially among older women. On the other hand, Traditional contraceptive methods have been minimally utilised as they are deemed as ineffective in preventing conception. The unmet need population is a major concern as it was reported as the main reason for non use among current non-users of contraception.

The binary logistic regression model was utilised to test the significance of the probable socio-economic and demographic determinants of contraceptive prevalence in Namibia.

In both periods, the following explanatory variables were found as having a significant effect on current contraceptive use: number of living children, health directorate, women's educational attainment, respondent and partner's approval of family planning, desire for additional children and discussed family planning with partner. Moreover, partner's occupation, place of residence and women's occupation had no significant effect on current use of contraception.

As recommendations, first and foremost, information, education and communication programmes on family planning needs to be boosted among couples countrywide, adjusted to suit local conditions. A continuous dialogue on the types of contraceptive methods, their benefits and side effects should prevail.

Secondly, continued involvement of males is highly crucial, as their understanding of the importance of family planning could lead to improved reproductive health.

Thirdly, government and other stakeholders ought to conduct family planning awareness campaigns in all 13 regions of the country, targeting masses especially those at grass root level, via constituency meetings and through print and electronic media. Namibia's rural population is sparsely distributed with long distances to health facilities.

Fourthly, a shortage of health personnel is being experienced countrywide, thus better staff packages and continued training of public health personnel, especially those posted in outlying areas is a necessity. In addition, training of community health volunteers on family planning could also create much needed awareness.

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APPENDICES

The following are output results derived upon running a binary logistic regression using the 1992 and 2000 DHS data. The Odds ratio's appearing in Table 5.2 in Chapter 4 are sourced from these output tables. The dependent variable is current contraceptive user status (Non-current user or current user). The dependent variables includes: age group, woman's occupation, husbands occupation, husbands educational attainment, woman's educational attainment, region (health directorate), desire for additional children, discussed family planning with partner, partner's approval of family planning, number of children alive, type of place of residence and respondents approval of family planning.

The 1992 Binary logistic regression model output

Note that:

V013=Age group, educlevcomp=woman's educational attainment, v024=health directorate, v025=type of place of residence, resp_occup=respondent's occupation, nmbrlivchld=number of living children, v611=discussed family planning with partner, v610=partners approval of family planning, desaddchld=desire for additional children, v612=respondent approves family planning, huseduatt=partner's educational attainment and husboccup=partner's occupation.

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	1932	84.1
	Missing Cases	365	15.9
	Total	2297	100.0
Unselected Cases		0	.0
Total		2297	100.0

a. If weight is in effect, see classification table for the total number of cases.

Dependent Variable Encoding

Original Value	Internal Value
Non contraceptive user	0
Contraceptive user	1

Categorical Variables Codings

					Paramete	er coding		
		Frequency	(1)	(2)	(3)	(4)	(5)	(6)
Age 5-year	15-19	83	.000	.000	.000	.000	.000	.000
groups	20-24	303	1.000	.000	.000	.000	.000	.000
	25-29	379	.000	1.000	.000	.000	.000	.000
	30-34	408	.000	.000	1.000	.000	.000	.000
	35-39	319	.000	.000	.000	1.000	.000	.000
	40-44	264	.000	.000	.000	.000	1.000	.000
	45-49	176	.000	.000	.000	.000	.000	1.000
Woman's	Never worked	1244	.000	.000	.000	.000	.000	
occupation	Prof/tech/manag/cleric	220	1.000	.000	.000	.000	.000	
	Sales and services	30	.000	1.000	.000	.000	.000	
	Agriculture	215	.000	.000	1.000	.000	.000	
	Skilled snd unskilled manual	218	.000	.000	.000	1.000	.000	
	Don't know	5	.000	.000	.000	.000	1.000	
Husbands	Prof/tech/Manag/Clerical	277	.000	.000	.000	.000		
occupation	Saleas and services	220	1.000	.000	.000	.000		
	Agriculture	410	.000	1.000	.000	.000		
	Skilled & unskilled manual	580	.000	.000	1.000	.000		
	Dont know	445	.000	.000	.000	1.000		
Husband's	None	1073	.000	.000	.000	.000		
education	Primary	610	1.000	.000	.000	.000		
attainment	Secondary	131	.000	1.000	.000	.000		
	Tertiary	54	.000	.000	1.000	.000		
	Dont know	64	.000	.000	.000	1.000		
Education level	No education	1187	.000	.000	.000			
completed	Primary	595	1.000	the .000	.000			
	Secondary	102	.000	1.000	.000			
	Tertiary	48	.000	.000	1.000			
Region	Northwest	614	.000	.000	.000			
	Northeast	624	1.000	.000	.000			
	Central	226	.000	1.000	.000			
	South	468	.000	.000	1.000			
Desire for	Wants more	1311	.000	.000				
additional	Undecided	111	1.000	.000				
children	Wants no more	510	.000	1.000				
Discussed FP	Never	974	.000	.000				
with partner	Once or twice	577	1.000	.000				
	More often	381	.000	1.000				
Husband	Disapproves	619	.000	.000				
approves FP	Approves	985	1.000	.000				
	Don't know	328	.000	1.000				
Number of	None	177	.000	.000				
children alive	1-3	960	1.000	.000				
	4 and above	795	.000	1.000				
Type of place of	Urban	629	.000					
residence	Rural	1303	1.000					
Respondent	Disapproves	532	.000					
approves FP	Approves	1400	1.000					

Block 0: Beginning Block

Classification Table^{a,b}

		Current contraceptive use status			
	Observed		Non contraceptive user	Contraceptive user	Percentage Correct
Step 0	Current contraceptive	Non contraceptive user	1504	0	100.0
	use status	Contraceptive user	428	0	.0
	Overall Percentage				77.8

a. Constant is included in the model.

Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)
Step 0	Constant	-1.257	.055	526.247	iii 1	.000	.285

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b. The cut value is .500

Variables not in the Equation

			Score	df	Sig.
Step	Variables	v013	63.425	6	.000
0		v013(1)	8.087	1	.004
		v013(2)	8.425	1	.004
		v013(3)	2.867	1	.090
		v013(4)	1.511	1	.219
		v013(5)	20.642	1	.000
		v013(6)	30.463	1	.000
		educlevcomp	194.011	3	.000
		educlevcomp(1)	30.043	1	.000
		educlevcomp(2)	71.038	1	.000
		educlevcomp(3)	56.555	1	.000
		v024	231.446	3	.000
		v024(1)	2.405	1	.121
		v024(2)	8.332	1	.004
		v024(3)	161.303	1	.000
		v025(1)	141.255	1	.000
		resp_occup	89.953	5	.000
		resp_occup(1)	63.660	1	.000
		resp_occup(2)	10.618		.001
		resp_occup(3)	3.924		.048
		resp_occup(4)	11.161	1	.001
		resp_occup(5)	.013	1	.908
		Nmbrlivchld	54.337	2	.000
		Nmbrlivchld(1)	46.642	1	.000
		Nmbrlivchld(2)	17.075	the	.000
		v611 WESTE	90.601	PE 2	.000
		v611(1)	25.489	1	.000
		v611(2)	36.032	1	.000
		v610	175.359	2	.000
		v610(1)	175.231	1	.000
		v610(2)	33.497	1	.000
		Desaddchld	79.248	2	.000
		Desaddchld(1)	.322	1	.570
		Desaddchld(2)	75.733	1	.000
		v612(1)	146.990	1	.000
		huseduatt	188.334	4	.000
		huseduatt(1)	20.984	1	.000
		huseduatt(2)	79.740	1	.000
		huseduatt(3)	48.890	1	.000
		huseduatt(4)	1.636	1	.201
		husboccup	56.350	4	.000
		husboccup(1)	.317	1	.574
		husboccup(2)	1.510	1	.219
		husboccup(3)	.032	1	.859
		husboccup(4)	36.736	1	.000
	Overall Statistics		536.584	35	.000
	Overan Glatistics		JJU.504	33	.000

Block 1: Method = Backward Stepwise (Likelihood Ratio)

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	637.160	35	.000
	Block	637.160	35	.000
	Model	637.160	35	.000
Step 2ª	Step	-5.171	5	.395
	Block	631.989	30	.000
	Model	631.989	31	.000
Step 3 ^a	Step	-2.259	1	.133
	Block	629.730	29	.000
	Model	629.730	26	.000

a. A negative Chi-squares value indicates that the Chi-squares value has decreased from the previous step.

Model	Summary
MOGCI	Juillial

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	1406.279 ^a	.281	.430
2	1411.450 ^a	.279	.427
3	1413.709 ^a	.278	.426

a. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

Classification Table^a

				Predicted	
			Current contr	•	
			sta	tus	
			Non		
			contraceptive	Contraceptive	Percentage
	Observed		user	user	Correct
Step 1	Current contraceptive	Non contraceptive user	1401	103	93.2
	use status	Contraceptive user	216	212	49.5
	Overall Percentage				83.5
Step 2	Current contraceptive	Non contraceptive user	1399	105	93.0
	use status	Contraceptive user	221	207	48.4
	Overall Percentage				83.1
Step 3	Current contraceptive	Non contraceptive user	1405	99	93.4
	use status	Contraceptive user	219	209	48.8
	Overall Percentage				83.5

a. The cut value is .500

Model if Term Removed

			Change in		
		Model Log	-2 Log		Sig. of the
Variabl		Likelihood	Likelihood	df	Change
Step	v013	-725.408	44.537	6	.000
1	educlevcomp	-711.354	16.429	3	.001
	v024	-734.168	62.057	3	.000
	v025	-704.080	1.881	1	.170
	resp_occup	-705.725	5.171	5	.395
	Nmbrlivchld	-729.829	53.379	2	.000
	v611	-706.526	6.773	2	.034
	v610	-713.128	19.978	2	.000
	Desaddchld	-707.974	9.670	2	.008
	v612	-723.633	40.987	1	.000
	huseduatt	-707.151	8.022	4	.091
	husboccup	-708.443	10.606	4	.031
Step	v013	-727.269	43.088	6	.000
2	educlevcomp	-718.433	25.415	3	.000
	v024	-736.703	61.956	3	.000
	v025	-706.854	2.259	1	.133
	Nmbrlivchld	-732.403	53.356	2	.000
	v611	-709.272	7.094	2	.029
	v610	-715.905	20.360	2	.000
	Desaddchld	-710.497	9.544	2	.008
	v612	-725.871	40.291	TY of the	.000
	huseduatt	-709.641	7.832	CAPE	.098
	husboccup	-710.749	10.049	4	.040
Step	v013	-727.905	42.102	6	.000
3	educlevcomp	-720.412	27.114	3	.000
	v024	-753.394	93.079	3	.000
	Nmbrlivchld	-733.299	52.889	2	.000
	v611	-710.397	7.085	2	.029
	v610	-717.268	20.827	2	.000
	Desaddchld	-711.434	9.160	2	.010
	v612	-726.925	40.140	1	.000
	huseduatt	-711.192	8.675	4	.070
	husboccup	-711.395	9.080	4	.059

Variables not in the Equation

			Score	df	Sig.
Step	Variables	resp_occup	5.256	5	.385
2		resp_occup(1)	.970	1	.325
		resp_occup(2)	3.025	1	.082
		resp_occup(3)	.019	1	.891
		resp_occup(4)	.102	1	.750
		resp_occup(5)	.691	1	.406
	Overall Statistics		5.256	5	.385
Step	Variables	v025(1)	2.282	1	.131
3		resp_occup	5.655	5	.341
		resp_occup(1)	1.002	1	.317
		resp_occup(2)	3.323	1	.068
		resp_occup(3)	.001	1	.978
		resp_occup(4)	.058	1	.810
		resp_occup(5)	.665	1	.415
	Overall Statistics		7.557	6	.272

a. Variable(s) removed on step 2: resp_occup.

Model Summary STERN CAPE

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	1406.279(a)	.281	.430
2	1411.450(a)	.279	.427
3	1413.709(a)	.278	.426

a Estimation terminated at iteration number 6 because parameter estimates changed by less than .001.

b. Variable(s) removed on step 3: v025.

Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)	95.0% EXF	
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	v013			35.078	6	.000			
1(α)	v013(1)	.013	.361	.001	1	.972	1.013	.499	2.053
	v013(2)	214	.365	.343	1	.558	.808	.395	1.651
	v013(3)	361	.374	.929	1	.335	.697	.335	1.452
	v013(4)	342	.392	.760	1	.383	.711	.330	1.532
	v013(5)	940	.422	4.951	1	.026	.391	.171	.894
	v013(6)	-2.321	.524	19.644	1	.000	.098	.035	.274
	educlevcomp			15.881	3	.001			
	educlevcomp(1)	.299	.171	3.038	1	.081	1.348	.964	1.885
	educlevcomp(2)	1.081	.355	9.263	1	.002	2.948	1.469	5.914
	educlevcomp(3)	1.789	.502	12.698	1	.000	5.982	2.236	16.000
	v024			52.775	3	.000			
	v024(1)	1.380	.252	30.014	1	.000	3.976	2.427	6.515
	v024(2)	1.865	.299	38.888	1	.000	6.457	3.593	11.604
	v024(3)	1.917	.273	49.395	1	.000	6.797	3.983	11.600
	v025(1)	252	.183	1.895	1	.169	.777	.543	1.113
	resp_occup			5.180	5	.394			
	resp_occup(1)	.291	.242	1.448	1	.229	1.338	.833	2.150
	resp_occup(2)	.931	.493	3.562		.059	2.537	.965	6.672
	resp_occup(3)	.037	.211	.030	1	.862	1.037	.685	1.570
	resp_occup(4)	016	.255	.004	CY of th	.948	.984	.597	1.620
	resp_occup(5)	-1.072	1.503	.508	CAP	.476	.342	.018	6.520
	Nmbrlivchld			39.540	2	.000			
	Nmbrlivchld(1)	2.013	.349	33.358	1	.000	7.489	3.782	14.831
	Nmbrlivchld(2)	2.434	.388	39.295	1	.000	11.404	5.328	24.409
	v611			6.751	2	.034			
	v611(1)	.421	.162	6.746	1	.009	1.523	1.109	2.092
	v611(2)	.246	.184	1.788	1	.181	1.279	.892	1.834
	v610			19.364	2	.000			
	v610(1)	.687	.184	13.941	1	.000	1.987	1.386	2.850
	v610(2)	011	.261	.002	1	.966	.989	.593	1.649
	Desaddchld			9.709	2	.008			
	Desaddchld(1)	.382	.310	1.520	1	.218	1.465	.798	2.688
	Desaddchld(2)	.518	.168	9.507	1	.002	1.679	1.208	2.335
	v612(1)	1.532	.269	32.338	1	.000	4.626	2.729	7.843
	husboccup			10.522	4	.032			
	husboccup(1)	058	.263	.049	1	.825	.943	.563	1.581
	husboccup(2)	.509	.253	4.050	1	.044	1.663	1.013	2.730
	husboccup(3)	.209	.228	.838	1	.360	1.232	.788	1.927
	husboccup(4)	191	.254	.568	1	.451	.826	.503	1.358
	huseduatt			8.021	4	.091			
	huseduatt(1)	.272	.169	2.589	1	.108	1.313	.942	1.830

ı	huseduatt(2)	.823	.302	7.426	1	.006	2.278	1.260	4.119
	huseduatt(3)	.728	.441	2.728	1	.008	2.276	.873	4.119
	huseduatt(4)	.131	.435	.090	1	.764	1.140	.486	2.674
	Constant	-6.869	.647	112.819	1	.000	.001	.+00	2.074
Step	v013	0.000	.047	34.093	6	.000	.001		
2(a)	v013(1)	000	261				1 000	E00	2.060
	v013(2)	.020 188	.361 .365	.003 .266	1	.956 .606	1.020 .829	.503 .406	2.069 1.693
	v013(3)	353	.374	.890	1	.345	.702	.337	1.693
	v013(4)	315	.374	.648	1	.343	.702	.339	1.463
	v013(5)	923	.422	4.786	1	.029	.730	.339	.908
	v013(6)	-2.238	.519	18.600	1	.000	.107	.039	.295
	educlevcomp	-2.230	.519	24.606	3	.000	.107	.039	.295
	educlevcomp(1)	.340	.167	4.143	1	.042	1.405	1.013	1.950
	educlevcomp(2)	1.271	.329	14.891	1	.000	3.563	1.869	6.793
	educlevcomp(3)	1.953	.472	17.106	1	.000	7.051	2.794	17.791
	v024	1.955	.472	52.918	3	.000	7.051	2.134	17.731
	v024(1)	1.326	.247	28.785	1	.000	3.766	2.320	6.114
	v024(2)	1.828	.295	38.339	1	.000	6.224	3.489	11.103
	v024(3)	1.897	.269	49.891	1	.000	6.668	3.939	11.289
	v025(1)	273	.181	2.277	1	.131	.761	.534	1.085
	Nmbrlivchld	275	.101	39.514	2	.000	./01	.554	1.005
	Nmbrlivchld(1)	2.013	.347	33.590	1	.000	7.488	3.790	14.793
	Nmbrlivchld(2)	2.423	.387	39.214	1	.000	11.278	5.283	24.076
	v611	2.120		7.065	2	.029	11.270	0.200	21.070
	v611(1)	.429	1.162	7.043	CY of th		1.536	1.119	2.108
	v611(2)	.264	.184	2.066	CAP	.151	1.302	.908	1.866
	v610		WES	19.719	2	.000			
	v610(1)	.684	.183	13.910	1	.000	1.982	1.383	2.839
	v610(2)	027	.260	.011	1	.916	.973	.584	1.620
	Desaddchld			9.582	2	.008			
	Desaddchld(1)	.435	.304	2.052	1	.152	1.545	.852	2.803
	Desaddchld(2)	.507	.168	9.147	1	.002	1.661	1.196	2.308
	v612(1)	1.514	.268	31.837	1	.000	4.543	2.685	7.686
	husboccup			9.937	4	.042			
	husboccup(1)	073	.262	.077	1	.781	.930	.557	1.553
	husboccup(2)	.448	.250	3.204	1	.073	1.565	.958	2.557
	husboccup(3)	.167	.226	.546	1	.460	1.182	.758	1.842
	husboccup(4)	243	.251	.937	1	.333	.784	.479	1.283
	huseduatt			7.828	4	.098			
	huseduatt(1)	.273	.169	2.610	1	.106	1.314	.944	1.829
	huseduatt(2)	.814	.302	7.272	1	.007	2.257	1.249	4.078
	huseduatt(3)	.704	.442	2.537	1	.111	2.021	.850	4.805
	huseduatt(4)	.147	.429	.117	1	.732	1.158	.499	2.687
	Constant	-6.757	.638	112.254	1	.000	.001		
Step 3(a)	v013			33.363	6	.000			
J(a)	v013(1)	.048	.361	.018	1	.894	1.049	.517	2.128

v013(2)	167	.364	.211	1	.646	.846	.414	1.728
v013(3)	313	.374	.703	1	.402	.731	.351	1.521
v013(4)	260	.390	.445	1	.505	.771	.359	1.655
v013(5)	888	.421	4.440	1	.035	.412	.180	.940
v013(6)	-2.170	.516	17.651	1	.000	.114	.042	.314
educlevcomp			26.273	3	.000			
educlevcomp(1)	.373	.166	5.063	1	.024	1.452	1.049	2.008
educlevcomp(2)	1.300	.329	15.655	1	.000	3.669	1.927	6.984
educlevcomp(3)	2.023	.472	18.395	1	.000	7.564	3.000	19.071
v024			77.313	3	.000			
v024(1)	1.359	.246	30.470	1	.000	3.893	2.403	6.308
v024(2)	1.963	.281	48.717	1	.000	7.123	4.104	12.361
v024(3)	2.074	.242	73.200	1	.000	7.957	4.948	12.798
Nmbrlivchld			39.066	2	.000			
Nmbrlivchld(1)	2.016	.348	33.475	1	.000	7.506	3.792	14.857
Nmbrlivchld(2)	2.411	.387	38.721	1	.000	11.145	5.215	23.816
v611			7.051	2	.029			
v611(1)	.427	.161	6.983	1	.008	1.532	1.116	2.102
v611(2)	.281	.183	2.359	1	.125	1.325	.925	1.896
v610			20.152	2	.000			
v610(1)	.685	.183	13.961	- 1	.000	1.983	1.385	2.841
v610(2)	043	.260	.027	1 1	.869	.958	.576	1.594
Desaddchld			9.199	2	.010			
Desaddchld(1)	.432	.302	2.038	ш-ш	.153	1.540	.851	2.784
Desaddchld(2)	.496	.168	8.750	. 1. 	.003	1.642	1.182	2.280
v612(1)	1.512	.268	31.732	2.1	.000	4.534	2.680	7.671
husboccup		WES	8.925	CA4	.063			
husboccup(1)	035	.260	.018	1	.894	.966	.580	1.608
husboccup(2)	.391	.248	2.491	1	.114	1.479	.910	2.403
husboccup(3)	.203	.225	.816	1	.366	1.225	.789	1.903
husboccup(4)	255	.251	1.035	1	.309	.775	.474	1.267
huseduatt			8.674	4	.070			
huseduatt(1)	.288	.168	2.925	1	.087	1.334	.959	1.855
huseduatt(2)	.850	.301	7.980	1	.005	2.340	1.297	4.219
huseduatt(3)	.752	.441	2.908	1	.088	2.121	.894	5.034
huseduatt(4)	.164	.429	.146	1	.703	1.178	.508	2.729
Constant	-7.061	.609	134.657	1	.000	.001		

a Variable(s) entered on step 1: v013, educlevcomp, v024, v025, resp_occup, Nmbrlivchld, v611, v610, Desaddchld, v612, husboccup, huseduatt.

The 2000 Binary logistic regression model output for Namibia

Note that:

V013=Age group, educlevcomp=woman's educational attainment, directrt=health directorate, v025=type of place of residence, resp_occup=respondent's occupation, nmbrlivchld=number of living children, v611=discussed family planning with partner, v610=partners approval of family planning, desaddchld=desire for additional children, v612=respondent approves family planning, huseduatt=partner's educational attainment and prtnreducatt=partner's occupation.

Case Processing Summary

Unweighted Cases ^a		N	Percent
Selected Cases	Included in Analysis	2338	82.7
	Missing Cases	489	17.3
	Total	2827	100.0
Unselected Cases	T T	0	.0
Total		2827	100.0

a. If weight is in effect, see classification table for the total number of cases.

UNIVERSITY of the WESTERN CAPE

Dependent Variable Encoding

Original Value	Internal Value
Non-contraceptive user	0
Contraceptive user	1

Categorical Variables Codings

					Paramete	er coding		
		Frequency	(1)	(2)	(3)	(4)	(5)	(6)
Age group	15-19	93	.000	.000	.000	.000	.000	.000
	20-24	343	1.000	.000	.000	.000	.000	.000
	25-29	458	.000	1.000	.000	.000	.000	.000
	30-34	528	.000	.000	1.000	.000	.000	.000
	35-39	405	.000	.000	.000	1.000	.000	.000
	40-44	309	.000	.000	.000	.000	1.000	.000
	45-49	202	.000	.000	.000	.000	.000	1.000
Husband's	Didn't work	263	.000	.000	.000	.000	.000	
occupation	Prof/Tech/Manag/Clerical	384	1.000	.000	.000	.000	.000	
	Sales and Services	311	.000	1.000	.000	.000	.000	
	Agriculture/Hh&Domestic	522	.000	.000	1.000	.000	.000	
	Skilled and Unskilled	825	000	000	000	1 000	000	
	manual	825	.000	.000	.000	1.000	.000	
	Dont know	33	.000	.000	.000	.000	1.000	
Woman's	Not working	1264	.000	.000	.000	.000	.000	
occupation	Prof/tech/manag/cleric	353	1.000	.000	.000	.000	.000	
	Sales and services	185	.000	1.000	.000	.000	.000	
	Agriculture	118	.000	.000	1.000	.000	.000	
	Skilled and unskilled manual	415	.000	.000	.000	1.000	.000	
	Don't know	3	.000	.000	.000	.000	1.000	
Partners	None	950	.000	.000	.000	.000	1.000	
educational	Primary	908	1.000	.000	.000	.000		
attainment	Secondary	326	.000	1.000	.000	.000		
	Tertiary	93	.000	.000	1.000	.000		
	Dont know	93 61						
Educational	No education		.000	.000	.000	1.000		
level completed		983	.000	.000	.000			
iovoi compictod	Primary Secondary	1023	1.000	f the .000	.000			
		248 84	.000	1.000	.000			
Directorate	•	_	.000	.000	1.000			
Directorate	Northwest	475	.000	.000	.000			
	Northeast	383	1.000	.000	.000			
	Central	723	.000	1.000	.000			
Lluabana	South	757	.000	.000	1.000			
Husband approves FP	Disapproves	436	.000	.000				
appi0103 i i	Approves	1464	1.000	.000				
Niconale and City 1	Don't know	438	.000	1.000				
Number of living children	0	212	.000	.000				
GIIIGI C H	1-3	1330	1.000	.000				
ъ .	4 and above	796	.000	1.000				
Respondent	Disapproves	288	.000	.000				
approves FP	Approves	1899	1.000	.000				
D	Don't know	151	.000	1.000				
Discussed FP	Never	746	.000	.000				
with partner	Once or twice	863	1.000	.000				
	More often	729	.000	1.000				
Desire for	Wants more	883	.000	.000				
additional children	Undecided	108	1.000	.000				
	Wants no more	1347	.000	1.000				
Type of place of	Urban	1075	.000					
residence	Rural	1263	1.000					

Block 0: Beginning Block

Classification Table^{a,b}

				Predicted	
				raceptive use atus	
	Observed		Non-contrac eptive user	Contraceptive user	Percentage Correct
Step 0	Current Contraceptive	Non-contraceptive user	1379	0	100.0
	use status	Contraceptive user	959	0	.0
	Overall Percentage				59.0

a. Constant is included in the model.

Variables in the Equation

		В	S.E.	Wald	df		Sig.	Exp(B)
Step 0	Constant	363	.042	74.625	Щ	1	.000	.695



b. The cut value is .500

Variables not in the Equation

			Score	df	Sig.
Step	Variables	Agegroup	50.643	6	.000
0		Agegroup(1)	1.501	1	.221
		Agegroup(2)	4.111	1	.043
		Agegroup(3)	6.537	1	.011
		Agegroup(4)	.584	1	.445
		Agegroup(5)	7.289	1	.007
		Agegroup(6)	37.387	1	.000
		educlevcomp	134.501	3	.000
		educlevcomp(1)	18.238	1	.000
		educlevcomp(2)	50.950	1	.000
		educlevcomp(3)	17.554	1	.000
		dirctrt	59.232	3	.000
		dirctrt(1)	.217	1	.641
		dirctrt(2)	38.767	1	.000
		dirctrt(3)	.099	1	.753
		v025(1)	44.485	1	.000
		resp_occup	64.416	5	.000
		resp_occup(1)	48.345	1	.000
		resp_occup(2)	4.174	> 1	.041
		resp_occup(3)	4.795	呵 1	.029
		resp_occup(4)	.173	m 1	.678
		resp_occup(5)	.817	1	.366
		Nmbrlivchld	51.391	2	.000
		Nmbrlivchld(1)	35.788		.000
		Nmbrlivchld(2)	7.326	. 1	.007
		v611	70.601	the 2	.000
		v611(1) ESTE	RN .761	PE	.383
		v611(2)	45.090	1	.000
		v610	141.981	2	.000
		v610(1)	138.662	1	.000
		v610(2)	34.693	1	.000
		Desaddchld	23.969	2	.000
		Desaddchld(1)	6.070	1	.014
		Desaddchld(2)	22.290	1	.000
		v612	74.107	2	.000
		v612(1)	72.472	1	.000
		v612(2)	12.828	1	.000
		Husboccup	59.444	5	.000
		Husboccup(1)	30.284	1	.000
		Husboccup(2)	2.767	1	.096
		Husboccup(3)	12.570	1	.000
		Husboccup(4)	.870	1	.351
		Husboccup(5)	.036	1	.849
		prtnreducatt	79.374	4	.000
		prtnreducatt(1)	12.853	1	.000
		prtnreducatt(1)	25.108	1	.000
		prtnreducatt(3)	10.212	1	.000
		prtnreducatt(4)	.284	1	.594
	Overall Statistics	prineducali(4)			
	Overall Statistics		383.207	37	.000

Block 1: Method = Backward Stepwise (Likelihood Ratio)

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	422.671	37	.000
	Block	422.671	37	.000
	Model	422.671	37	.000
Step 2ª	Step	045	1	.832
	Block	422.626	36	.000
	Model	422.626	33	.000
Step 3 ^a	Step	-2.423	4	.659
	Block	420.203	32	.000
	Model	420.203	32	.000
Step 4 ^a	Step	-5.303	5	.380
	Block	414.900	27	.000
	Model	414.900	27	.000
Step 5ª	Step	-8.559	5	.128
	Block	406.341	22	.000
	Model	406.341	25	.000

a. A negative Chi-squares value indicates that the Chi-squares value has decreased from the previous step.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2742.625 ^a	.165	.223
2	2742.670 ^a	.165	.223
3	2745.093 ^a	.165	.222
4	2750.396 ^a	.163	.219
5	2758.955 ^b	.160	.215

- a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.
- b. Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Classification Table^a

	Predicted					
			Current Cont			
			sta	atus		
			Non-contrac	Contraceptive	Percentage	
	Observed		eptive user	user	Correct	
Step 1	Current Contraceptive	Non-contraceptive user	1081	298	78.4	
	use status	Contraceptive user	439	520	54.2	
	Overall Percentage				68.5	
Step 2	Current Contraceptive	Non-contraceptive user	1082	297	78.5	
	use status	Contraceptive user	437	522	54.4	
	Overall Percentage				68.6	
Step 3	Current Contraceptive	Non-contraceptive user	1095	284	79.4	
	use status	Contraceptive user	436	523	54.5	
	Overall Percentage				69.2	
Step 4	Current Contraceptive	Non-contraceptive user	1091	288	79.1	
	use status	Contraceptive user	443	516	53.8	
	Overall Percentage				68.7	
Step 5	Current Contraceptive	Non-contraceptive user	1075	304	78.0	
	use status	Contraceptive user	434	525	54.7	
	Overall Percentage		m'		68.4	

a. The cut value is .500



Model if Term Removed

Variable Likelihood Likelihood Change			Model Log	Change in -2 Log		Sig. of the
Site	Variable				df	
directr	Step	Agegroup	-1396.065	49.506	6	.000
v025	1	educlevcomp	-1388.514	34.404	3	.000
resp_occup		dirctrt	-1388.385	34.146	3	.000
Nmbrlivchid v611		v025	-1371.335	.045	1	.832
Nmbrlivchild v611		resp occup	-1374.806	6.986	5	.222
V610		. — .	-1401.120	59.615	2	.000
v610 -1384.102 25.580 2 .000 Desaddchld -1377.607 12.590 2 .002 v612 -1377.4169 5.713 2 .057 Husboccup -1373.707 4.789 5 .442 prtnreducatt -1372.512 2.399 4 .663 Step Agegroup -1386.700 49.470 6 .000 2 educlevcomp -1388.730 34.789 3 .000 resp_occup -1374.906 7.143 5 .210 Nmbrlivchld -1401.172 59.675 2 .000 v611 -1375.883 9.097 2 .011 v610 -1384.176 25.683 2 .000 v612 -1374.201 5.731 2 .057 Husboccup -1373.795 4.921 5 .426 prtnreducatt -1372.546 2.423 4 .659 Agegroup -1393.891 42.690		v611				
Desaddchld		v610				
V612		Desaddchld				
Husboccup		v612				
Step Agegroup -1372.512 2.399 4 .663 .000 2 educlevcomp -1388.730 34.789 3 .000		-				
Step Agegroup -1396.070 49.470 6 .000		•				
2	Sten	•			-	
dirctrt -1389.061 35.452 3 .000 resp_occup -1374.906 7.143 5 .210 Nmbrlivchld -1401.172 59.675 2 .000 v611 -1375.883 9.097 2 .011 v610 -1384.176 25.683 2 .000 Desaddchld -1377.668 12.666 2 .002 v612 -1374.201 5.731 2 .057 Husboccup -1373.795 4.921 5 .426 prtnreducatt -1372.546 2.423 4 .659 Step Agegroup -1397.661 50.229 6 .000 3 educlevcomp -1393.891 42.690 3 .000 dirctrt -1399.933 36.773 3 .000 resp_ocup -1376.310 7.528 5 .184 Nmbrlivchld -1401.851 58.610 2 .008 v610 -1385.815 26.538						
resp_occup		•				
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v611 -1375.883 9.097 2 .011 v610 -1384.176 25.683 2 .000 Desaddchld -1377.668 12.666 2 .002 v612 -1374.201 5.731 2 .057 Husboccup -1373.795 4.921 5 .426 prtnreducatt -1372.546 2.423 4 .659 prtnreducatt -1397.661 50.229 6 .000 3 educlevcomp -1393.891 42.690 3 .000 dirctrt -1390.933 36.773 3 .000 dirctrt -1390.933 36.773 3 .000 resp_occup -1376.310 7.528 5 .184 Nmbrlivchld -1401.851 58.610 2 .000 v611 -1377.316 9.539 2 .008 v612 -1375.98 5.303 5 .380 Step Agegroup -1400.295 50.195 6		. — .				
v610 -1384.176 25.683 2 .000 Desaddchld -1377.668 12.666 2 .002 v612 -1374.201 5.731 2 .057 Husboccup -1373.795 4.921 5 .426 prtnreducatt -1372.546 2.423 4 .659 Step Agegroup -1397.661 50.229 6 .000 diretr -1390.933 36.773 3 .000 diretrt -1390.933 36.773 3 .000 resp_occup -1376.310 7.528 5 1.84 Nmbrlivchld -1401.851 58.610 2 .000 v611 -1377.316 9.539 2 .008 v610 -1385.815 26.538 2 .000 v612 -1375.680 6.267 2 .044 Husboccup -1375.198 5.303 5 .380 Step Agegroup -1400.295 50.195 6 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
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Husboccup			Control of the Contro			
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Step Agegroup -1397.661 50.229 6 .000 3 educlevcomp -1393.891 42.690 3 .000 dirctrt -1390.933 36.773 3 .000 resp_occup -1376.310 7.528 5 .184 Nmbrlivchld -1401.851 58.610 2 .000 v611 -1377.316 9.539 2 .008 v610 -1385.815 26.538 2 .000 v612 -1375.680 6.267 2 .044 Husboccup -1375.198 5.303 5 .380 Step Agegroup -1400.295 50.195 6 .000 4 educlevcomp -1401.218 52.041 3 .000 dirctrt -1394.909 39.423 3 .000 resp_occup -1379.477 8.559 5 .128 Nmbrlivchld -1404.109 57.822 2 .000 v610 -13			7777	The second second second second	The second second	
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Husboccup		Desaddchld	-1378.941	12.789	2	.002
Step Agegroup -1400.295 50.195 6 .000 4 educlevcomp dirctrt -1401.218 52.041 3 .000 resp_occup resp_occup -1394.909 39.423 3 .000 resp_occup v611 -1379.477 8.559 5 .128 Nmbrlivchld -1404.109 57.822 2 .000 v610 -1380.413 10.430 2 .005 v610 -1388.240 26.084 2 .000 Desaddchld -1381.761 13.126 2 .001 v612 -1378.581 6.767 2 .034 Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000		v612	-1375.680	6.267		.044
4 educlevcomp dirctrt -1401.218 52.041 3 .000 dirctrt -1394.909 39.423 3 .000 resp_occup -1379.477 8.559 5 .128 Nmbrlivchld -1404.109 57.822 2 .000 v611 -1380.413 10.430 2 .005 v610 -1388.240 26.084 2 .000 Desaddchld -1381.761 13.126 2 .001 v612 -1378.581 6.767 2 .034 Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp -1420.515 82.076 3 .000 dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000			-1375.198	5.303	5	.380
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v610 -1388.240 26.084 2 .000 Desaddchld -1381.761 13.126 2 .001 v612 -1378.581 6.767 2 .034 Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp -1420.515 82.076 3 .000 dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000		Nmbrlivchld	-1404.109	57.822	2	.000
Desaddchld		v611	-1380.413	10.430	2	.005
v612 -1378.581 6.767 2 .034 Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp -1420.515 82.076 3 .000 dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000		v610	-1388.240	26.084	2	.000
v612 -1378.581 6.767 2 .034 Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp -1420.515 82.076 3 .000 dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000		Desaddchld	-1381.761	13.126	2	.001
Step Agegroup -1403.420 47.885 6 .000 5 educlevcomp -1420.515 82.076 3 .000 dirctrt -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000		v612	-1378.581		2	.034
5 educlevcomp directrt -1420.515 82.076 3 .000 Mmbrlivchld -1399.147 39.338 3 .000 Nmbrlivchld -1407.603 56.251 2 .000	Step	Agegroup	-1403.420	47.885	6	.000
Nmbrlivchld -1407.603 56.251 2 .000		educlevcomp		82.076	3	
Nmbrlivchld -1407.603 56.251 2 .000		dirctrt	-1399.147		3	
voit		v611	-1385.059	11.163	2	.004
v610 -1392.765 26.576 2 .000						
Desaddchld -1386.021 13.087 2 .001						
v612 -1382.768 6.582 2 .037						

Variables not in the Equation

			Score	df	Sig.
Step 2ª	Variables	v025(1)	.045	1	.832
	Overall Statistics		.045	1	.832
Step 3 ^b	Variables	v025(1)	.069	1	.793
		prtnreducatt	2.428	4	.657
		prtnreducatt(1)	2.179	1	.140
		prtnreducatt(2)	.041	1	.840
		prtnreducatt(3)	.115	1	.735
		prtnreducatt(4)	.029	1	.864
	Overall Statistics		2.473	5	.780
Step 4 ^c	Variables	v025(1)	.344	1	.558
		Husboccup	5.281	5	.383
		Husboccup(1)	1.653	1	.199
		Husboccup(2)	.812	1	.368
		Husboccup(3)	.265	1	.607
		Husboccup(4)	.006	1	.937
		Husboccup(5)	.065	1	.798
		prtnreducatt	2.813	4	.590
		prtnreducatt(1)	1.859	1	.173
		prtnreducatt(2)	.017	1	.898
		prtnreducatt(3)	.001	1	.969
		prtnreducatt(4)	.008	L 1	.927
	Overall Statistics	TINITYED	7.761	10	.652
Step 5 ^d	Variables	v025(1)	.925	the 1	.336
		resp_occup	RN 8.577	E 5	.127
		resp_occup(1)	2.931	1	.087
		resp_occup(2)	.206	1	.650
		resp_occup(3)	1.697	1	.193
		resp_occup(4)	2.363	1	.124
		resp_occup(5)	.009	1	.923
		Husboccup	6.317	5	.277
		Husboccup(1)	2.343	1	.126
		Husboccup(2)	.844	1	.358
		Husboccup(3)	.659	1	.417
		Husboccup(4)	.001	1	.973
		Husboccup(5)	.026	1	.872
		prtnreducatt	3.492	4	.479
		prtnreducatt(1)	2.117	1	.146
		prtnreducatt(2)	.095	1	.758
		prtnreducatt(3)	.025	1	.874
		prtnreducatt(4)	.005	1	.944
	Overall Statistics		16.335	15	.360

a. Variable(s) removed on step 2: v025.

b. Variable(s) removed on step 3: prtnreducatt.

c. Variable(s) removed on step 4: Husboccup.

d. Variable(s) removed on step 5: resp_occup.

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	2742.625(a)	.165	.223
2	2742.670(a)	.165	.223
3	2745.093(a)	.165	.222
4	2750.396(a)	.163	.219
5	2758.955(b)	.160	.215

a Estimation terminated at iteration number 5 because parameter estimates changed by less than .001. b Estimation terminated at iteration number 4 because parameter estimates changed by less than .001.

Variables in the Equation

		В	S.E.	Wald	df	Sig.	Exp(B)		% C.I.for (P(B)
		Lower	Upper	Lower	Upper	Lower	Upper	Lower	Upper
Step 1(a)	Agegroup			45.994	6	.000			
. (4)	Agegroup(1)	384	.270	2.025		.155	.681	.401	1.156
	Agegroup(2)	578	.270	4.578	1	.032	.561	.331	.953
	Agegroup(3)	578	.273	4.475	11 111	.034	.561	.328	.958
	Agegroup(4)	737	.284	6.722	1	.010	.479	.274	.835
	Agegroup(5)	-1.099	.295	13.899		.000	.333	.187	.594
	Agegroup(6)	-1.738	.326	28.451	1	.000	.176	.093	.333
	educlevcomp		UNI	33.743	ΓY of tl_3e	.000			
	educlevcomp(1)	.463	W.116	15.965	CAPE	.000	1.589	1.266	1.994
	educlevcomp(2)	1.102	.207	28.263	1	.000	3.009	2.005	4.517
	educlevcomp(3)	1.207	.316	14.597	1	.000	3.342	1.800	6.206
	dirctrt			33.504	3	.000			
	dirctrt(1)	.646	.176	13.539	1	.000	1.908	1.353	2.692
	dirctrt(2)	.777	.150	26.690	1	.000	2.175	1.620	2.920
	dirctrt(3)	.326	.148	4.831	1	.028	1.385	1.036	1.852
	v025(1)	025	.116	.045	1	.832	.976	.777	1.225
	resp_occup			6.958	5	.224			
	resp_occup(1)	.259	.161	2.584	1	.108	1.296	.945	1.778
	resp_occup(2)	.163	.178	.834	1	.361	1.177	.830	1.669
	resp_occup(3)	238	.229	1.082	1	.298	.788	.504	1.234
	resp_occup(4)	.237	.130	3.319	1	.068	1.267	.982	1.635
	resp_occup(5)	.335	1.280	.068	1	.794	1.397	.114	17.182
	Nmbrlivchld			52.624	2	.000			
	Nmbrlivchld(1)	1.383	.199	48.329	1	.000	3.988	2.700	5.890
	Nmbrlivchld(2)	1.645	.235	49.067	1	.000	5.183	3.271	8.214
	v611			9.126	2	.010			
	v611(1)	.164	.122	1.810	1	.179	1.179	.928	1.498
	v611(2)	.384	.129	8.800	1	.003	1.467	1.139	1.891
	v610			24.633	2	.000			

ı	v610(1)	.727	.147	24.553	1	.000	2.070	1.552	2.760
	v610(1)	.456	.147	6.632	1	.000	1.577	1.115	2.760
	Desaddchld	.430	.177	12.531	2	.010	1.577	1.113	2.231
	Desaddchld(1)	.008	.250	.001	1	.975	1.008	.618	1.644
	Desaddchld(2)	.362	.105	11.856	1	.001	1.436	1.169	1.765
	v612	.502	.103	5.597	2	.061	1.400	1.103	1.703
	v612(1)	.410	.179	5.264	1	.022	1.507	1.062	2.138
	v612(2)	.197	.261	.567	1	.451	1.218	.729	2.032
	Husboccup	.137	.201	4.748	5	.447	1.210	.123	2.002
	Husboccup(1)	.417	.206	4.092	1	.043	1.518	1.013	2.274
	Husboccup(2)	.355	.203	3.048	1	.043	1.426	.957	2.123
	Husboccup(3)	.221	.192	1.319	1	.251	1.247	.855	1.819
	Husboccup(4)	.247	.181	1.857	1	.173	1.281	.897	1.828
	Husboccup(5)	.134	.417	.103	1	.749	1.143	.505	2.588
	prtnreducatt	.101	,	2.403	4	.662	1.110	.000	2.000
	prtnreducatt(1)	.173	.118	2.147	1	.143	1.189	.943	1.499
	prtnreducatt(2)	.082	.178	.214	1	.644	1.086	.766	1.540
	prtnreducatt(3)	.019	.286	.004	1	.947	1.019	.582	1.785
	prtnreducatt(4)	.029	.295	.009	1	.922	1.029	.577	1.836
	Constant	-3.575	.393	82.594		.000	.028	.077	1.000
Step	Agegroup			45.962	6	.000			
2(a)	Agegroup(1)	383	.270	2.015		.156	.682	.401	1.157
	Agegroup(2)	575	.270	4.547	1	.033	.563	.332	.955
	Agegroup(3)	575	.273	4.439	1	.035	.563	.330	.961
	Agegroup(4)	733	.284	6.685	TY of the	.010	.480	.276	.837
	Agegroup(5)	-1.096	.294	13.859		.000	.334	.188	.595
	Agegroup(6)	-1.735	.325	28.420	CAPE	.000	.176	.093	.334
	educlevcomp			34.129	3	.000			
	educlevcomp(1)	.466	.115	16.305	1	.000	1.593	1.271	1.997
	educlevcomp(2)	1.105	.207	28.572	1	.000	3.019	2.013	4.527
	educlevcomp(3)	1.207	.316	14.607	1	.000	3.344	1.801	6.211
	dirctrt			34.753	3	.000			
	dirctrt(1)	.645	.175	13.500	1	.000	1.905	1.351	2.688
	dirctrt(2)	.785	.146	28.911	1	.000	2.192	1.646	2.917
	dirctrt(3)	.331	.146	5.157	1	.023	1.393	1.046	1.854
	resp_occup			7.117	5	.212			
	resp_occup(1)	.262	.161	2.659	1	.103	1.300	.948	1.781
	resp_occup(2)	.167	.177	.882	1	.348	1.181	.834	1.673
	resp_occup(3)	236	.228	1.068	1	.301	.790	.505	1.236
	resp_occup(4)	.239	.130	3.403	1	.065	1.270	.985	1.637
	resp_occup(5)	.347	1.279	.074	1	.786	1.415	.115	17.362
	Nmbrlivchld			52.696	2	.000			
	Nmbrlivchld(1)	1.382	.199	48.303	1	.000	3.982	2.697	5.879
	Nmbrlivchld(2)	1.641	.234	49.272	1	.000	5.158	3.262	8.155
	v611			9.113	2	.010			
	v611(1)	.164	.122	1.805	1	.179	1.179	.927	1.498

1	v611(2)	I	100	0.707	۱ .	000	4 407	4 400	4 000
	v610	.383	.129	8.787	1	.003	1.467	1.139	1.890
	v610(1)	700	4.47	24.731	2	.000	0.070	4 554	0.700
	v610(1)	.728	.147	24.646	1	.000	2.072	1.554	2.762
	Desaddchld	.456	.177	6.634	1	.010	1.577	1.115	2.231
	Desaddchld(1)	010	0.40	12.606	2	.002	4 040	000	4 0 4 0
		.010	.249	.002	1	.967	1.010	.620	1.648
	Desaddchld(2) v612	.363	.105	11.953	1	.001	1.438	1.170	1.766
		440	470	5.615	2	.060	4 505	4 000	0.400
	v612(1) v612(2)	.410	.179	5.274	1	.022	1.507	1.062	2.139
	Husboccup	.196	.261	.561	1	.454	1.216	.729	2.030
	•	400	000	4.880	5	.431	4 504	1 010	0.070
	Husboccup(1)	.420	.206	4.155	1	.042	1.521	1.016	2.278
	Husboccup(2)	.359	.202	3.136	1	.077	1.431	.962	2.128
	Husboccup(3)	.215	.190	1.276	1	.259	1.240	.854	1.801
	Husboccup(4)	.252	.180	1.955	1	.162	1.286	.904	1.831
	Husboccup(5)	.136	.417	.107	1	.744	1.146	.506	2.594
	prtnreducatt			2.427	4	.658			
	prtnreducatt(1)	.175	.118	2.190	1	.139	1.191	.945	1.501
	prtnreducatt(2)	.086	.177	.235	1	.628	1.090	.770	1.543
	prtnreducatt(3)	.021	.286	.005	100	.942	1.021	.583	1.788
	prtnreducatt(4)	.034	.294	.013	II III	.908	1.035	.581	1.842
04	Constant	-3.599	.377	91.290	1	.000	.027		
Step 3(a)	Agegroup			46.609	6	.000			
σ(α)	Agegroup(1)	398	.269	2.196	1	.138	.671	.396	1.137
	Agegroup(2)	583	.269	4.711	Y of the	.030	.558	.329	.945
	Agegroup(3)	585	272	4.628	CAPE	.031	.557	.327	.949
	Agegroup(4)	734	.283	6.731	CAFE	.009	.480	.276	.836
	Agegroup(5)	-1.111	.294	14.310	1	.000	.329	.185	.586
	Agegroup(6)	-1.749	.325	29.033	1	.000	.174	.092	.329
	educlevcomp			41.824	3	.000			
	educlevcomp(1)	.503	.111	20.710	1	.000	1.654	1.332	2.054
	educlevcomp(2)	1.133	.195	33.881	1	.000	3.104	2.120	4.546
	educlevcomp(3)	1.205	.294	16.775	1	.000	3.338	1.875	5.942
	dirctrt			35.987	3	.000			
	dirctrt(1)	.685	.173	15.727	1	.000	1.983	1.414	2.781
	dirctrt(2)	.791	.146	29.554	1	.000	2.206	1.658	2.933
	dirctrt(3)	.344	.145	5.605	1	.018	1.410	1.061	1.875
	resp_occup			7.502	5	.186			
	resp_occup(1)	.282	.160	3.109	1	.078	1.325	.969	1.813
	resp_occup(2)	.178	.176	1.013	1	.314	1.194	.845	1.687
	resp_occup(3)	233	.228	1.045	1	.307	.792	.506	1.239
			1		_	.064	1.270	.986	1.637
	resp_occup(4)	.239	.129	3.418	1	.004	1.270	.900	1.037
	resp_occup(4) resp_occup(5)	.239 .269	.129 1.276	3.418 .045	1	.833	1.309	.107	15.962
	resp_occup(5)			.045	1	.833			

1	v611	I		9.557	2	.008			ı
	v611(1)	.163	.122	1.783	1	.182	1.177	.927	1.496
	v611(2)	.390	.129	9.155	1	.002	1.477	1.147	1.902
	v610	.000	20	25.531	2	.000	,		1.002
	v610(1)	.739	.146	25.437	1	.000	2.093	1.571	2.789
	v610(2)	.461	.177	6.823	1	.009	1.586	1.122	2.242
	Desaddchld		,	12.729	2	.002	1.000		
	Desaddchld(1)	.024	.249	.009	1	.924	1.024	.629	1.668
	Desaddchld(2)	.365	.105	12.143	1	.000	1.440	1.173	1.769
	v612			6.141	2	.046			
	v612(1)	.422	.178	5.626	1	.018	1.526	1.076	2.163
	v612(2)	.179	.261	.472	1	.492	1.196	.718	1.994
	Husboccup			5.265	5	.384			
	Husboccup(1)	.412	.200	4.258	1	.039	1.510	1.021	2.233
	Husboccup(2)	.374	.202	3.442	1	.064	1.454	.979	2.159
	Husboccup(3)	.201	.190	1.124	1	.289	1.223	.843	1.775
	Husboccup(4)	.262	.180	2.121	1	.145	1.299	.914	1.848
	Husboccup(5)	.155	.417	.137	1	.711	1.167	.515	2.643
	Constant	-3.551	.375	89.815	1	.000	.029		
Step 4(a)	Agegroup			46.499	6	.000			
4(a)	Agegroup(1)	400	.268	2.234		.135	.670	.397	1.133
	Agegroup(2)	575	.267	4.622	1	.032	.563	.333	.950
	Agegroup(3)	569	.270	4.424	1	.035	.566	.333	.962
	Agegroup(4)	718	.282	6.502	1	.011	.488	.281	.847
	Agegroup(5)	-1.089	.292	13.912	Y of the	.000	.337	.190	.596
	Agegroup(6)	-1.745	.324	29.088	CAPE	.000	.175	.093	.329
	educlevcomp		WES	50.787	3	.000			
	educlevcomp(1)	.542	.108	25.377	1	.000	1.719	1.392	2.122
	educlevcomp(2)	1.214	.190	40.771	1	.000	3.368	2.320	4.889
	educlevcomp(3)	1.278	.293	19.074	1	.000	3.589	2.023	6.369
	dirctrt			38.529	3	.000			
	dirctrt(1)	.672	.167	16.095	1	.000	1.958	1.410	2.718
	dirctrt(2)	.823	.143	32.933	1	.000	2.277	1.719	3.016
	dirctrt(3)	.358	.143	6.281	1	.012	1.431	1.081	1.894
	resp_occup			8.547	5	.129			
	resp_occup(1)	.332	.158	4.446	1	.035	1.394	1.024	1.898
	resp_occup(2)	.196	.176	1.242	1	.265	1.216	.862	1.717
	resp_occup(3)	200	.226	.786	1	.375	.818	.525	1.275
	resp_occup(4)	.247	.129	3.651	1	.056	1.280	.994	1.649
1	resp_occup(5)	.275	1.288	.046	1	.831	1.317	.105	16.437
	Nmbrlivchld			51.068	2	.000			
	Nmbrlivchld(1)	1.363	.199	47.138	1	.000	3.907	2.648	5.766
	Nmbrlivchld(2)	1.600	.232	47.525	1	.000	4.954	3.143	7.807
	v611		_	10.448	2	.005			
1	v611(1)	.167	.122	1.878	1	.171	1.182	.931	1.501
I	v611(2)	.406	.128	9.974	1	.002	1.500	1.166	1.929

1	v610	l		25.105	2	.000			
	v610(1)	.731	.146	25.021	1	.000	2.076	1.559	2.764
	v610(2)	.459	.176	6.776	1	.009	1.582	1.120	2.234
	Desaddchld			13.061	2	.001			
	Desaddchld(1)	.019	.249	.006	1	.938	1.020	.626	1.660
	Desaddchld(2)	.369	.105	12.420	1	.000	1.446	1.178	1.774
	v612			6.624	2	.036			
	v612(1)	.435	.177	6.025	1	.014	1.544	1.092	2.185
	v612(2)	.177	.260	.467	1	.494	1.194	.718	1.987
	Constant	-3.356	.350	91.777	1	.000	.035		
Step	Agegroup	0.000	.000				.000		
5(a)	,			44.315	6	.000			
	Agegroup(1)	369	.268	1.905	1	.168	.691	.409	1.168
	Agegroup(2)	540	.267	4.082	1	.043	.583	.345	.984
	Agegroup(3)	506	.270	3.528	1	.060	.603	.355	1.022
	Agegroup(4)	641	.280	5.251	1	.022	.527	.304	.911
	Agegroup(5)	-1.000	.290	11.892	1	.001	.368	.208	.649
	Agegroup(6)	-1.679	.322	27.203	1	.000	.187	.099	.351
	educlevcomp			78.448	3	.000			
	educlevcomp(1)	.592	.105	31.579		.000	1.808	1.470	2.222
	educlevcomp(2)	1.346	.174	59.533	1	.000	3.840	2.728	5.405
	educlevcomp(3)	1.474	.268	30.171	11 11	.000	4.366	2.580	7.387
	dirctrt			38.411	3	.000			
	dirctrt(1)	.622	.164	14.459	1	.000	1.863	1.352	2.567
	dirctrt(2)	.844	.143	35.041	1	.000	2.326	1.759	3.075
	dirctrt(3)	.395	.141	7.908	TY of the	.005	1.485	1.127	1.956
	Nmbrlivchld		WES	49.678	CAPE	.000			
	Nmbrlivchld(1)	1.353	.198	46.494	1	.000	3.868	2.622	5.707
	Nmbrlivchld(2)	1.564	.231	45.640	1	.000	4.776	3.034	7.518
	v611			11.182	2	.004			
	v611(1)	.168	.122	1.918	1	.166	1.183	.933	1.502
	v611(2)	.416	.128	10.614	1	.001	1.516	1.180	1.947
	v610			25.589	2	.000			
	v610(1)	.734	.146	25.422	1	.000	2.084	1.566	2.772
	v610(2)	.443	.175	6.369	1	.012	1.557	1.104	2.196
	Desaddchld			13.021	2	.001			
	Desaddchld(1)	017	.247	.005	1	.945	.983	.605	1.596
	Desaddchld(2)	.364	.104	12.136	1	.000	1.438	1.172	1.765
	v612			6.439	2	.040			
	v612(1)	.431	.177	5.947	1	.015	1.538	1.088	2.174
	v612(2)	.190	.259	.541	1	.462	1.209	.728	2.008
	Constant	-3.342	.350	91.326	1	.000	.035		

a Variable(s) entered on step 1: Agegroup, educlevcomp, dirctrt, v025, resp_occup, Nmbrlivchld, v611, v610, Desaddchld, v612, Husboccup, prtnreducatt.