

DETERMINANTS OF CONTRACEPTIVE USE: A COMPARATIVE
STUDY OF DISABLED AND NON-DISABLED WOMEN IN KENYA

BY

MARK ODHIAMBO

Q56/72089/2008

A RESEARCH PROJECT SUBMITTED IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
DEGREE OF MASTER OF SCIENCE IN POPULATION STUDIES OF
THE UNIVERSITY OF NAIROBI

University of NAIROBI Library

||| ||| ||| |||₂

NOVEMBER 2012

DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Name: Mark Ooko Odhiambo

Signature:  Tfc

Date: 11th April - 2012


This research project has been submitted for examination with our approval as university supervisors.

Name: Dr. Wanjiru Gichuhi

Signature: 

Date: 11 th April - 2012

Name: Mr. Andrew Mutuku

Signature: 

Date:

DEDICATION

I dedicate this work to my lovely wife Berline Okeyo.

AKNOWLEDGEMENT

The compilation of this project was made possible through the guidance of my supervisors at the Population Studies and Research Institute (PSRI) namely; Mr. Andrew Mutuku and Dr. Wanjiru Gichuhi. I would also like to acknowledge my employer, Kenya Airways, for giving me time from my work in order to undertake the research required to produce this project. In particular I am grateful to my controlling manager Mr. Thomas Omondi and the Chief Operating Officer Mr. Bram Steller for their continued encouragement. Members of staff at PSRI under the leadership of the Director Dr. Lawrence Ikamari were also instrumental in ensuring that my studies at PSRI are fruitful thus resulting in this project whose development largely benefited from the knowledge and skills acquired at the institution. Not forgetting the moral support from the PSRI students (2008 group) during the entire period at the Institute.

ABSTRACT

There is a global concern of the participation of disabled persons in national development. Poverty, discrimination, and stigma, are the major socio-economic problems faced by persons with disabilities. The reproductive health problems faced by women with disabilities include sexual exploitation, unwanted pregnancy and complications during childbirth. The study sought to establish the determinants of contraceptive use among disabled women in Kenya. Specifically, the study examined the effect of socio-economic, socio-cultural and demographic on contraceptive use among the disabled and non-disabled women in Kenya.

The study was conceptualized within the Bong arts Conceptual model (1978). The data for this study were obtained from The Kenya National Survey for Persons with Disabilities Survey-2008. Logistic regression was the main method for data analysis. The contraceptive use for women with disabilities is of concern because of the discrimination and exclusion of this group from active participation in the society as compared to their non-disabled peers (Jans & Stoddard, 1999; Trainor, 2007). Overall, the findings from this study indicate that access to family planning is a critical factor explaining the use of contraception. These findings are consistent with the literature, which outline limited access to family planning services occasioned by both cultural and religious beliefs. In this regard, Information, education and communication (IEC) on Contraceptive needs for women with disabilities also need to be developed with special focus not only on the messages but also on the various forms of disability. GOK and other stakeholders could take up development and production of IEC materials on Contraceptive use specifically targeting WWDs. These should be up to date and properly distributed with translated versions in the various local languages for effective reach.

TABLE OF CONNTENTS

| | |
|---|-----------|
| DECLARATION | » |
| DEDICATION | |
| AKNOWLEDGEMENT | v |
| ABSTRACT | v |
| TABLE OF CONNTENTS | vi |
| LIST OF TABLES | viii |
| TABLE OF FIGURES | |
| CHAPTER ONE | 2 |
| GENERAL INTRODUCTION | 2 |
| 1.1 Background..... | 2 |
| 1.2 Problem Statement..... | 4 |
| 1.3 Objectives of the study..... | 6 |
| 1.4 Justification of the Study..... | 6 |
| 1.5 Scope and Limitations of the Study..... | 7 |
| CHAPTER TWO | 3 |
| LITERATURE REVIEW | 9 |
| 2.1 Introduction..... | 9 |
| 2.2 Theoretical Background..... | 9 |
| 2.3 Literature Review..... | 20 |
| 2.3.1 Determinants of Contraception..... | 20 |
| 2.3.2 Relationship between Contraceptive Use and Independent Variables..... | 12 |
| 2.3 Summary of Literature Review..... | 24 |
| 2.4 Conceptual Framework..... | 25 |
| 2.5 Operational Framework..... | 16 |
| 2.6 Hypotheses | 27 |
| CHAPTER THREE | 28 |

| | |
|--|---------------------------|
| DATA AND METHODS..... | 18 |
| 3.1 Introduction..... | 18 |
| 3.2 Source of Data..... | 18 |
| 3.3 Methods of Analysis..... | 19 |
| 3.3.1 Descriptive Statistics..... | 19 |
| 3.3.2 Bivariate Analysis..... | 20 |
| 3.3.3 Logistic Regression..... | 20 |
| 3.4 Definitions of Variables..... | 22 |
| 3.5 Definition of Concepts..... | 23 |
| CHAPTER FOUR..... | 24 |
| FACTORS INFLUENCING CONTRACEPTIVE USE AMONG WOMEN WITH DISABILITY IN KENYA..... | 24 |
| 4,1..... | <i>Introduction</i> 24 |
| 4.2 <i>Distribution of Women with Disability by Background Characteristics.....</i> | 24 |
| 4.3. <i>Differentials of Contraceptive Use by Background Characteristics among Disabled and Non-disabled Women in Kenya.....</i> | 26 |
| 4.4. <i>Factors Influencing Contraceptive Use among disabled women and non-disabled women in Kenya</i> | 30 |
| CHAPTER FIVE..... | 34 |
| SUMMARY, CONCLUSIONS AND RECOMMENDATIONS..... | 34 |
| 5.1 Introduction..... | 34 |
| 5.2 Summary of Findings..... | 34 |
| 5.3 Conclusion..... | 35 |
| 5.4 Recommendations..... | 36 |
| 5.41 <i>Recommendations for Further Research.....</i> | 36 |
| 5.4.2 <i>Recommendations for Policy and Programs.....</i> | 36 |
| References..... | 38 |

LIST OF TABLES

| | |
|---|----|
| Table 2.1 Definition of Variables..... | 22 |
| Table 4.1 Frequency Distribution of Disabled and Non-disabled Women in Kenya by Background Characteristics..... | 25 |
| Table 4.2 Differentials of Contraceptive use among disabled and non-disabled women in Kenya | 27 |
| Table 4.3 Coefficient estimates from logistic regression model predicting Contraceptive use among disabled and non-disabled women in Kenya..... | 31 |

TABLE OF FIGURES

Figure 1 - Conceptual Framework..

Figure 2 - Operational Framework.

CHAPTER ONE

GENERAL INTRODUCTION

1.1 Background

It is estimated that about 10% of the world population consists of persons with disabilities, 80% of the persons with disabilities come from the developing countries. In general, PWDs are a marginalized group of people globally: segregation and discrimination at homes, places of work and social functions applies to them across the board.

The first meaningful global intervention for PWDs was by UN in 1975 when there was a UN declaration on the rights of PWDs, rehabilitation, education, employment, dignity and enjoyment of life. In 1981 there was international year for the disabled persons who created awareness and expanded social participation and equality of PWDs. A comprehensive document, the world programme of action concerning disabled persons was adopted in 1982. It outlined the guidelines to full participation of PWDs in social life & equality and development. The first effort at international level to deal with disability was initiated in 1971 following UN declaration on rights of mentally handicapped. In 1975 UN Declaration on the rights of PWDs expanded with global awareness created during the 1981 International Year for Disabled Persons. This was later followed by UN decade for persons with disabilities (1982-1992). African countries later set their own Decade of PWDs (1999-2009) with main objective of creating awareness on the major causes of disabilities in African Countries.

Efforts to deal with disability issues started before the promulgation of Human Rights Charter in 1984. Women with disability, like all people, should enjoy human rights that are secured by international laws and policies. The Convention on the Rights of Persons with Disabilities (2008), the Program of Action of the International Conference on Population and

Development (1994), and the 1993 Vienna Declaration recognize the importance of ensuring that women with disability enjoy the reproductive health rights that are enjoyed by the rest of the women. They stress issues such as the right to equality and non-discrimination, the right to marry and found a family, the right to comprehensive reproductive health care including family planning and maternal health services, education, information, the right to be free from sexual abuse and exploitation and, the right to have access to reproductive and family planning information and education.

Disabled adolescents may be as sexually active as healthy, able-bodied adolescents according to a US study. However, in countries like India, women with physical disability are alienated from the rest of the family and not considered for marriage hence they don't receive any information on reproductive health. Gender is regarded as a significant consideration as both the international and Kenyan data indicate that women and girls with disabilities suffer double discrimination because of their gender and are more likely to be victims of physical and sexual abuse (African Union of the blind, 2007). This was the beginning of the real national planning for Persons with Disabilities (PWDs).

In southern Africa, says Musakanya of Southern Africa Federation of the Disabled (SAFOD, 1986), "tradition generally views disability as a curse, a punishment from the ancestral spirits or God for wrongs committed by one's parents. As a result, most parents hide their disabled children, and a disabled woman is not expected to have children."Furthermore, "in the developing world, it is highly unusual for a disabled woman even to have had a routine gynecological checkup," says Lucy Wong-Hernandez, executive director of the Winnipeg, Canada-based Disabled Peoples International (1999). "I have personally known many disabled women with cervical or breast cancer who never had the opportunity to have these conditions

detected with a Pap smear or mammogram. Because no one talks about breast cancer in disabled women, these women do not even know how to examine their own breasts." In countries with active disability programs, health-care providers are increasingly giving reproductive health information to persons with physical disabilities, says Musakanya of SAFOD (1999). "They are also learning to assess the patient's pre-disability versus current sexual functioning; how the disability affects the patient's sexual expression, contraceptive needs and use; and any sexual abuse that might be occurring."

For the purpose of this study, disability is defined as 'A physical, mental, emotional or other health conditions/limitation that has lasted or expected to last more than 6 months and that limits a person's full participation in the activities of daily life'. However, there is no single agreed international standard for measuring disability since its definition depends on the purpose for which the measure is intended. Considering reproductive health service utilization, three quarters of the women (75%) had ever utilized reproductive health services compared to 51% of the men. Majority however, feel they are not accessible to persons with disabilities. This was attributed to geographical inaccessibility of health facilities, unfriendliness of the service providers, poverty, lack of awareness on reproductive health issues and lack of confidentiality. Radios and friends are the major providers of reproductive health and HIV/AIDS information (Mulindwa 2003)

Many governments in developing countries consider fertility regulation an important component of their overall strategy for improving standards of living. Family planning programmes aimed at increasing contraceptive prevalence are most widely used approach to bring about fertility reductions (Wekesa and Omurundo, 2001).

Nationally, Kenya has addressed the issues concerning the disabled persons in a number of ways with the formation of several associations and academic institutions as well as rehabilitation centers. These include Kenya Society for the Blind, Association of the Physically Disabled of Kenya, the Kenya Society for Mentally Handicapped, and Kenya Society for Deaf Children. The government also enacted 'the Persons with Disabilities Bill' which became Disability Act in 2003. The National Council for PWDs formed under this Act came up with Disability Policies to be implemented countrywide. Despite substantial declines in fertility and increases in contraceptive adoption over the past two decades, unmet need for family planning remains high in Kenya with about one in four married women having an unmet need for family planning. This represents a major reproductive health challenge given the government's commitment to "make available quality and sustainable family planning services to all who need them, in order to reduce the unmet needs for family planning". It also suggests a large potential for further increases in contraceptive use. (APHRC, 2001)

1.2 Problem Statement

The Disability act of 2003 and the policies related to it dwell on the prevention, awareness and public education of WVDs as well as economic, recreation and health, HIV/AIDS among other social needs. The policy doesn't address the reproductive and contraceptive needs of the women with disability but instead stresses on the gender rights and legal services. Therefore there is need to have disability policies to focus on the fertility and reproductive health status of this population segment. According to the Kenya Demographic and Health Survey, slightly less than half (46%) of currently married women are using some method (modern & traditional) of contraception (KNBS et al., 2010). According to the Kenya National Survey for Persons with Disabilities (NCPD et al., 2008) report, only 15 percent of married

women with disability use any type of family planning of which 13% use modern contraception while the remaining 2.4 % use the traditional/natural methods. About 20% of non-disabled women aged (15-49) use some form of contraception. This disparity in contraceptive use in Kenya is said to be due to differences in socio-economic, socio-cultural and demographic factors (Kimani and K'Oyugi, 2004).

Females with disabilities have a number of Reproductive Health (RH) problems, which they are faced with and these include sexual exploitation, unwanted pregnancies and complications during pregnancy and childbirth. Women with disabilities identified sexual exploitation by men as one of the major problems they are faced with. Some of this arises out of men's fear to identify themselves with girl friends that have disabilities (Mulindwa, 2003). It's also mentioned that sexual exploitation has led to risky and wreck-less behavior among the WWDs themselves. WWDs are abandoned by their partners when they get pregnant, while some others become pregnant after episodes of rape (Mulindwa, 2003). This leads to unwanted pregnancies, with a resultant high incidence of single parenthood among WWDs.

Mulindwa (2003) observed that there is a widely held belief that WWDs experience complications during pregnancy and delivery. The complications include miscarriages, failure to carry the pregnancy to term and failure to have a normal delivery. While most discussants attributed these complications to the nature/form of disability, some relatively few discussants attributed it to failure of pregnant WWDs to attend antenatal care due to the fear they have for service providers, distances to the health facilities and lack of funds to facilitate their access to such health services.

The rate of contraceptive use among disabled women in Kenya still remains low compared to that of women without disability. This study sought to determine the

demographic, socio-economic and cultural factors influencing contraceptive use among the disabled and non-disabled women in Kenya. Generally, quantitative studies on the reproductive health status of this segment of the population are lacking and therefore this study seeks to fill this knowledge gap. The literature informs us on the studies which were focused on general population both men and women for both the disabled and non-disabled but most review focused on women with disabilities. This study will therefore focus on comparative analysis of both disabled women and non-disabled women which didn't quite come out well in the literature.

1.3 Objectives of the study

The general objective of the study was to establish the determinants of contraceptive use among disabled and non-disabled women in Kenya. The specific objectives were:

1. To investigate demographic factors influencing contraceptive use among the disabled and non-disabled women in Kenya.
2. To establish socio-economic factors influencing contraceptive use among the disabled and non-disabled women in Kenya.
3. To determine socio-cultural factors influencing contraceptive use among women the disabled and non-disabled women in Kenya.

1.4 Justification of the Study

The Persons with disability (PWDs) form 4.6% of the population in Kenya and this cannot be ignored. The WWDs are known to be vulnerable and exposed to sexual exploitation which results into unwanted pregnancies especially in Sub-Saharan Africa (Kyalo, 1996). In developing countries 20% of the poor are neglected (World Bank, 2004) hence difficulty in achieving some

of the Millennium Development Goals (e.g. reducing child mortality and improving maternal health) and other international agendas, including goals in the Program of Action of the International Conference on Population and Development (ICPD).

Disability concerns must be integrated into all the programmatic and policy goals associated with SRH and reproductive rights. The study findings will help other researchers with information on whether discrimination (denied/refused) plays a role in contraceptive use among WWDs. The findings of the study will also enable informed design and implementation of policies, programs and strategies that address the family planning needs including HIV/AIDS, of persons with disabilities. In specific terms, the findings will help in designing specific interventions for the reproductive health and HIV/AIDS program in various regions nationwide.

1.5 Scope and Limitations of the Study

This national study focused on all disabled women in the reproductive ages in Kenya. The questionnaires were administered both at household and institutional level. The institutions included Hospitals, Treatment Centers, Residential special schools, Private and non-private children homes, Orphanage. Since the institution admits affected people across the nation, getting the correct residence of the person would be a challenge. The confounding effects such as the caregiver's level of education and personal biases have often not been controlled for in the study design and statistical analysis e.g Answering questions on behalf of the disabled person.

Mt. Elgon district was excluded from the survey because of persistent insecurity in the area. The effect of exclusion of the district in the sample is minimal since it contributes 0.5% of population according 1999 census. Another limitation is with the institutional data which does not give the actual distribution of the disabled (these are national institutions which consist of

PWDs from various regions of the country) which has already addressed in the data collected. There are variables addressed in literature review like employment status, income levels, desire for children etc which were not captured by the data hence will be left out. Another challenge is the small sample population of disabled women of reproductive age.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter puts together upto date research information on disability. It goes further to review factors associated with contraceptive use in Kenya as well a contraceptive use among women with disability in various parts of the world. Also under this chapter are the theoretical & conceptual framework and the definition of all the key variables in the study. The operational framework, the definition of key concepts & variables and the study hypothesis shall be discussed.

2.2 Theoretical Background.

The contraceptive prevalence rate for disabled women is 16% and that of all women disability is currently standing at 46%, a difference of 30%. This is a direct factor of fertility where increase in contraceptive use decreases the fertility. Family planning is a broad area that comprises the use of contraceptives and other natural methods in birth control. The proximate determinants of fertility are the biological and behavioral factors through which the indirect determinants - social, economic, psychological and environmental variables - affect fertility. The distinguishing feature of a proximate determinant is its direct connection with fertility. If a proximate determinant, such as contraceptive use changes, then fertility necessarily changes also (assuming the other proximate determinants remain constant), while this is not necessarily true for an indirect determinant of fertility such as income or education.

Consequently, fertility levels and trends among populations over time can always be traced to variations in one or more of the proximate determinants (Kingsley Davis and Judith

Blake, 1956). Bongaarts realized that some of these factors are more relevant than others in determining the magnitude of fertility change. In fact, only four of them (proportion married, contraceptive use and effectiveness, induced abortion and postpartum infecundability) are the most important in explaining fertility variation, accounting for up to 96 percent of fertility change in some populations (Bongaarts, 1982; 1978).

2.3 Literature Review

2.3.1 Determinants of Contraception

Several studies on fertility and contraceptive use have identified socio-economic, socio-cultural and demographic variables as significant determinants and include; female educational attainment, assets or wealth, place of residence, gender inequality, infant and childhood mortality, age at first marriage, religion, marital status, polygamy and ethnicity among many others (West off and Cross, 2004). They isolate key among them to be education, marital type, degree of urbanization, status of women, wage employment, wealth status, health facilities and personnel, access to information, social infrastructure, exposure to media and urban life styles.

According study done in Lesotho, health reasons, lack of information and social pressures were some of the major reasons for the non-use of contraceptives as a form of family planning. In many sub-Saharan African countries, the idea of limiting the number of births was so culturally unacceptable that family planning programmes were introduced as a means for promoting better maternal and child health by helping women space their births (Donaldson and Tsui, 1990). Socio-cultural factors such as ethnicity, forms of marriage, religion and gender roles are embedded in traditional and cultural milieu. They can dictate the extent to which innovations such as the use of contraceptives will be accepted or rejected (APRC, 1998).

Whether or not perceptions of the advantages and disadvantages of childbearing become criteria for decision making on fertility goals depends upon another factor determining the salience of fertility. This factor, perceived control over birth planning involves the extent of knowledge regarding fertility regulation methods, perceived availability of methods and the cultural and individual acceptability of methods prior to and during use. Decisions regarding fertility goals require that individuals know about the methods, find them culturally and personally acceptable. Preconception decision making cannot take place when ways to prevent conception are not known or are considered unacceptable (Shedlin and Hollerbach, 1981)

However it's worth noting that other studies conducted in some Asian and Latin American countries indicate that there is non-use of contraceptives due to the desire for a child, side effects or health reasons and temporary in fecundity. It is expected that exposed women who want no more children may have higher rates of contraceptive use than those who want more or are undecided (DaVanzo et al. 1988; Freedman, Khoo, and Supraptilah 1981; Johnson-Ascadi and Weinberger 1980). Research has shown, however, that spacing may be more important than stopping as a motivation for contracepting in the African context (ani & McCarthy 1986; Ware 1976). Studies of the relationship between contraceptive use and child mortality yield contradictory findings. Most studies suggest that couples who have experienced the death of one or more children (*child Loss*) are less likely to contracept than those who have not (Heer 1983; Tuladhar 1985). Yet van de Walle and Knodel (1980) argue that prior child loss may be a sign of an unmet need for contraception. In their opinion, child deaths often may be caused by intentional neglect because the births were unwanted. Consequently, women with prior child deaths may be more highly motivated to practice contraception than those without.

2.3.2 Relationship between Contraceptive Use and Independent Variables

Age

World Fertility Survey data show that age is related curvilinearly to current contraceptive use (Johnson-Ascadi and Weinberger 1980; Nortman 1982; Stephen, Rindfuss, and Bean 1988). Couples are less likely to contracept when fecundity is low, especially at the oldest and the youngest ages. Contraceptive use also may decline at oldest ages even among apparently fecund women because of declining frequency of intercourse. Older women also may wish to have more children and therefore may contracept less frequently.

Marital Status

Marital is expected to influence use of modern contraceptive methods. Use of contraceptives was found to vary across marital status with married women using the services most compared to single women. Past studies showed that, married women use contraceptives the most due to high incidences of sexual activities compared to single women. In these cases, it was revealed that use of contraceptives was aimed at helping to space children and prevent unwanted pregnancy (Okech T.C. 2002)

Level of Education

Studies show consistently that wife's education has strong net positive effects on contraceptive use (Cochrane 1979; Gomes 1984; Johnson-Ascadi and Weinberger 1980; Lesthaeghe, Vanderhoeft, Becker, and Kibet 1983; Mason 1985; Nortman 1982). Education is expected to increase receptivity to "new technologies," including awareness and use of contraception. Educated women also may desire fewer children than their less educated counterparts because of the incompatibility between formal-sector employment and child care (Oppong 1983). Respondent's education is a categorical variable indicating whether she has no

education, lower primary school education (one to four years), upper primary school education (five to eight years), or secondary school education (more than eight years).

Region of Residence

Recently, region of residence has received increasing attention as a macro factor affecting contraceptive use in many less-developed countries (Cleland, Casterline, Singh, and Ashurst 1984; Freedman et al. 1981). Studies with this emphasis propose two major explanations for regional differentials in contraceptive use. A socioeconomic hypothesis suggests that regions whose women have low education, limited formal-sector employment, and limited access to health and family planning outlets are expected to have low rates of contraceptive use. In addition, region of residence may be a proxy for ethnic or cultural boundaries that are related to acceptance of contraceptive methods (van de Walle and Knodel 1980). The important mechanisms through which ethnicity may affect use of modern contraceptives are norms and customs affecting age at marriage, type of marital unions, postpartum abstinence, breastfeeding, and resilience in the face of innovation (Clignet 1970; Lesthaeghe 1989; Murty and DeVos 1984). --

Place of Residence

Type of current residence (rural/urban) is important because past studies suggest that it has a substantial impact on contraceptive use (Lightbourne 1980; Tuladhar 1985). Urban areas in many developing countries are often associated with higher education, better access to medical care and family planning, and other social services. Consequently, rates of contraceptive use are expected to be higher in urban than in rural areas.

Intervening Variable (Ever been refused Family Planning)

In the Northern African states where terms are dictated by religion (men controlled) in broader family and husband at family level (Westoff and Bankole, 1998). Some ethnological studies have reported the dominant role of men in the patriarchal society of Nepal. In rural Nepal women still obey men (husbands) and in taking decisions about family planning (FP) the husband's opinion rules supreme. Another study in Nepal states "husband's approval of FP" as the third most common reason for non-use of contraception (Kane et al. 1990). In other parts of South Asia where similar patriarchal societies prevail, husband's opinion of FP has been identified as one of the four main obstacles to the adoption of modern contraceptive methods (Kane et al. 1990).

2.3 Summary of Literature Review

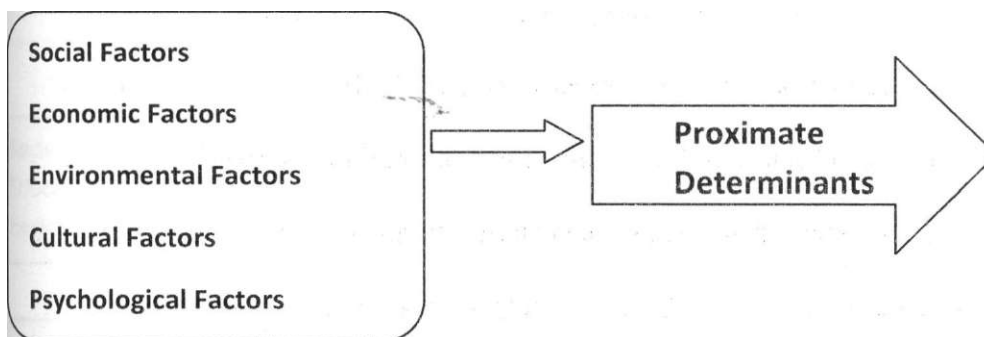
This chapter has looked at the various approaches and dimensions on studies relating to disability within the arena of contraceptive use. Emerging from this review is how WWDs are marginalized within society affecting their access to family planning services and information. The women in Northern Africa experience other constraints not common with the sub-Saharan countries such as the religion which has firm stands on the contraceptive use among her members. The research conducted in developing countries outline the socio-economic factors like education and income as key factors influencing fertility and birth control among disabled women.

While all others factors discussed in this chapter may be common to all women, marginalization and discrimination is unique to women with disability. The lack of studies on disability and contraceptive use has pointed out the need for more robust studies so as to determine the actual situation on the ground as well as aid policy processes.

2.4 Conceptual Framework

The study was conceptualised within Bongaarts proximate determinants of fertility framework (1978). According to this framework, fertility is directly influenced by a set of factors such as contraceptive use, which are referred to as the proximate determinants. These are in turn influenced by social, economic, cultural, psychological, health and environmental factors, which are referred to as the background factors. The Bongaarts framework which considers only four of the proximate determinant as the most important in explaining fertility variation, accounting for up to 96 percent of fertility change in some populations (Bongaarts, 1978). Out of the four, we shall be interested only in contraceptive use as the determinant in our study. The framework is illustrated with below chart.

Figure 1 - Conceptual Framework



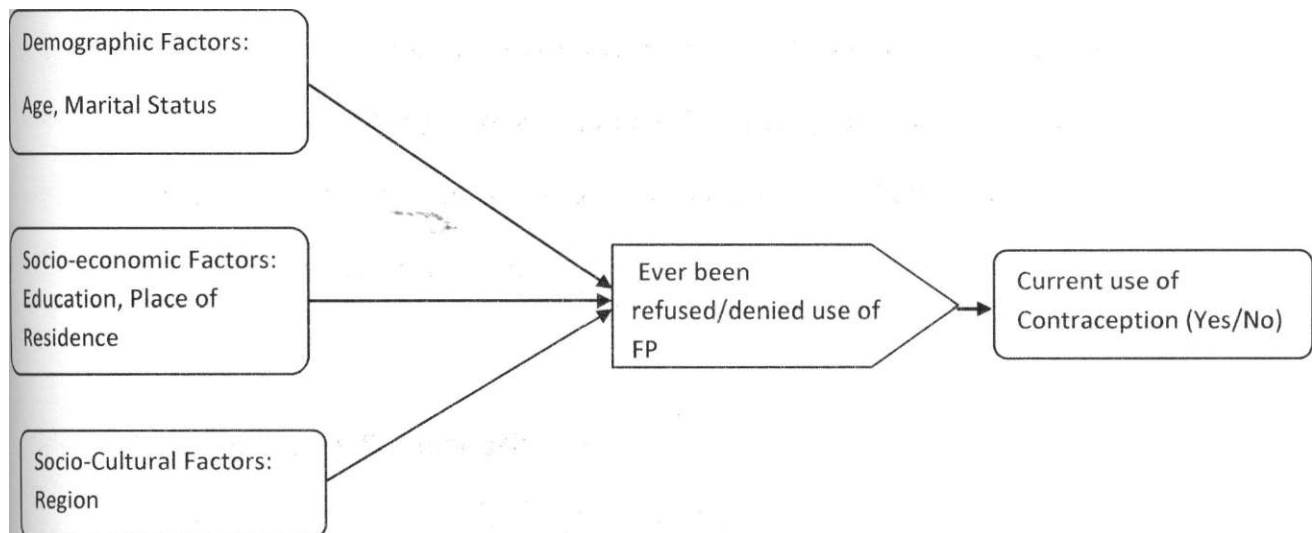
Source: Bongaarts Proximate Determinants of Fertility (1978)

The fact that the framework encompasses independent variables that were examined in this work, makes it far more suitable compared with others. Further, the Bongaarts framework has been modified by other authors to study the effects of socio-economic, socio-cultural and demographic factors on contraceptive use, for example Gichuhi (1991).

2.5 Operational Framework

The literature review intensively covered two major proximate determinants: Contraception and induced abortion however the operational framework will be on contraception. The following figure shows the operational framework for contraceptive use among disabled women in Kenya. According to the framework, Age, Marital Status, Ever been pregnant, Education, Place of Residence and Region of Residence affect the Contraceptive use through access to Family Planning services.

Figure 2 - Operational Framework



2.6 Hypotheses

1. Disabled and non-disabled women with Secondary and above level of education are more likely to use modern contraception in Kenya compared to other groups.
2. Disabled and non-disabled women with who have never been refused family planning are more likely to use modern contraception in Kenya to those who have been refused.
3. Disabled and non-disabled women living in urban areas are more likely to use modern contraception in Kenya compared to their rural counterparts.
4. Disabled and non-disabled women who are married are more likely to use modern contraception in Kenya compared to the non-married.

CHAPTER THREE DATA AND METHODS

3.1 Introduction

This section highlights the source of data and methods of data analysis. Section one describes the source of data and section two presents the methods utilized for data analysis i.e. the descriptive analysis, bivariate and multivariate analysis. This is followed by a section on variables and their description which outlines in a table all variables used in the study and how they are defined.

3.2 Source of Data

The data for this study was obtained from The Kenya National Survey for Persons with Disabilities (NCPD et al., 2008). The main objectives of the Kenya National Survey for Persons with Disabilities (NCPD et al.,2008) were to; estimate the numbers of PWDs and their distribution in the country, examine the demographic, socio-economic and socio-cultural characteristics of PWDs, determine the nature, types and causes of disability in the country, Identify specific problems faced by persons with disability by sex, Identify coping mechanisms and needs of PWDs and Establish the nature of services and rehabilitation programmers available for PWDs by type.

This survey was to form a basis for evidence based approaches in line with the achievement of disability policy objectives. The survey involved interviews with members of nearly 15,000 households across all of Kenya's eight provinces (69 districts). The survey also involved interviews with persons with disability of all ages in all the eight provinces to get estimates of their numbers, distribution, and the demographic, socio-economic and cultural characteristics among others. This was the first national survey of its kind to be conducted in

Kenya. It was conducted by the National Coordinating Agency for Population and Development in collaboration with the Kenya National Bureau of Statistics, Ministry of Sports, Gender, culture and social services, Ministry of Health among others. Using a multistage cluster design based on a master sample frame developed and maintained by the KNBS, a representative sample of households was obtained.

The survey was conducted with the following instruments: Household questionnaire - collect all details of everybody who spent previous night in the house, Individual questionnaire - Administered to those with disability only as identified in above household, Reproductive Health Questionnaire - Administered to women of reproductive ages (12-49) and finally Institutional questionnaires- applied to institutions serving PWDs. The survey covered a total of 14,569 households in which 3,095 individuals with disability were interviewed, and 6,943 women aged 12-49 were interviewed on reproductive health issues - this is the focus population of study. This study focused on 281 women aged 12-49 years with disability.

3.3 Methods of Analysis

3.3.1 Descriptive Statistics

The frequency distributions developed to examine the patterns of response to each of the independent and dependent variables under investigation. This entails listing of the categories of the variables and counts the number of observations in each. In the study the data for all variables are summarized and organized in an effective and meaningful way to show the counts and percentages. The percentage values were vital in comparing different variables (populations)

3.3.2 Bivariate Analysis

The chi-square test is used to determine whether there is a significant difference between the expected frequencies and the observed frequencies in one or more categories. Do the numbers of individuals or objects that fall in each category differ significantly from the number you would expect? Cross tabulations was used at bivariate level of analysis to test for associations between contraceptive use and independent variables. The test isolated the variables that did not have any relationship with contraceptive use as discussed in details in the next chapter. The chi-square formula used on this study is

$$X^2 = \frac{(O - E)^2}{E}$$

E where O is the Observed Frequency in each category

E is the Expected Frequency in the corresponding category

X^2 is Chi Square

3.3.3 Logistic Regression

Logistical regression is used when there are only two categories of the dependent variable. Logistic regression is often used because the relationship between the primary variable and a predictor is non-linear. Logistic regression determines the impact of multiple independent variables presented simultaneously to predict membership of one or other of the two dependent variable categories. Logistic regression employs binomial probability theory in which there is only two values to predict: that probability (p) is 1 rather than 0, i.e. the event/person belongs to one group rather than the other.

Logistic regression forms a best fitting equation or function using the maximum likelihood method, which maximizes the probability of classifying the observed data into the appropriate category given the regression coefficients. The probability of one

outcome is modeled as a function of the linear combination of several explanatory variables. Example the probability of contraceptive use changes very little with a ten-point difference among the most educated & disabled women, but a ten point change can mean a drastic change in the probability of contraceptive use in disabled women with low levels of education. Below is an illustration;

$$\hat{Y}_i = \frac{e^u}{1 + e^u}$$

Where Y-hat is the estimated probability that the ith case is in a category and u is the regular linear regression equation:

$$u = A + B^1X_1 + B_2X_2 + \dots + B_kX_k$$

$$\hat{Y}_i = \frac{e^{b_0 + b_1X_1}}{1 + e^{b_0 + b_1X_1}}$$

Change in probability is not constant (linear) with constant changes in X. This means that the probability of a success (Y=Contraceptive use = 1) given the predictor variable (X) is a non-linear function, specifically a logistic function. It is not obvious how the regression coefficients for X are related to changes in the dependent variable (Y) when the model is written this way.

The values in the regression equation b0 and b1 take on slightly different meanings.

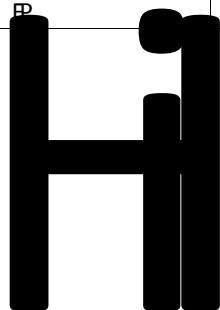
- b0 <r The regression constant.
- b1 <- The regression slope

3.4 Definitions of Variables

The following are some of the operational definitions of variables used in this research project:

Table 3.1 Definition of Variables

| Variable | Type | Description | Measurement |
|-------------------------------|-------------|---|--|
| Contraceptive use(Current) | Dependent | Refers to the prevention of pregnancy for purposes of limiting or spacing children. This variable measures the level of contraceptive use among women with disability. | 1 = Yes 2 = No |
| Demographic Factors | | | |
| Age | Independent | Current age of women with disability (12-49 years). | 1 = 12- 24 years 2= 25-34 years 3= 35-49 years |
| Marital status | Independent | Respondent's marital status at the time of survey. This is divided into in 3 categories. | 1 = Single 2= Married 3=Separated/widow |
| Socio-economic Factors | | | |
| Education | Independent | Highest level of education attained by women with disability. | 1 = No Education 2 = Primary 3= Secondary & above. |
| Region of residence | Independent | In this study the region of high disability prevalence includes Nairobi, Coast, and Central & Nyanza provinces while low prevalence includes N.Eastern, Eastern, and Western & Rift Valley. | 1 = Region of high prevalence 2= Region of low prevalence |
| Place of residence | Independent | Place of respondent's residence at the time of survey | 1 = Rural 2 = Urban |
| Intervening Factors | | | |
| Ever been denied/refused FP | Independent | Whether women with disability have ever been denied/refused family planning at the time of survey. | 1- Yes 2- No |



3.5 Definition of Concepts

The following are some of the Concepts used in this research proposal:

- Disability - refers to a physical, mental, and emotional or other health conditions that has lasted or is expected to last for more than six months and that limits or prevents a person's full participation in the activities of daily life. The
- Physical disability - refers to any difficulty in moving one or more parts of the body.

Socio-economic status - Ownership of assets and properties like houses, cars etc and it takes the form of standard of living.

Mobility- refers to the ability of the PWDs to move from point A to B. It measures how much movement restricts/limits the participation of PWDs from carrying out their daily activities.

Prevalence - The number or proportion (of cases, instances, and so forth) present in a population at a given time. Compare with incidence

Prevention (of disease or ill health) - Action to reduce or eliminate the onset, causes, complications or recurrence of disease or ill health.

CHAPTER FOUR

FACTORS INFLUENCING CONTRACEPTIVE USE AMONG WOMEN WITH DISABILITY IN KENYA

4.1 *Introduction*

This chapter presents the results of the study. It begins by looking at the background characteristics among women with disability. Part two presents results of the differentials of contraceptive use by various background characteristics and finally the results of multivariate analysis are presented.

4.2 *Distribution of Women with Disability by Background Characteristics*

The sample population comprised 281 women aged 12-49 years with disability out of 6877 based on individual response on reproductive health issues. Table 4.1 below shows the distribution of the sample population by background characteristics. The results show that contraceptive use for women with disability and non-disabled women in Kenya were 16% and 20% respectively. The majority of women with disability were older (35-49 years) at 45% with the youthful women (12-24years) coming second at 31%. The middle aged disabled women had the least at 24%. For the non-disabled women, those aged 12-34 years were 20% and 31% & 49% respectively for ages 25-34years & 35years & above.

On the marital status, 47% of the disabled women in Kenya were the married while 38% were not married at the time of the survey. Only over 15% of these women were windowed, divorced or separated. While for non-disabled women, single, married and separated women were 28%,50% and 22% respectively.

Table 4.1 Frequency Distribution of disabled and non-disabled Women in Kenya by Background Characteristics

| Independent Variable | Women with Disabilities | | Women Without Disabilities | |
|-----------------------------------|-------------------------|---------|----------------------------|---------|
| | Freq | Percent | Freq | Percent |
| Contraceptive Use | | | | |
| Yes | 45 | 3.3% | 1334 | 96.7% |
| No | 236 | 4.3% | 5259 | 95.7% |
| Age | | | | |
| 12-24 years | 88 | 3.9% | 2144 | 96.1% |
| 25-34 years | 66 | 3.9% | 1646 | 96.1% |
| 35-49 years | 127 | 4.3% | 2806 | 95.7% |
| Marital Status | | | | |
| Not Married | 106 | 4.2% | 2417 | 95.8% |
| Married | 132 | 3.9% | 3252 | 96.1% |
| Separated/widowed | 43 | 4.4% | 927 | 95.6% |
| Education Levels | | | | |
| No Education | 34 | 3.7% | 890 | 96.3% |
| Primary Education | 145 | 4.1% | 3432 | 95.9% |
| Secondary & Above | 102 | 4.3% | 2272 | 95.7% |
| Region of Residence | | | | |
| Region of low Prevalence | 114 | 3.8% | 2872 | 96.2% |
| Region of high Prevalence | 167 | 4.3% | 3724 | 95.7% |
| Place of Residence | | | | |
| Rural | 195 | 3.9% | 4868 | 96.1% |
| Urban | 86 | 4.7% | 1728 | 95.3% |
| Ever been denied use of FP | | | | |
| Yes | 6 | 6.2% | 90 | 93.8% |
| No | 275 | 4.1% | 6496 | 95.9% |

The results show that majority of the disabled women had attained primary level of education (47%), those with secondary and above level were at 40% while only 13% had no education. Like in the case of disabled women, 54% (majority) of non-disabled women had primary level of education while those with no education were least at 6% with those with secondary education & above at 40%.



The disabled women in high disability prevalence areas were 59% while their counterparts in low prevalence regions were at 41%. On the other hand, non-disabled women outcome for were 30% & 70% for low and high prevalence regions respectively.

The findings indicate that majority of the disabled women in Kenya were resident in rural areas (69%) while 31% were living in urban areas, similar trend applies to non-disabled women who were 71% & 29% for rural and urban areas respectively.

Furthermore, only 2% of the disabled women and 4% of non-disabled women in Kenya had been denied use of family planning and an overwhelming majority of 98% and 96% for respectively had access to family planning, On type of disability, most of the disabled women were suffering from visual impairment at 41%, while those with multiple disability, Hearing & physical disability are at 17%, 10% & 16% respectively. Similar trend applies for non-disabled women.

4.3. Differentials of Contraceptive Use by Background Characteristics among Disabled and Non-disabled Women in Kenya

This section presents the results of bivariate analysis that shows the association between contraceptive use and key background characteristics. The results are presented in Table 4.2

The results show that age of women was not significantly associated with contraceptive use among disabled women in Kenya but significantly associated with contraceptive use among non-disabled women in Kenya. Disabled women aged 35 years and above had the highest rate of contraceptive use (20%) as compared to those aged 25- 34 years (15%), the contraceptive use was least for women of ages 12-24 years. On the other hand, women without disability aged 25-34 years had a highest level of contraceptive use (26%) while those aged 12-24years having least (12%); women aged 35years and above had an average of 23% contraceptive

prevalence. Both results from women with and without disability indicate that women aged 12-24 years have the least rate of contraceptive use compared to other age categories. Overall, women without disability had a higher rate of contraceptive use than women with disability in all categories of age

Table 4.2 Differentials of Contraceptive use among disabled and non-disabled women in Kenya

| Independent Variable | Women with disabilities | | | DF | Women without disabilities | | |
|-----------------------------|-------------------------|-------------|------------|----|----------------------------|--------------|--------------|
| | Use FP | No FP | Total | | Use FP | No FP | Total |
| | Freq (%) | Freq (%) | Freq (%) | | Freq (%) | Freq (%) | Freq (%) |
| Age | | | | 2 | | | |
| 12-24 years | 10(11.4) | 78(88.6) | 88(3.9) | | 263(12.3)** | 1881(87.7)** | 2144(96.1)** |
| 25-34 years | 10(15.2) | 56(84.8) | 66(3.9) | | 422(2.5.7)** | 1223(74.3)** | 1645(96.1)** |
| 35-49 years | 25(19.7) | 102(80.3) | 127(4.3) | | 649(23.1)** | 2155(76.9)** | 2804(95.7)** |
| Marital Status | | | | 2 | | | |
| Not Married | 13(12.3) | 93(87.7) | 106(4.2) | | 374(15.5)** | 2042(84.5)** | 2416(95.8)** |
| Married | 22(16.7) | 110(83.3) | 132(3.9) | | 671(20.6)** | 2579(79.4)** | 3250(96.1)** |
| Separated/widowed | 10(23.3) | 33(76.7) | 43(4.4) | | 289(31.2)** | 638(68.8)** | 927(95.6)** |
| Highest Education | | | | 2 | | | |
| No Education | 4(11.8) | 30(88.2) | 34(3.7) | | 82(9.2)** | 810(90.8)** | 892(96.3)** |
| Primary Education | 30(20.7) | 115(79.3) | 145(4.1) | | 722(21.0)** | 2709(79.0)** | 3431(95.9)** |
| Secondary & Above | 11(10.8) | 91(89.2) | 102(4.3) | | 529(23.3)** | 1741(76.7)** | 2270(95.7)** |
| Region of Residence | | | | 1 | | | |
| Region of low Prevalence | 14(9.6)* | 103(90.4)* | 114(3.8)* | | 395(13.8)** | 2474(86.2)** | 2869(96.2)** |
| Region of high Prevalence | 34(20.4)* | 133(79.6)* | 167(4.3)* | | 939(25.2)** | 2785(74.8)** | 3724(95.7)** |
| Place of Residence | | | | 1 | | | |
| Rural | 35(17.9) | 160(82.1) | 195(3.9) | | 946(19.4)** | 3922(80.6)** | 4868(96.1)** |
| Urban | 10(11.6) | 76(88.4) | 86(4.7) | | 388(22.5)** | 1337(77.5)** | 1725(95.3)** |
| Ever been refused FP | | | | 1 | | | |
| Yes | 5(83.3)** | 1(16.7)** | 6(6.3)** | | 49(54.4)** | 41(45.6)** | 90(93.8)** |
| No | 40(14.5)** | 235(85.5)** | 275(4.1)** | | 1281(19.7)** | 5222(80.3)** | 6503(95.9)** |

P-Values * $p < 0.05$ ** $p < 0.01$

The results show that age of women was not significantly associated with contraceptive use among disabled women in Kenya but significantly associated with contraceptive use among non-disabled women in Kenya. Disabled women aged 35 years and above had the highest rate

of contraceptive use (20%) as compared to those aged 25- 34 years (15%), the contraceptive use was least for women of ages 12-24 years. On the other hand, women without disability aged 25-34 years had a highest level of contraceptive use (26%) while those aged 12-24years having least (12%); women aged 35years and above had an average of 23% contraceptive prevalence. Both results from women with and without disability indicate that women aged 12-24 years have the least rate of contraceptive use compared to other age categories. Overall, women without disability had a higher rate of contraceptive use than women with disability in all categories of age

The study findings show that marital status of women was not significantly associated with contraceptive use among disable women in Kenya but was significantly associated with contraceptive use among non-disabled women in Kenya. The separated/widowed women with disability had a highest rate of contraceptive use (23%) slightly higher than that of women with disability who were married (17%) and 12% for unmarried women. For women without disability, the order of contraceptive use is similar to that of women with disability with 31% for widowed/separated women;-21% for married women and 16% for the 'not married'. These results imply that women without disability had a higher rate of contraceptive use than women with disability.

The results also indicate that level of education for women was not significantly associated with contraceptive use among disable women in Kenya while it was significantly associated with contraceptive use among non-disabled women in Kenya. Women with disability who had attained primary level of education had the highest rate of contraceptive use at 21 percent, followed by women with no education (12%), and women with secondary level of education and above had the lowest rate at 11%. On women without disability; those who had

attained secondary level of education and above had the highest rate of contraceptive use (23%), followed by women with primary level of education (21%) and, women who had no education had the lowest rate of contraceptive use at 9 percent. It's interesting to note that both groups of women with primary level of education have the same contraceptive prevalence (21%) and at the same time, prevalence rate for women without disability doubles that of the disabled women.

The results show that region of residence for women were significantly associated with contraceptive use among both the disabled women and non-disabled women in Kenya. Disabled women from provinces with low contraceptive prevalence had contraceptive use of 9.6% while those from provinces with high contraceptive prevalence had a rate of 20.4 percent. Women who came from provinces with high contraceptive prevalence had the highest rate of contraceptive use (25.2%), and women who came from provinces with low contraceptive use had a rate of 13.8%. From the results, women without disability registered a higher rate of contraceptive use than women with disability.

The study findings show that place of residence for women is not significantly associated with contraceptive use among disabled women in Kenya but were significantly associated with contraceptive use among non-disabled women in Kenya. Women who came from rural areas had the highest rate of contraceptive use at 18%, while women who came from urban areas had a rate of 12%. On the other hand, the non-disabled women who came from urban areas reported a higher rate of contraceptive use (23%) than women who came from rural areas (19%). The results show that the rate of contraceptive use among women with disability residing in rural areas is higher than that of women residing in urban areas which are the exact

opposite for women without disability. Overall, women without disability registered a higher rate of contraceptive use than women with disability especially in urban areas.

The results show that access to family planning for women is significantly associated with contraceptive use among both the disabled women and non-disabled women in Kenya. Women with disability who reported having ever been refused family planning had a higher rate of contraceptive use (83%) than women who reported having never been refused family planning (15%). Women without disability who reported having ever been refused family planning had a higher rate of contraceptive use (54%) than women who reported having never been refused family planning (20%).

4.4. Factors Influencing Contraceptive Use among disabled women and non-disabled women in Kenya

This section presents results of the multivariate logistic regression on factors influencing contraceptive use among disabled and non-disabled women in Kenya. The results are presented in table 4.3. The results show that age of women was a significant determinant of contraceptive use among the non-disabled women but not among disabled women in Kenya. Non-disabled women aged 25-34 years and 35 and above years were 2.7 and 2.4 times respectively more likely to use modern contraception compared to women aged 12-24 years. Disabled women in the same age brackets were also more likely to use modern contraception compared to the younger women even though the results were not significant.

Marital status of women without disability was significantly associated with contraceptive use. The results show that divorced/separated women with no disability were 48% more likely to use contraceptives compared to those that were unmarried.

Table 4.3 Coefficient estimates from logistic regression model predicting Contraceptive use among disabled and non-disabled women in Kenya

| Covariates | Women With Disability | | | Women Without Disability | | |
|----------------------------|------------------------------|-------------|---------------|---------------------------------|-------------|---------------|
| | B | S.E. | Exp(B) | B | S.E. | Exp(B) |
| Age | | | | | | |
| 12-24 years R | | | | | | |
| 25-34 years | 0.085 | 0.623 | 1.088 | 0.991 | 0.109 | 2.695** |
| 35-49 years | 0.538 | 0.623 | 1.712 | 0.893 | 0.115 | 2.443** |
| Marital Status | | | | | | |
| Not Married R | | | | | | |
| Married | 0.045 | 0.577 | 1.046 | -0.147 | 0.102 | 0.864 |
| Separated/Divorced | 0.478 | 0.653 | 1.613 | 0.397 | 0.119 | 1.487** |
| Education Levels | | | | | | |
| No Education R | | | | | | |
| Primary | 0.418 | 0.605 | 1.519 | 0.829 | 0.13 | 2.291** |
| Secondary+ | -0.22 | 0.673 | 0.803 | 0.998 | 0.134 | 2.713** |
| Region of Residence | | | | | | |
| Low Prevalence R | | | | | | |
| High Prevalence | 0.973 | 0.544 | 2.646 | 0.905 | 0.079 | 2.471** |
| Place of Residence | | | | | | |
| Rural R | | | | | | |
| Urban | 0.319 | 0.585 | 1.376 | 0.526 | 0.084 | 1.692** |
| Ever been denied FP | | | | | | |
| Yes R | | | | | | |
| No | -3.556 | 1.166 | 0.029** | -1.502 | 0.228 | 0.223** |
| Constant | 0.479 | 1.393 | 1.615 | -2.081 | 0.267 | 0.125 |

Key: ** p<0.01 R - Reference Category

Even though marital status for disabled women was not significant associated with use of contraceptives, the married and divorced/separated women are more likely to use contraceptives compared to those not married. Research by others, including Canadian Center of Science and Education give almost similar results.

Level of education had a highly significant effect on contraceptive use among non-disabled women in Kenya. The findings indicate that non-disabled women with primary education and Secondary plus were 2.3 and 2.7 times more likely to use modern contraception compared to those with no education. Interestingly, education status has no significant

influence on the contraceptive use among the disabled women. This is in line with findings from other researchers like Tuladhar, J.M.

The results show that region of residence was a significant determinant of contraceptive use among the non-disabled women but not among disabled women in Kenya. The results indicate that those in high prevalence were 2.5 times more likely to use contraceptive compared to those living in low prevalence regions. Disabled women from high prevalence regions were also more likely to use contraception compared to those in low prevalence regions even though the results were not significant.

Place of residence was significantly associated with contraceptive use among non-disabled women in Kenya. The results indicate that 69% of women without disability residing in urban areas were more likely to use modern contraception compared to those residing in rural areas. About 38% of disabled women with were more likely to use contraceptive though the results were not significant.

Finally the results indicated that ever been refused/denied use of family planning is a highly significant determinant-for.contraceptive use for both disabled and non-disabled women in Kenya. The results show that the disabled women who reported having never been refused family planning were 97% less likely to use modern contraception as compared to women who reported as having ever been refused family planning while on the other hand non-disabled women who reported having never been refused family planning were 88% less likely to use contraceptives as compared to women who reported as having ever been refused family planning. Research by Okech T.C also gives similar findings.

In summary the results show that ever been refused/denied use of family planning is the only significant determinant of contraceptive use among the disabled women in Kenya. On the

other hand, age, marital status, education level, region of residence, Place of residence, and ever been refused/denied FP were the significant determinants of contraceptive use among women without disability as indicated by the results in table 4.3.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This study was set to establish the determinants of contraceptive use among disabled and non-disabled women in Kenya. Specifically, the study aimed to examine demographic, socio-economic and socio-cultural factors influencing contraceptive use among disabled and non-disabled women in Kenya. This chapter presents a summary of the study findings, conclusions and recommendations. The recommendations that have been made touch on policy, programmes, and research.

5.2 Summary of Findings

This study set out to examine factors influencing contraceptive use among disabled and non-disabled women in Kenya. Data was obtained from The Kenya National Survey for Persons with Disabilities (NCPD et al., 2008). The main dependent variable for the study was the contraceptive use with independent variables were: age of respondents, education levels, marital status, region of residence, place of residence and ever been refused family planning. The study utilized three main methods of data analysis which include descriptive statistics (frequency distribution), the bivariate analysis (chi-square) and multivariate analysis (multiple logistic regressions).

The sample population comprised 281 women aged 12-49 years with disability out of 6877 based on individual response on reproductive health issues. The results show that contraceptive use for women with disability and non-disabled women in Kenya were 16% and 20% respectively. The bivariate analysis shows that only ever been refused/denied family J planning and region of residence are the only significant factors influencing the contraceptive among both disabled and non-disabled women in Kenya. The results also showed that women

with disability who reported having been refused family planning had a higher rate of contraceptive use (83%) than women who reported having never been refused family planning who were at 14%, the trend is similar for the non-disabled women.

However, multivariate regression results showed that ever been denied/refused family planning was the only factor significant associated with contraceptive among the disabled women in Kenya. The results show that the disabled women who reported having never been refused family planning were 97% less likely to use contraceptives as compared to women who reported as having ever been refused family planning while on the other hand non-disabled women who reported having never been refused family planning were 88% less likely to use contraceptives as compared to women who reported as having ever been refused family planning. This is in line with other studies which outline denied use of family planning services occasioned by both cultural and religious beliefs especially among Muslim dominated North Africa population and among some Christian-Catholics (Winnipeg, 1999; West off and Bankole, 1998; APPRC, 1998)

5.3 Conclusion

This study sought to investigate demographic, socio-economic and intervening factors influencing contraceptive use among women with disability within the reproductive ages. Based on the findings, it is clear that contraceptive use among disabled women is influenced by access to family planning only.

The contraceptive use for women with disabilities was of concern because of the discrimination and exclusion of the group from active participation in the society as compared to their non-disabled peers (Jans & Stoddard, 1999; Trainor, 2007). Overall, the findings from this study indicate that ever been denied/refused family planning is a critical factor

explaining the use of contraception. These findings are consistent with the literature, which outline that denied/refused family planning services occasioned by both cultural and religious beliefs especially among Muslim dominated North Africa population and among some Christian-Catholics (Winnipeg, 1999; West off and Bankole, 1998; APPRC, 1998). However, about 97% of the disabled women were never denied use family planning but this is not reflected in the contraceptive prevalence which stood at 16%. This implies that they were still other underlying factors which for this low prevalence rate.

5.4 Recommendations

Based on the findings and conclusion, this study proposes recommendations for research, policy and programs.

5.4.1 Recommendations for Further Research

A qualitative research is recommended to for clarity and insight on some of the factors that influence the use of contraceptives that probably were not well captured by the quantitative methods. Further studies on this subject should be carried out at lower levels i.e. at regional or county levels to bring out specifics from each of the regions and for comparison purposes.

5.4.2 Recommendations for Policy and Programs

The findings from the study clearly indicate the need to promote Contraception and reproductive health among WWDs as a right and to also respond to their sexual and reproductive health needs through various interventions. In light of this, the following are proposed for action:

1. In order to effectively address the Reproductive Health needs of PWDs, there is need to design and implement WWD-specific interventions. Since family planning (FP) remains

at the core of sexual and reproductive health care, there is need for the RH program to also provide FP services to WWDs including FP counseling, information, education, and contraceptive supplies.

2. Information, education and communication (IEC) on Contraceptive needs for WWDs also need to be developed with special focus not only on the messages but also on the various forms of disability. GOK and other stakeholders could take up development and production of IEC materials on Contraceptive use specifically targeting WWDs. These should be up to date and properly distributed with translated versions in the various local languages for effective reach. A woman with physical disability wondered aloud, "When you give me condoms to go and use to protect myself from pregnancy or HIV/AIDS and you can see I have no hands, do you ever imagine how I'm going to use them...? I think you need to have health providers who can educate the PWDs on how to use family planning methods for them to be effective...." (NCPD et.al, 2009

References

APPRC, 1998. *Fertility Decline in Kenya: Levels, Trends and Differentials*. Population Council. Nairobi, Kenya.

Australian Institute of Health and Welfare, 2006. *Life Expectancy and Disability in Australia. 1988-2003*.

Australian Institute of Health and Welfare, 2008. *Disability in Australia: Trends in prevalence, education, employment and Community Living*. Bulletin 61.

Bongaarts J and Bruce J, 1995. *The causes of Unmet Need for Contraception and the Social Context of Services*. Studies in Family Planning, vol.26 (2).UNHQ, New York, 3-5 December 2001.

Bongaarts J, 1978. "A framework for analyzing the proximate determinants of fertility" Population and Development Review 4 (1):105-132.

Bongaarts J, 1982. "The fertility-inhibiting effects of the intermediate fertility variables." Studies in Family Planning 13(6/7):179-189.

Bongaarts, J. 1986. "The Transition in Reproductive Behaviour in the Third World." pp.105-32 in *The World Population and US Policy: Choices Ahead*, edited by J. Menken and J.N. Bongaarts. New York and London: Norton.

Caldwell, J.C. 1980. "Mass Education as a Determinant of the Timing of Fertility Decline." Population and Development Review 6: 225-55.

Centerline J.B, Perez A.E and Biddlecom A.E, 1997. *Factors Underlying Unmet Need for Family Planning in the Philippines*. Studies in the Family Planning, vol.28 (3).

Cleland, J., and S. Rutstein. 1986. "Contraception and Birthspacing." International Family Planning Perspectives 12(3): 83-90.

Clignet, R. 1970. *Many Wives, Many Powers: Authority and Power in Polygamous Families*. Evanston, IL: Northwestern University Press.

Cochrane, S. and S.M. Farid. 1989. *Fertility in Sub-Saharan Africa. Analysis and Explanation*. Washington, DC: World Bank.

Cornelius R.M and Novak A, 1983. *Contraceptive Availability and Use in Five Developing Countries*. Studies in Family Planning, vol.1 (2).

Developing Countries International Family Planning Perspectives 16(2): 49-54.

Donaldson and Tsui, 1990. *International Family Planning Movement*. Population Bulletin, vol.45 (3), Population Reference Bureau, Washington D C.

Dow T.E. and L.H. Werner. 1982. "Modern, Transitional, Traditional Demographic and Contraceptive Patterns among Kenyan Women." *Studies in Family Planning* 13(1): 12-23.1983. "Prospects for Fertility Decline in Rural Kenya." *Population and Development Review* 9: 77-97.

Equality Commission for Northern Ireland, 2003. *Equality and Inequalities in Health and Social Care in Northern Ireland*. A Statistical Overview (DHSSPS, 2004:125.

Freedman, R., S. Khoo, and B. Supraptilah. 1981. "Modern Contraceptive Use in Indonesia: A Challenge from Conventional Wisdom." *World Fertility Survey Scientific Reports* 20. Voorburg, The Netherlands: International Statistical Institute.

Goldberg, H.I., A. Spitz, M. McNeill, A. Krystall, and K. de Boer. 1987. 1985 Chogoria Community Health Survey: Report of Principal Findings. Atlanta: Center for Disease Control.

Goldberg, H.I., M. McNeill, and A. Spitz. 1989. "Contraceptive Use and Fertility Decline in Chogoria, Kenya." *Studies in Family Planning* 20(1): 17-25.

Gomes, M. 1984. "Family Size and Educational Attainment in Kenya." *Population and Development Review* 10(4): 647-60.

Ikamari, L.D.E, 1985. *Determinants of Contraceptive Use in Kenya*. A Thesis, PSRI, University of Nairobi.

Institute for Resource Development/Macro International. *Demographic Health Surveys Comparative Studies*, No. 5, Columbia.

Jans, L., & Stoddard, S., 1999. *Women and disability in the United States*.

Johnson-Ascadi, G. and G. Weinberger. 1980. "Factors Affecting Use and Non-Use of Contraception." pp. 51-84 in *The Role of Surveys in the Analysis of Family Planning Programs*, edited by A.I. Hermalin and B. Entwisle. Liege, Belgium: Ordina.

Kane T, Farr G, Janowitz B. 1990. Initial Acceptability of Contraceptive Implants in Four Kenya National Bureau of Statistics, 2009. *Economic Survey*. Nairobi, Kenya. Government Printer.

Khan, M.A and Mizanur Rahman, 1997. *Determinants of Contraceptive Method Choice in Rural Bangladesh*. *Demographers Notebook, Asia Pacific Population Journal*, 12 (3).

Kyalo, M.M, 1996.*Determinants of Contraceptive Non-Use in Kenya: Evidence from the KDHS (1989)*.MA Thesis PSRI, University of Nairobi.

Lesthaeghe, R., C. Vanderhoeft, S. Becker and M. Kibet. 1983. "Individual and Contextual Effects of Female Education on the Kenya Marital Fertility Transition." IPD Working Paper 1983-9. Brussels: Inter-University Programme in Demography.

Lightbourne, R.E. 1980. "Urban-Rural Differentials in Contraceptive Use." World Fertility Survey Comparative Reports 10. Voorburg, The Netherlands: International Statistical Institute.

Lutalo,T.et.al,2000.*Trends and Determinants of Contraceptive Use in Rakai District,Uganda*. 1995- 1998' Studies in Family Planning,31(3).

Mason, K. 1985. The Status of Women: A Review of Its Relationship to Fertility and Mortality. New York: Rockefeller Foundation.

Mulindwa, I.N, 2003. *Study on Reproductive Health and HiV/AIDS among Persons with Disability in Kampala*.Rakai Districts, Uganda.

Murty, R.K. and S. De Vos. 1984. "Ethnic Differences in Contraceptive Use in Sri Lanka." Studies in Family Planning 15(5): 222-32.

National Coordinating Agency for Population & Development and Kenya National Bureau of Statistics, 2008.*Kenya National Survey for Persons with Disability*. Nairobi, Kenya.

National Coordinating Agency for Population & Development and Kenya National Bureau of Statistics, 2009.*Kenya National Survey for Persons with Disability*. Policy Brief Vol.3.

National Institute on Disability and Rehabilitation Research. Washington, DC

Ndungu, H.W, 2004.*Factors influencing Use of Modern Contraceptives among rural women in Kenya*. MA Thesis PSRI, University of Nairobi.

NSW Government Submission to Productivity Commission Research Study (2004) Economic implications of an Ageing Australia, NSW Government.

NSW Industry Group, 2003. *People Ageing with Disability*. Draft Position Paper, March 2003.

O'Connor, JS, 1996.*Caring Work: A Gendered Activity*. Sociology, 44 (2) 13-29.

Okech T.C. *Contraceptive use among women of Reproductive Age in Kenya*. 2002,Vol 1

Omondi-Odhiambo, A.M. Voorhoeve and J.K. van Ginneken. 1984. "Age-Specific Infant and Childhood Mortality and Causes of Death." pp. 213-22 in Maternal and Child Health in Rural

Kenya. An Epidemiological Study, edited by J.K. van Ginneken and A.S. Muller. London and Sidney: Croom Helm.

Opong, C. 1983. "Women's Roles. Opportunity Costs, and Fertility." pp. 547-89 in *Determinants of Fertility in Developing Countries*, edited by R.A. Bulatao and R. Lee. New York: Academic Press.

Physical Disability council of New South Wales, 2008. *Impact of Ageing on the needs of People with Disability*. Second Edition.

Research Center for Gender, Health and Ageing, 2007. *Does Gender matter in Ageing?* Conference Report, University of Newcastle, July 2007.

Ross, J. A. and E. Frankenberg, 1993. *Findings from Two Decades of Family Planning Research*. New York, Population Council.

Stephen, E.H., R.R. Rindfuss, and F.D. Bean. 1988. "Racial Differences in Contraceptive Choice: Complexity and Implications." *Demography* 25(1): 53-70.

Trainor, A. A., 2007. *Perceptions of adolescent girls with LD regarding self-determination and postsecondary transition planning*. *Learning Disability Quarterly*, 30(1), 31-45.

Trainor, A. A., 2008. *Using cultural and social capital to improve postsecondary outcomes and expand transition models for youth with disabilities*. *The Journal of Special Education*, 42(3), 148-162.

Tuladhar, J. M. 1985. "Determinants of Contraceptive Use in Nepal." *Journal of Biosocial Science* 17: 185-93.

Tuladhar, J.M, 1985. *Determinants of Contraceptive Use in Nepal*. *Journal of Biosocial Science*, 17.

UN, 2006. *Some Facts about Persons with Disabilities*. International Convention on the rights of Persons with Disabilities. United Nations, 14-25 August 2006, New York. United Nations expert group meeting on disability-sensitive policy and program me monitoring and evaluation.

Wekesa and Omurundo, 2001. *Socio-economic and socio-cultural Dimension of Traditional and Modern Contraception in Kenya*. Population and Development in Africa: PSRI.

Westoff, C.F. and L.H. Ochoa, 1991. *Unmet Need and the Demand for Family Planning*.

WHO, 2006. *Disability, Prevention and Rehabilitation Technical Report* .Series No.668.

World Health Organization, Geneva.