ABSTRACT

Context: The issue of contraceptive use, its determinants and availability of varieties are presently a concern to the government of Lesotho. This is so because they are very important components of any successful family planning programs.

Methods: The study uses the Lesotho Demographic and Health Survey (LDHS), 2004 data set to examine the role and pattern of three groups of variables (individual, fertility and contextual variables) in determining contraceptive use among women aged 15-49 years in Lesotho. Based on the Cost-Benefit theoretical model, analyses are done at three levels. These are the univariate, bivariate and multivariate levels. The logistic regression technique is used at the multivariate level.

Results: All background characteristics at the bivariate level are found to have a strong significant association and hence a relationship with the use of contraceptive. This however is with the exception of sex of household head, which is only significant when controlling for marital status and age. At the multivariate level, women educational level, partner's educational attainment and marital status have the highest odd ratio of contraceptive use and hence, the highest power of critical predictions. They are also highly significant in each model. The stepwise regression shows that addition of new group of variables (fertility and contextual variables), brought about changes in ratio values although very small. It also maintained the same pattern of predictions with the other models to the use of contraceptive.

Conclusion: This study concludes that factors found to be associated with contraceptive use should be considered by the Lesotho government in its family planning programmes, especially those concerning contraceptives as this will bring about increase in use and hence, increase in contraceptive prevalence in the country.

DECLARATION

I hereby declare that the content of this research report is entirely mine and that there is no part of this report copied or re-produced from any other known source, except as titled in the text.

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ABBREVIATIONS

1. AIDS: Acquired Immunized deficiency syndrome.
2. DHS: Demographic and Health Survey.
3. DK: Don't know.
4. HIV: Human Immunodeficiency Virus.
5. LDHS: Lesotho Demographic and Health Survey, 2004.
6. LNPP: Lesotho National Population Policy.
7. LRHS: Lesotho Reproductive Health Survey.
8. MOHSW: Ministry of Health and Social Welfare.
9. RC: Reference Category.
10. STI: Sexually Transmitted Infections.
11. UNAIDS: United Nations programmes on HIV/AIDS.
12. UNCEF: United Nations Children Fund.
13. USA: United States of America.
14. WFB: World Facts Book on Demographic, Geographic and Population issues.
15. WHO: World Health Organization.

CHAPTER 1
INTRODUCTION

1.1 General Introduction:

Contraceptive use in the recent time has been a central element of quality of care in the provision of family planning services and an important dimension of women's reproductive right (Bruce, 1990; Daiz et al, 1999). Also, Demographers has come to agree in recent time that to bring about an increase in contraceptive prevalence, family planning programme developers and implementers should in their effort to providing variety of safe, effective, acceptable and affordable contraceptive methods; understand better the determinants of various contraceptive methods available in the country (Magadi and Curtis, 2003).

In the light of these, the interest in the study of contraceptive use and the associated factors in Lesotho have probably never been greater than it is today. As a country, Lesotho is presently estimated with a population of 2.1 million (LDHS, 2004). With a HIV prevalence rate at 26.6%, available record shows that about 270, 000 i.e., between 250,000-290,000 of the country populations are presently living with HIV. From this number, 150,000 are women and the remaining are men. The total number of death from HIV and AIDS in record is 23,000 (between 20,000-27,000) (UNAIDS, 2006). From all indications, the country has "the fourth highest HIV infection rate in the world" (UNAIDS, 2006).

Lesotho experiences a high adolescent unwanted pregnancies ranging between 32% and 46%, a rising teenage motherhood and sexually transmitted infections (STIs) which at 26% (Adair, 2007) is not encouraging. Based on these estimations, there has been an urgent call or need for family planning programme drawn on a foundation of an understanding of the critical influencing variables of contraceptives. All geared towards increasing contraceptive prevalence in the country especially among women of reproductive age. In Lesotho, contraceptive is not only seen as a method of preventing pregnancy but also as that of preventing sexually transmitted infections (STIs). In other words, in Lesotho the "use of contraceptive methods allow women to postpone pregnancy, alter the timing between pregnancies, or avoid pregnancy completely"

(Hawkins et al., 1995). It has been in practice over a long time and has been widely acknowledged as a determinant and credited for decline in fertility in both developing and developed countries (Robey et al., 1992; Weinberger, 1991).

It is important to note that in the past, traditional societies (Lesotho inclusive) have been using one form of traditional preventive method or the other (withdrawal, periodic abstinence, folkloric and local traditional methods peculiar to each particular tribe). Also at present, there exist various methods as science has come up with varieties of modern methods (Pills, IUD, Diaphragm, Condom, Sterilization, etc). Thus, the issue has moved from the availability of contraceptives to the type and most especially the factors that determine or associated with the use (of a type) at a particular point in time. Presently, the over-all contraceptive prevalence in Lesotho is about 40.6% (male and female averaged) (WHO, 2006). This rate only represents the average usage in the Sub-Saharan Africa and is much lower when compared to countries in the western world.

According to the Lesotho Demographic Health Survey (LDHS) 2004 report, only about 1% of women in Lesotho are currently using the traditional method. 27% is currently using the modern method which is very poor and as high as 72% are not currently using any method. Percentage of men aged 15 to 24 who used a condom last time they had sex with a casual partner is 48% and women 50% (UNAIDS, 2006). These situations are disturbing and calls for urgent attention. However, it is important to mention that in the country, varieties of method are available and "Couples can choose from a range of contraceptives and the decision to use and to choose a particular method can be influenced by decisions made at various levels: at national and regional level, at community and clinic level and at individual level" (Madise, 2004).

With these developments in mind, any attempt to bring about higher contraceptive prevalence in the country and consequently, attaining the United Nations medium variant fertility projections (Weinberger, 1989) will call for a better understanding of the trends and patterns of those background variables determining the use of contraceptive among women of aged 15-49 in Lesotho. This is so because proper understanding of these variables is important for improved quality of care, including better programming, planning and management (logistics, training needs and planning). Enabling the government of the country in realizing their desired goal and impacting her family

planning policies and programs concerning unwanted fertility to a maximum (Magadi and Curtis, 2003).

According to Madise, (2004), "Understanding factors affecting family planning in Lesotho, particularly the importance of quality of care and access is necessary for informed population program and policy formulation". Therefore in this study, determining factors of contraceptive use among women aged 15-49 in Lesotho who are exposed to the risk of sexual outcomes (unwanted pregnancy and STI's) are examined and their level of association (relationship) and critical predictability brought to light.

1.2 Problem Statement:

In Lesotho, the prevalence and consequences of reproductive health needs are immense. Studies have indicated increasing level of unwanted pregnancy of between 32% and 46% (Adair, 2007) and STIs, including HIV prevalence rate for women at 26.4% (Adair, 2007), all which are on the rise. The country present contraceptive prevalence is between 37% (PRB, 2005; LRHS, 2002) and 40% (WHO, 2006) which is only average compared to other sub- Saharan African countries and low compared to other developed countries. These situations have been widely acknowledged as a problem in the country and called for concern.

The LDHS, 2004 report has it that only about three in every ten women population currently uses the modern method and one in every ten, the traditional method. The report also has it that a little above seven in every ten of the women in Lesotho do not use any form of contraception. Of these women ratios, only 35% are currently married women in the country. These ratios are considered low, despite claimed increase in contraceptive use reported in the late 1990s by most studies (MOHSW et al., 2005; Tuoane et al., 2004).

Even at this, most studies in Lesotho have tended to focus on modern contraceptives methods (Madise, 2004; Mpiti, and Kalule-Sabiti, 1985), while similar attention has not been given to understanding the factors affecting other methods of use such as abstinence, withdrawal, folkloric etc available in the country. Most importantly, to the best of my knowledge; no study in recent time has tried using LDHS 2004 data to critically examining the use of contraceptive in Lesotho. The above situations have

contributed in rating Lesotho as the fourth HIV infected country in the world which needs to be re-addressed.

1.3 Justification:

This study is justified on many grounds. Given the current concern over the spread of the human immunodeficiency virus (HIV) and increase in unwanted pregnancy especially among adolescents in Lesotho, knowledge of the factors affecting the use of contraceptive has become increasingly important. Hence, this study will bring about increase in knowledge and consequently, increase in contraceptive use and prevalence which is part of the objectives of the Lesotho government population policy (LNPP, 1994).

Also, this study is justified in the sense that it will help in bringing about improvement in quality of care and program planning and management (logistics, training needs and planning), thus; helping the country to realize the desired impact of its family planning programme. In other words, to address the various reproductive health challenges in the country, the study is essential and hence, justified.

1.4 Research Questions:

(1) What is the level and pattern of contraceptive use in Lesotho?

(2) What are the factors affecting the use of modern contraceptives and no method users in Lesotho?

1.5 Objectives:

1.5.1 General Objective:

The general objective of this study is to examine the determinants of the use of modern method of contraception and no method users in Lesotho.

1.5.2 Specific Objectives:

1. To examine the levels and patterns of contraceptive use among women aged 15-49 in Lesotho.

2. To identify some socio-economic factors affecting the use of contraceptives among women in Lesotho.

1.6 Definition of concepts:

The following terms or concepts in the study are defined for the purpose of clarity:

1. Contraceptive use – This is defined as the deliberate use of any technique or device to prevent conception by those exposed to the risk of pregnancy through sexual intercourse.
2. Socio-economic variables–These are underlying variables which influence proximate determinants of contraceptive use.

1.7 Area of Study:

This area of study of this research is on contraceptive use and its determinants. The study identify itself with three class of variables and attempt to investigate the levels and pattern of contraceptive use and its determinants among women aged 15-49 years in Lesotho using the LDHS, 2004 data.

1.8 Organization of the Study:

This study has been carried out based on the methodology as highlighted above. The study is presented in six chapters. Chapter one and two are the introductory and literature review chapters, while chapter three is on the methodology. Chapter four, deals with the demographic and socio-economic characteristics of respondents. Here the univariate, and bivariate, including the various controls were carried out. Chapter five consists of the multivariate analyses. In these chapters (4 and 5), results are presented in tables and followed by comments on each table. Chapter six consists of the discussions of findings, conclusions and recommendation.

CHAPTER 2
LITERATURE REVIEW

2.1 Introduction

In the course of carrying out this study, a lot of materials (text books and research publications) in the area of contraceptive use and its influencing (determinant) variables were sourced and read. In this chapter, effort has been made under "correlates of contraceptive use" to bring to light, the view of these various authors based on the presentation in these materials. Also, briefly, discussion is also made on the theoretical model of the research and upon these write-ups, statement of hypotheses drown.

2.2 Correlates of contraceptive use

In recent times studies have been carried out and researches done on contraceptive use and possible determinants. Prominent among these studies is the work done by Tanfer, et al (1992) in which they examined the social and demographic factors determining the use of contraceptives. In their work, Tanfer, et al, (1992) researched and found that several social, demographic and other factors that are closely associated with the high practical cost of pregnancy (such as its effect on education and occupation) tended to increase the motivation to control fertility and consequently, the likelihood of method use. Here, the researchers identified variables such as family stability, education, work status (employment), religious affiliation as most likely factors. On the other hand, the researchers also went ahead to identify the failure of several other noteworthy variables to the contribution of the prediction of method use. Examples here include variables such as living arrangement, duration of the relationship, communication, partner co-operation, access to contraceptive methods etc. In concluding, the researchers noted that these factors are recognized but are not too relevant at the present time. With these, the researchers seem to identify with the basic characteristics variables as the main determinants of contraceptive use in Lesotho.

Also in recognizing the work done by Rindfuss (2006), the researchers agreed that contraceptive behavior can be viewed as a learned and habitual behavior, and is thus dependent on a woman past experience with contraception. They went further to argued

that evidence exist showing that women with more sexual experience tend to use contraceptive more often than those with less experience. Therefore, compared with those with fewer years of sexual activities; those with longer history will have a better understanding of their pregnancy risks and of the methods necessary to avoid pregnancy (Tanfer, et al, 1992).

On the other hand Dung, (1995) in his study, traced the major determinants of contraceptive use to women and husband education, age, sex of couple's living children, region and government participation through family planning programs. According to him, a woman education is an influencing factor but "the husband's education is a stronger predictor of method use than is the education of the wife". Also, he insisted that couples who have only sons or daughters (particularly daughters) will most likely practice contraception. Insisting that even if they do, the probability that they will use the traditional method is higher, even accounting for the type of place of residence i.e. not withstanding if they reside in the urban or rural area. This study proved that patterns of contraceptive use differ considerable by individual fertility and contextual characteristics (Dung, 1995).

Close to this, Njogu, (1991) identified background characteristics such as education, type of place of current residence and renewed government commitment through the provision of family planning programmes as one of the major components of the determinant of contraception. According to him, "better educated and urbanized groups (of women) were more likely to contracept in both periods (i.e. in their menstrual periods)" (Njogu, 1991). He went further to prove and conclude that government commitment through the provision of family planning programmes will help create variety and easy assess to variety of methods.

Going the other way, Adair (2007) in his work on contraception and HIV associated the use of contraceptives to two major causes. These are the desire for children and unmet need for contraceptive use. In this study, the researcher agued that "two causes of the level of use are the desire for children and unmet need for contraception to limit or space births. If an HIV-positive woman does not want to have a child in the future or if she wants to space her births, unmet need for contraception may still put her at risk of pregnancy"(Adair,2007). In the article, the researcher also went ahead to acknowledge

and agree with some other studies and concluding that "knowledge of HIV status among infected women resulted in an increase in contraceptive use, increases in contraceptive use by HIV-positive women can occur through integration of family planning and HIV services" (Adair,2007),

Kee and Darroch, (1981) in there study found that effectiveness, pleasure, harmfulness, and cost were the most important dimensions underlying perceptions of different contraceptive methods. Also, Cvetkovich and Grote, (1981) in there own study on the effect of psychosocial mortality and communication skills on the contraceptive choice of teenage women found out that "attitude towards pregnancy, age at sexual debut, relationship status, and frequency of intercourse were associated with using birth control pills. While on the other hand, communication and role-taking skills were important for condom users" (Cvetkovich and Grote, 1986).

Bertrand et al., (1995), identified and define the concepts of access, quality of care, and medical barriers as main determinants of contraceptive use in Lesotho. Synthesizing them into a consistent framework, the researchers insisted that access determines whether interested individuals make contact with a family planning provider; and insisting that quality and medical barriers come into play afterward. They then concluded, by noting that all these affect the decision of women to adopt a method and the motivation to continue the use of any method.

In this study, the researchers interpreted access as the difficulty of getting to a service point, the cost of services and commodities, clinic hours, knowing where to seek services, and factors like social stigma that discourage people from seeking services. They also interpreted medical barriers as practices that impede contraceptive use based on some unjustified medical rationale such as outdated contraindications and requiring unnecessary physical examinations and laboratory tests (Bertrand et al., 1995). Clearly, Mfono, (1998) also argued that usage is influenced by access to sexuality education, poor family planning services, and attitude associating sexual involvement. She insisted that the level of a woman education, especially on sexuality and the possibility of her easy access to various methods as a result of effective planning services will to a great extent determine the rate or level a woman adopt prevention or uses a particular method. This to low extent agrees with what Bertrand et al., (1995) has put forward.

Condelli, (1986) in Cohen et al, (1978), Smetana and Adler, (1980) in their various studies found and associated the use of contraceptives to subjective-norm variables and attitudinal factors. They found and agued in their works that subjective-norm variables were more predictive and hence more correlated to behavioral intention than were the attitudinal factors. They also went further to claim that the support of a woman's partner may be particularly important for methods that require participation by the man. These methods include modern method like condoms and diaphragm. On the other hand, partner's independent methods, such as birth pills may be less dependent on support (Condelli, 1986).

Close to this, Kelly (1979) in his work noted that attitude about using specific contraceptives were related to heterosexual and autoerotic feelings (sexual arousal and gratification from self-stimulation). Kelly (1979) also went further to note that positive attitudes about methods involving genital manipulation (e.g., the diaphragm and condom) were associated with more positive feelings about masturbation and greater expressed comfort with touching one's genitals. He also went further to ague that positive parental attitudes and more sexual experience also were related to positive attitude about using these contraceptives (Kelly, 1979).

Caldwell, (1979); Dyson and Moore, (1983) identified education, especially as it relates to women as a key determinant of contraceptive use. Better-educated women they argued are noted to be more willing to engage in innovative behavior than are less educated women, and in many third World contexts, the use of contraception remains innovative. Better educated women are also argued to have more knowledge of contraceptive methods or of how to acquire them than are less educated women because of their literacy, greater familiarity with modern institutions, and greater likelihood of rejecting a fatalistic attitude towards life (Caldwell, 1979).

In support of this, Cochrane, (1979) noted that "there is good evidence that for whatever reason, women's education does indeed promote the use of contraception in most developing countries outside of tropical Africa". The study went further to note that where individual, cultural, fertility and contextual variables were controlled, a woman's education was found to be a stronger predictor of method use and method choice than that of her husband. The study also shows that to a great extent, contraceptive use and

choice of modern method depend on the sex of a couple's living children, implying some preference for sons, although generally women prefer to have children of both sexes.

Female autonomy and seclusion, equality between spouses linked with spousal communication, have been argued to influence contraceptive use (Dyson and Moore, 1983; Beckman, 1983; Hollerbach, 1983; Narzary, 2001). In support of this, the Lesotho Reproductive Health survey (LRHS, 2002) wrote that **"**There was very little communication between spouses and sexual partners about family planning, the number of children to have, when to have them, whether or not to use contraceptives and what contraceptives to use". Between 50 and 70 percent of respondents never, hardly or rarely discuss these issues with their partners. While this reflects society's sensitivity and difficulty about discussing sex and sexual matters, it is also a reflection of the absence of an egalitarian and a companionate relationship between spouses and partners" (LRHS, 2002).

UNICEF, (2006) in a related study conducted in Lesotho, on the other hand, brought to light the issue of marriage and the type of union a woman is into as factors of influence. The type of union in the sense that couples may be living together but not married and hence, having sex for the fun of it or married, but separated and hence, only satisfying their sex urge. As a result of these, the study noted "that only about 12.6% of women in marriage or union use any method of contraceptives". The most commonly used method is the injection estimated at 6.2%. The most unpopular method is the periodic abstinence and that about 87% of the women indicated that they use no form of contraception at all" (UNICEF, 2006).

Madise and Diamond, (2004) emphasized on types and wrote that "method available in Lesotho are vasectomy, female sterilization, combined and progestin-only pills, inject-ables, IUDs, spermicides, diaphragms, cervical caps, condoms and, to a lesser extent, female condoms and implants. The pill was the most commonly used method through 1994, after which it was overtaken by the injectable. Use of condoms, the third most prevalent method, has generally increased throughout the years, except for an unexplained drop in 1995" (Madise and Diamond, 2004). In furthering their argument, the authors went further to argue that for some women, the choice of a contraceptive is closely linked to cost and choice. According to them, the increase in the cost of family

planning services (an example was that reported at the beginning of 1998 in Lesotho) could have caused some women to discontinue use. Concluding, they noted that the choice of methods available is an important factor for the uptake and continuation of contraception (Madise and Diamond, 2004).

Makatjane, (2007) traced the use and non use of contraceptive to Lesotho men. According to him, Basotho men generally have a negative attitude towards use of modern contraceptives (Poulter et al., 1981; Makatjane, 1987; Clarke, 1984; Hall and Malahleha, 1989; Shale and Makatjane, 1988). The most commonly cited reason for Basotho men's displeasure with modern contraceptives according to him is the fear of a high likelihood of infidelity by their wives. However, further literature shows that in men's view, spouse separation stemming out of labour migration invalidates the need for use of modern contraceptives as there is no risk of pregnancy in their absence (Makatjane, 2007). Close to this is the work of Dyson and Moore, (1983), whose study suggests that female autonomy and seclusion, equality between spouse, spousal communication on family planning and size, child loss, place of residence, and women's involvement in income earning activities are significant predictors and thus, has great influence on contraceptive use among women in Lesotho.

On the other hand, some studies have documented the husband's non-approval of contraceptive use as a reason for non-use of contraceptives among married women in Lesotho (Schuster, 1979; UNFPA, 1991; Wener, 1983; Hall and Malahleha, 1989; Sembajwe and Makatjane, 1987). These studies suggest that women residing in male-headed households are less likely to use modern contraceptives than women residing in female-headed households. That is, since men are generally against use of modern contraceptives, households headed by men are not a conducive environment within which women can be encouraged to use modern contraceptives. In line with this thinking, it is then arguable, therefore, that men's attitude towards use of modern contraceptives might be influencing women's use of modern contraceptives in Lesotho.

In contrast to this argument, Madise, (2004) insisted that the use of contraceptive is rather influenced more by level rather than choice and cost. She insisted that the "Couples can choose from a range of contraceptives and the decision to use and to choose a particular method can be influenced by decisions made at various levels: at national and

regional level, at community and clinic level and at individual level. At the national level, policies are set concerning the methods to be included and excluded from public and private family planning programs" (Madise, 2004)).

From the above studies, it can be deduced that some variable have been identified as being influential to the use of contraceptives in Lesotho. These variables include: access, quality of care, and medical barriers, education, standard of family planning services, attitude, spousal communication, marriage. Also, women involvement in income earning activities, the husband's non-approval of contraceptive use and levels are other variables identified and linked to influence contraceptive use in the country (Caldwell, 1979; Mfono, 1998; Bertrand et al., 1995; Cochrane, 1979; UNICEF, 2006; Makatjane, 2007; Madise and Diamond, 2004; Dyson and Moore, 1983; Makatjane, 1987; and Madise, 2004).

Thus, this study intends to examine the levels and patterns of some these identified socio-economic factors affecting modern contraceptive use and no method users among women of reproductive age group 15-49 in the country. This is so because most studies in this area (Makatjane, 1987; Tuoane, Madise, and Diamond, 2004), have only ended in identifying and describing these variables without any critical examination and in-dept quantification; classifying the dependent variables into users of modern method and no method users and using that LDHS 2004 data. Also, this study will assist in achieving the national policy objective and goals as stipulated in the Lesotho population policy by serving as true evidence of reality. It will help to address various reproductive health challenges in the country. And generally, comparing and understanding these factors will help in identifying sector areas that will be manipulated for programme interventions.

2.3 Theoretical Model:

Like any scientific discipline, demographic research has been governed by theoretical model and this study is not an exception. Basically, the motivation to avoid pregnancy is largely determined by the relative costs and benefits of a pregnancy. Demographers are of the opinion that if the cost of getting pregnant outweighs the benefits of getting pregnant, all things being equal, women will surely use contraceptive

in other to regulate their fertility. Therefore, the theoretical model adapted and used for analyse in this study is based on the cost–benefit theory of pregnancy. The cost-benefit theory of pregnancy states that for any pregnancy there is always cost and benefit associated with it. The cost of getting pregnant has to do with disadvantages associated with getting pregnant like the tendency of one losing her job (especially where she has been instructed not to), inactive in business (for those that are self employed), medical complications that comes with pregnancy to mention but a few. Benefits include have people o help out in the house and the idea of seeing children as an investment for the future. The theory insists that at any given time, a woman should actually weigh the cost of getting pregnant over the benefits. If the cost outweighs the benefit, then the women should use contraceptive in other to avoid getting pregnant and if the reverse is the case, then she should avoid using contraceptive completely.

Hence, in relation to this study, this theoretical model we have used for analysis is based on the assumption that a woman defines these relative costs and benefits according to her past and current characteristics needs. In line with the thinking of the theory, we expect these characteristics to affect contraceptive decision making through a set of unmeasured, intervening variables, including a women's evaluation of specific contraceptives, her perceived risk of pregnancy and her motivation to avoid pregnancy. In this study, assessing the possible effects of these set or class of characteristics, we brought into light, variables like age, women educational level, her partners educational attainment, the type of place were she resides, her number of living children, sex of household head, birth in the last five years, child loss, marital status, desire for more child and of cause the region were she is located in the country.

Some studies on contraceptive use in recent time are known to have adapted this theoretical method and found it useful. Prominent among these is the work done by Tanfer, et al (1992) and Brewster, (2006). These researchers in their recent works have adapted this model and have found them useful. The benefit of this model is that it enables the researchers in examining the determinants of contraceptive use, weighed it along the cost and benefit of getting pregnant by a woman considering the influencing factors behind it. The model also allows us to put into play, relevant determinant variables as much as one can think of.

2.4 HYPOTHESIS:

Therefore, based on the above presentations, the hypothesis examined in this study is:

There is no significant difference in the correlates of contraceptive use among women in Lesotho.

CHAPTER 3
METHODOLOGY

3.1 Introduction:

The purpose of this chapter is to discuss the approach in which the study is carried out. Here, issues like the study design, variable used in the analyses, data management, the limitation and scope of the study are all highlighted. Under data analyses, the logistic regression technique employed in the study is discuses and the formula presented.

3.2 Study Design:

Basically, this study has been carried out using the Lesotho Demographic and Health Survey, 2004 data. The 2004 LDHS is derived from a nationally representative cross-sectional survey. It is a secondary data with a sample of 7,522 women aged 15-49, all located in a representative probability sample of more than 9,000 households across the country. This is irrespective of their ethnic origin, socio-economic and educational status. All checked and identified as eligible for the individual interview. Interviews were completed with 94.3 percent of them. The response rate for urban women is somewhat higher than for rural respondents (96 percent compared with 94 percent).

The survey utilized a two-stage sample design using the list enumeration areas first grouped in Provinces, districts and Clusters, and latter stratified by urban and rural areas; constructed to allow for separate estimates for key indicators. In the first stage, 405 clusters (109 in the urban and 296 in the rural areas) were selected from a list of enumeration areas from the 1996 Population Census frame. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey. In household areas with wrong planning, and geographical barriers, a stratification method was employed.

Due to the inductive inference nature of the study, the quantitative method approach is adopted. This is so because this approach allows for good use of statistical techniques for the interpretation of results. Also the quantitative design allows for description of respondents' views on factors determining contraceptive use. Relevant characteristic variables extracted from the LDHS data for the purpose of this study are

classified into three groups: Individual, Fertility and Contextual characteristic. These variables have been selected for inclusion in the analyses based on their significant in previous studies of contraceptive behavior or on hypothesized associations with contraceptive use.

3.3 Variable Used in the Analyses:

3.3.1 Explanatory Variables

The analyses use three groups of independent variables. These consist of individual, fertility and contextual predictors of contraceptive use. The individual level variables are understood here to be those variables that make the sample of women comparable across the survey. These are variables concerning individual respondents. On the other hand, the fertility variables are those that have to do with the fertility level or reproductive issues concerning the respondent. While the contextual variables, are those variable that enables us to examine the effect of characteristics of the society where the respondents live during contraceptive use. Jointly, these variables are: Age in groups, type of place of residence (Rural/Urban), women highest educational level, number of children 5 and under, Sex of H/hold head, current marital status, birth in the last 5 years (Parity), Child loss—Define this as women who has lost a living child or pregnancy after three months, desire for more children and of cause, Region/Districts.

The relevance of the age variable here is to help understand the age structure of the sample population we are dealing with. In the study, this has been recoded into ten years age group at the univariate level and into adolescent/ adults (15-24, 25-49+) at the remaining level of analyses. There is a need for us to know the place were this women reside, and so the "type of place of residence" variable comes handy. With these variables, we will not only know if these women reside in the rural or urban area, but also the number that do. Also, one will also like to have idea of the educational level of the women, including that of their partners. And so, the variable "highest educational level" and "partners educational attainment" has been included. These two variables will help us to know if these women are illiterate or not and if not, to understand their level of educational achievement including their partners. In other wards, with this variable, we are be able to know if these women can actually read or write and at which level and size.

Other variable included in the study are the "number of children ever born" and the number of "child loss" at the same time frame. This variable helps to tell us the possible number of children the women we are dealing with have within the study period and how many she has lost to death. In this work the mean number of age is used at the univariate level for parity and child loss. Parity is however seen as a continuous variable at other levels of analyses (bivariate and multivariate) and child loss recoded from 6 to 3 (maximum). This is so because the age at this levels is recoded into adolescents (15-24) and adults (25-49+). The thinking here is that although it is possible but very uncommon for a women between the age of 15-24 years to have or lost up to 6 children before the age of 24.

The relevant of "sex of house hold head" variable is to let us know the type of household these women came from, if it is being headed by themselves as it is common here in Southern Africa or by a male as it is common in countries like Nigeria were the society frowns at anything at of this. We will also want to know if these women are married or not. For this, the current marital status variable comes into play. For the sake of this study, this variable is recoded into married and unmarried. Also, it is very important in this study to know if these women have given birth in the last five years and for this, the number of birth variable came very handy. Also, for this variable the mean number was used at the univariate level and also recoded to four births at other levels. Since the women we are dealing with are all in their child bearing age, we needed to find out if they still desire to have children in the feature and here, the desire for more children variable comes into play and became very relevant.

3.3.2 Outcome Variable:

The variable "current contraceptive method" is used as the dependent variable in this study. The original responses in the data for this variable fell into three categories. These are "no method", "traditional methods" and "modern method" respectively. For the purpose of this study, the response "traditional method" was dropped because we are only concerned with those using the modern methods and the no method users. In addition to this, the data result showed that only about 1% of the sample population uses the traditional method. 72% of the distribution uses no method and only about 27% uses the

modern method. 1% of the entire sample population is about 93 women of the population. On its own, this number is not a good sample size for any form of analyses. The entire variable was then renamed as "Contraceptive use".

It is important to mention that to determine this variable in the data, women were asked current contraceptive method they are using. The purpose of this variable is to tell us if these women are currently using contraceptive at the moment and if so, which type.

3.4 Scope and Limitation:

The sample size of the study is made up of 7,522 interviewed women aged 15-49 obtained from 9,000 household within the country. Also, as a secondary data, the LDHS dataset is posed with some limitations. First, the survey was not conceived with this research in mind and so may not ensure accuracy of information on the exposure variables. The data has cases of non-response and possibility of reporting bias from both the enumerators and respondents. These have all resulted in either overestimation or underestimation of the responses. It is also envisaged that there will be cases of missing data on variables of interest.

3.5 Data Management:

3.5.1 Data Source

The data used in this study was obtained from the 2004 LDHS data on Lesotho. Permission was obtained from ORC Macro (who provided technical support to the survey), through the MEASURES DHS + project, to use the data, which has been published and available for interested researchers.

3.5.2 Data Processing:

The data for this study has been downloaded from the Measure DHS dataset. Data of interest was extracted and transferred to STATA statistical software program. They were then checked for accuracy and outliers with this statistical software programs before they were run and analyses conducted.

In other to enable some of the data to fit very well, some variable were recoded and others sorted out. The dependent (outcome) variable was recoded into use of

"Modern method" and "No method users". The age variable recoded into ten years age group at the early part of the analyses (univariate analyses) and later, adolescent/adults at the bivariate and multivariate. Also at the bivariate level, births in the last five years variable is recoded into four children by recoding the 4^{th} to 6^{th} children as 4^{th}. This is so because the issue of adolescent and adult came into play here and I believe it is most unlikely for an adolescent woman (defined as women between the ages 15-19 years) to have more than four children at this point in time. The mean value of birth was used for birth in the last five years in order to do away with any biasness from the respondents. The DK responses under women partner's educational attainment was also dropped so that the variable will make better sense.

3.6 Data Analyses:

The data for this study is analysed at three levels: univariate, bivariate and the multivariate level analyses. The univariate data analyses provide the overall description or summary of all the characteristics of variables of interest (independent and dependent variables) individually. The bivariate analysis on the other hand, entails the analysis of two variables (an independent variable versus the dependent variable) to determine whether the data are associated and hence, describes the best relationship between them. In the study, each determinant variable is cross tabulated with the categorical dependent variables to investigate whether there is association between the dependent and independent variable. A cross tabulation is also carried out, controlling for marital status and age. Chi-square tests will be carried out at this level.

Finally, the multivariate Analysis is carried out. This entails the analysis of all variables together to determine whether or not the data are related and describes the best relationship between them. Here, four models are developed. These are the models for the individual, fertility and contextual characteristics. The multivariate logistic regression analysis is used to determine the relationship between the independent variables and dependent variable. I used the logistic regression model because the dependent variables are dichotomous. The general model of the logistic regression used is as follows:

$$\log\left[\frac{p_i}{1-p_i}\right] = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 x_6 + \beta_7 x_7 \ldots\ldots\ldots\ldots\epsilon_o$$

Where:

$\log\left[\frac{p_i}{1-p_i}\right]$ == Odd ratio,

α: == The intercept,

$x_1, x_2, x_3, x_4, x_5, x_6,$ and x_7 == all independent variables used in the study,

ϵ_o == the error term.

Four models were estimated. The first model examined individual correlates of contraceptive use. The second model examined fertility variables and the third, contextual variables. The final model (the stepwise regression) involves the inclusion of all the variables.

3.7 Ethical Consideration:

This study will employ an analysis of secondary data whose report is already available and published in the public domain. It has no risk of undue disclosure and other ethical considerations and thus, do not need to go through the University Ethical Committee.

CHAPTER 4

DEMOGRAPHIC AND SOCIO-ECONOMIC CHARACTERISTICS OF RESPONDENTS

4.1 Introduction:

In this chapter, the univariate and bivariate analyses including the control results are presented. The purpose of the univariate analyses carried out here is to derive the basic characteristic feature of the respondents. On the other hand, The Bivariate analysis done is to study the relationship between contraceptive use and selected socio-economic variables. Controls carried out involve the control for age and marital status of the respondents.

4.2 Univariate Analysis: Characteristics of Respondents

For the purpose of deriving the background characteristics of the respondents in this study, descriptive statistics have been employed.

Table 1: Percentage distribution of women aged 15-49 by selected Socio-economic characteristics, LDHS 2004.

Variables	Frequency	Percentage (%)
Contraceptive Use:		
Modern Method	1,998	27
No Method	5,097	73
Age:		
15-24	3,217	45
25-34	1,833	26
35-44	1,454	21
45+	591	8
Type of place of Residence:		
Urban	1,945	27
Rural	5,150	73
Women highest Educational level:		
No education	169	2
Primary	4,309	61
Secondary	2,520	36
Higher	97	1

Mean number of children ever born (Parity):		
Mean	0.9	
Sex of household Head:		
Male	4,549	64
Female	2,540	36
Current Marital Status:		
Married	4,297	61
Un-married	2,798	39
Mean birth in the last 5 years:		
Mean	0.5	
Partner's Educational Level:		
No Education	1,110	26
Primary	2,188	51
Secondary	912	21
Higher	86	2
Desire for more Children:		
Wants no more	3,589	5 1
Wants after 2 years	1,497	21
Wants within 2 years	866	12
Wants, unsure timing	606	9
Undecided	222	3
Declared infecund	160	2
Sterilized	159	2
Region/Distrit:		
Butha-buthe	774	11
Leribe	845	12
Berea	685	10
Maseru	1,059	15
Mafeteng	709	10
Mohale' hoek	803	11
Quthing	574	8
Qasha's nek	497	7
Mokhotlong	605	9
Thaba-tseka	544	8

Table 1 above is a profile of the women from the Lesotho Demographic and Health Survey (LDHS) 2004. Women in the data are classified by whether they use the modern method or no method. Before recoding, the raw data showed that although some women use the traditional method, the proportion of those using those methods in the

sample remains very negligible at about 1 percent and so was dropped. However, the table shows that modern contraceptive usage in the country remains low at 27 percent. The age group 15-24 years is the highest while the age group 45+ is the lowest in the country. Women living in the rural area are more than those living in the urban and those with primary education are more in population than all other level of education combined. About 2.4 percent of the sampled population has no formal education while three in every five of the women have primary education. This is the same ratio with secondary and higher education combined.

The mean number of children born is one. There are more married women in the country than the unmarried as the result showed that about 61% of them are married while the rest are not. Also, 64 percent of these women live in male-headed households. This indicates that more home are being headed by males than female which is natural and expected.

The statistics further shows that about half of the women have partners with primary educational level, while a little more than one in every five woman have partners with more than primary education. Only about 26 percent of men are without education in the country. The mean number of birth of every woman in the last 5 years is one child. In terms of fertility preference, the result shows that those who want no more child makes up half of the entire women population and those who are sterilized are the least in the country. Also, it is observed that about 51 percent of the women want no more children while the rest want either between after or are either sterilized, declared in fecund and so on. On the average, women in the country are almost evenly distributed among the regions, with about one or close to one of every ten living in each region.

4.3 Level and Pattern of Contraceptive use:

Figure 1: A Chart showing the percentage distribution of current contraceptive use among Lesotho women aged 15-49 by Place of residence

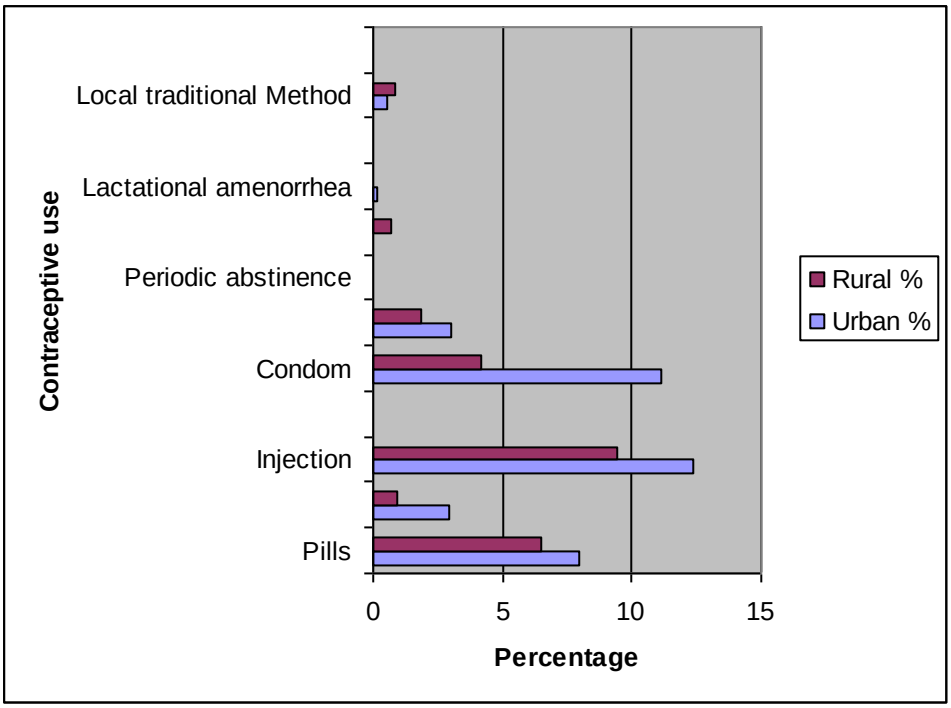

Table 2 above shows that more than two third of Lesotho women do not use contraceptives (60% in the Urban and 76% in the Rural). It also shows that the use of traditional methods is low while injections are the commonest method in use.

4.4 Bivariate Analysis:

The Bivariate analyses done here study the relationship between contraceptive use and selected socio-economic variables like age (in group), place of residence, women highest educational attainment, current marital status etc; using the Pearson's Chi-Square test.

Table 2: Percentage distribution of women aged 15-49 using modern and no method users of contraceptives, LDHS 2004.

Predictive Variables	Type of Method	
	Modern Method (%)	No Method (%)
Age:	**	
15-24	18	82
25-34	40	59
35-44	33	66
45+	20	79
Type of Place of residence:	**	
Urban	38	62
Rural	23	77
Women highest Educational level:	**	
No Education	7	93
Primary	23	77
Secondary	35	65
Higher	45	55
Number of children ever born (Parity):	**	
0	25	75
1	31	69
2	24	76
3	23	77
4	28	72
5	26	74
6	24	76
Sex of H/hold head:		
Male	28	72
Female	27	73

Birth in the last 5 years:	**	
0	21	79
1	39	61
2	27	73
3	29	71
4	00	100
Partner's Educational attainment:	**	
No Education	19	81
Primary	33	67
Secondary	47	53
Higher	61	39
Desire for more children:	**	
Wants within 2 years	14	86
Wants after 2+ years	33	67
Wants, unsure timing	11	89
Undecided	24	76
Wants no more	29	71
Sterilized	100	0
Declared infecund	4	96
Child loss:		
0	28	72
1	29	71
2	26	74
3	16	84
Region/Distict:	**	
Butha-buthe	32	69
Leribe	29	71
Berea	28	72
Maseru	30	70
Mafeteng	34	66
Mohale's hoek	27	73
Quthing	24	76
Qasha's nek	30	70
Mokhotlong	15	85
Thaba-tseka	20	80

**** Statistically significant at 5% level (or P<0.05). P**
Parity is defined as a continuous variable.

The result shows that among the various age groups, the use of contraceptive and hence, levels of association tend to rise and fall as age increases. The result shows that women in the country use less of contraception at the early adolescent and the old age which demographically is normal. Age group 15-24 with one in every five women has the least association among users of the modern method and age group 25-34 (40%) is the highest. This means that two in every five of those using the modern method are women between the ages 25-34 years. People not using method at all response level have a higher level of association than those using the modern method. The result also showed that age at this level of testing is highly associated with the use of contraceptive.

While minority (38%) of the urban women uses modern method, majority uses no method. Also, those using the no method are higher in both areas. This situation goes to suggest that the women in the urban area are more prone to the use of modern contraceptive method than those in the rural area. Women with no education have the least association with the use of modern contraceptives and highest association with no method. In other words, a little above nine in every ten women in the country have between primary and higher education in the country. The results show that as a woman's level of education increases in Lesotho, her level of association with modern contraceptive method increases and her level of association with not using method decreases.

Women interviewed in Lesotho either have no child or has between one to four children of their own. About one in every three women with one child associates the use of modern method to her number of children. Women with three children (23%) expressed the least association, and those with one child (31%) the highest with the use of modern method. This case is however the opposite with those not using method. It can also be observed that the level of use does not follow the usual expected pattern of association but is highly significant at this level. However, that homes in Lesotho are either male or female headed is expected. Results however shows that the women in the two homes expresses the same level of association, with male headed household only about 1% level of association higher among those using the modern method of contraceptives in the country. The table also shows that the characteristic is not significant at this level of testing.

Women in Lesotho are classified married or unmarried. Those married (32%) are almost twice association than those unmarried (19%) to the use of modern contraceptive method, while those not using no method have the highest association among the unmarried. Overall, the result shows that more women in the country generally associate their non use of method to their marital status. One in about every three married women and about one in every five unmarried women using the modern method associate the use of contraceptive to their marital status. The result also shows that the characteristic is very significant at this level of testing.

Women in Lesotho have either had no birth or have given birth to between one and four births in the last five years. The result shows that women with one child birth (38%) has that highest level of association, and those with four birth, the least association with the use of modern method. Women with one birth are about two in every five women associating their number of birth to the use of modern method. The pattern of association or relationship shows that as there is an increase and decrease pattern of association as the number of births increases over the years. This development is however with the exception of the fourth birth of women in the country. The result also shows that the characteristic is very significant at this level of testing.

Women in the country with partners who have a higher educational attainment (61%) have the highest level of association with the use of modern method while those who partners have no educational attainment (19%) have the least. About three in every five of women using the modern method associated their use to their partners' higher educational attainment. With the opposite being the case with those using no method, the result further shows that as the level of a woman's partner educational attainment gets higher, so does the level of association among women using modern method and decrease among those not using method. Women who do not know their husband educational attainment are however exempted from this rule as their situation seems unique. The result also shows that the characteristic is very significant at this level of testing.

The desire for more children characteristics does not show any conventional pattern of association or relationship. Understandably, women who are sterilized (100%) have the highest level of association or relationship while those declared In-fecund (4%) have the least level among those using the modern method. The total percentage of

women who still have desire of having children or/and undecided are lower than those who does not, sterilized and declared infecund which is usually expected. These situations as the result shows are in contrary to with those using no method of contraception in the country. The result also shows that the characteristic is very significant at this level of testing.

Women in Lesotho who have lost one child one month before the survey has the highest level of association while those who have lost three and above has the lowest association to the use of modern method with those using no method reporting contrary. In all, women who use no method have higher associational level than those who use modern method at all response levels. The result also shows that perpetual rise in child loss result in an increase and then, perpetual decrease in level of association. The result also shows that the characteristic is insignificant at this level of testing.

In Lesotho, the levels of association among women using the modern or no method are almost evenly distributed among all region/district. However, women living in the Butha-buthe (32%) has the highest and Mokhotlong (15%) the least level of association with the use of modern method. In all, the levels of association are more among women using any other method then those using the modern method. The result also shows that the characteristic is insignificant at this level of testing.

4.4.1 CONTROLS:

The basis of this section are to find out if there are changes in the level of association between the dependent variable and other independent variables controlling for a woman marital status and her age. In other words, if there will be changes in contraceptive use among the women bearing or having in mind, her age and marital status i.e. holding them constant.

Table 3: Percentage distributions of Women using modern Contraceptives controlling for Marital Status, LDHS 2004.

	Marital Status			
	Married Women		Unmarried Women	
Background Xtics	% using m/ method	% using no method	% using m/ method	% using no method
Age(In Group):	**		**	
Adolescent	13.86	86.14	8.41	91.59
Adult	34.44	65.56	29.62	70.38
Type of Place of residence:	**		**	
Urban	47.02	52.98	27.91	72.09
Rural	28.62	71.38	13.66	86.34
Women highest educ. level:	**		**	
no education	6.67	93.33	6.45	93.55
primary	27.77	72.23	14.03	85.97
secondary	45.96	54.04	23.97	76.03
higher	54.55	45.45	31.71	68.29
Number of children ever born (Parity):	**		**	
0	29.37	70.63	20.41	79.59
1	38.20	61.80	17.43	82.57
2	27.34	72.66	13.83	86.17
3	25.67	74.33	14.61	85.39
4	27.27	72.73	27.27	72.73

5	20.00	80.00	0.00	100.00
6	25.00	75.00	50.00	50.00
Sex of H/hold head:	**		**	
Male	33.96	66.04	13.50	86.50
Female	30.32	69.68	23.81	76.19
Birth in the last 5 years:	**		**	
0	27.09	72.91	16.55	83.45
1	40.90	59.10	29.22	70.78
2	28.36	71.64	18.75	81.25
3	29.41	70.59	28.57	71.43
4	0.00	100.00	na	na
Partner's edu. Level:	**		**	
no education	18.74	81.26	21.78	78.22
Primary	33.22	66.78	28.88	71.12
Secondary	47.75	52.25	45.13	54.87
Higher	61.45	38.55	55.56	44.44
Desire for more children:	**		**	
Wt/wthn. 2 yrs.	12.43	87.57	18.40	81.60
W/after 2+ yrs.	37.80	62.20	23.97	76.03
W, unsure timn	37.93	62.07	10.09	89.91
Undecided	32.43	67.57	21.74	78.26
Wants no more	33.38	66.62	20.38	79.62
Sterilized	100.00	0.00	100.00	0.00
Decl/infecund	5.71	94.29	3.23	96.77
Child loss:	**--		**--	
0	33.85	66.11	18.10	81.90
1	28.16	71.55	31.56	67.44
2	27.78	7191	14.29	85.71
3	12.50	8571	33.33	66.67
Region/District:	**		**	
Butha-buthe	40.65	59.35	17.49	82.51
Leribe	38.10	61.90	13.25	86.75
Berea	33.50	66.50	20.14	79.86
Maseru	34.22	65.78	23.58	76.42
Mafeteng	41.70	58.30	20.16	79.84

Mohale's hoek	32.85	67.15	17.76	82.24
Quthing	25.90	74.10	20.62	79.38
Qasha's nek	29.71	70.29	29.11	70.89
Mokhotlong	19.84	80.16	6.91	93.09
Thaba-tseka	24.18	75.82	12.87	87.13

**** Statistically significant at 5% level (or P<0.05).**
****-- Statistically not significant (or P# 0.05).**

Table 3 above shows the percentage distribution of women using modern contraceptives controlling for marital status. All variables of interest are highly significant except child loss which although is significant, but not very high. The result also shows that in general, the level of association of married and unmarried adult using the modern are higher than that of the married and unmarried adolescent women and those of no method is lower. A closer observation also showed that the levels of association of unmarried and married adolescent women in the country using the modern method about are one-third that of the adults in the country. The level of association of unmarried women using the modern method of contraceptive living in the urban area is twice the level of that living in the rural area. However, the level of those living in the rural area using any other method is higher than those living in urban even if both are very high. The result also shows that controlling for marital status, age characteristics is significant for both married and unmarried women.

Married and unmarried women using the modern method and living in the urban area are about two times highly association than those living in the rural area. However, those in the rural using no method are higher associated than those in the urban area. The result also shows that the variable as a background characteristic is significant for both categories of marriage.

Unmarried and married women with no education (7%) using the modern method have the same level of associations and are the least associated with the use of modern methods, while those with a higher education (32%) and (54%) have the highest association. Also, the higher the level of education for unmarried women using the modern method, the higher the level of association and the decrease in the level of those using no method. The result also shows that the variable as a background characteristic is significant for both categories of marriage.

Unmarried women with four children using the modern method has the highest association, while surprisingly, those with two and three children has the least association. On the other hand, those married using the modern method with three child (27%) have the least and those with one child having the highest. It is important to note however that the percentage value of association at all level of parity are almost the same for unmarried and married women using the modern method, with same also applicable to married and unmarried women using any other method. In every case, close one or one of every three of the women using the modern method associate use of contraceptive to their number of children. The variable as a background characteristic is significant for both categories of marriage.

Unmarried women using the modern method from male headed homes have a lower level of association compared to those from female headed homes. Those with unmarried in male headed homes are almost one in every three woman in the country. However, the level of association of unmarried women in the male headed household using no method is higher than those using the modern method. However, unlike other levels of testing, result here shows that the variable as a background characteristic is significant for both categories of marriage. Among these women, those married and unmarried with two kids, have the highest level of association among those using the modern method. However, while those with four kids have the least level of association; the level of those unmarried is "not available". The variable as a background characteristic is significant for both categories of marriage.

Married and unmarried women in the country with partners who have a higher educational attainment using the modern method (61%) and (55%) respectively has the highest level of associations. On the other hand, those who do not know their partner's educational attainment (21%) and (15%) have the least among the unmarried and married women. With the opposite being the case with any other method, the result further shows that as the level of a woman's partner educational attainment gets higher, there is an increase in the level of association with women using the modern method and decrease with those using any no method which is normal. Women who do not know their husband educational attainment are however exempted from this as their case seems unique. At this level, the result shows that the variable is significant at both categories.

As the desire for more children changes, so does the level of association vary for both married and unmarried women. Understandable, unmarried and married women who are sterilized through the use of modern method (100%) have the highest level of association while those declared In-fecund (3%) and (6%) are the least level for both response categories. These situations as the result shows are in contrary to those using any other method of contraception in the country. Following a similar pattern, the opposite is however the case with married women in the country. Result also shows that the desire for more children variable is significant testing for both categories.

Both Unmarried and married women in Lesotho have either not lost a child, or they have lost between 1-3 children plus. Those who have lost no children (34%) have the highest level of association while those who have lost none have the lowest association among those married, using the modern method. On the other hand, those who have lost three children (33%) have the highest association while those who has lost non has the least among the unmarried using any no method. Although in all, women who use no method have higher associational level with those who use the modern method at all number of child loss. The result also shows that perpetual rise in child loss does not result in a perpetual increase in level of association for both married and unmarried women in Lesotho. The child loss variable as the result indicates is not too significant and hence, do not have a strong relationship with the use of contraceptive, testing for marital status at both categories.

In Lesotho, the levels of association among women using the modern or any other method are almost evenly distributed among all region/district. However, in this case, Unmarried women living in the (41%) have the highest and those in Mokhotlong (20%) the least level of association with the use of modern method. In all, the levels of association are more among women using no method then those using the modern method. To a very big surprise, region as a contextual characteristic is highly significant to use of contraceptive in Lesotho at this level of testing.

In summery, testing at 5% level of significant, all variable are highly significant. This is however with the exception of child loss variable which is not highly significant.

Table 4: Percentage distributions of Women using modern Contraceptives controlling for Age group, LDHS 2004.

	Age (in Group)			
	15-24 [Adolescents]		25-49 [Adults]	
Background Xtics	% using m/method (0)	% using no method (1)	% using m/method (0)	% using no method (1)
Type of Place of residence:	**		**	
Urban	12.71	87.29	44.69	55.31
Rural	8.31	91.69	28.54	71.46
Women highest educ. level:			**	
no education	11.11	88.89	6.25	93.75
primary	8.05	91.95	27.36	72.64
secondary	11.39	88.61	43.54	56.46
higher	na	na	44.33	55.67
Number of children ever born (Parity):			**	
0	9.28	90.72	31.56	68.44
1	10.19	89.81	37.00	63.00
2	8.19	91.81	27.08	72.92
3	8.47	91.53	25.81	74.19
4	0.00	100.00	37.50	62.50
5	0.00	100.00	20.00	80.00
6	50.00	50.00	25.00	75.00
Sex of H/hold head:	**			
Male	7.50	92.50	33.74	66.26
Female	12.23	87.77	32.26	67.74
Current Marital status:	**		**	
Married	13.86	86.14	34.44	65.56
Un-married	8.41	91.59	29.62	70.38
Birth in the last	**		**	

5 years	6.72	93.28	29.41	70.59
0	24.30	75.70	40.50	59.50
1	23.08	76.92	27.14	72.86
2	na	na	29.31	70.69
3	na	na	0.00	100.00
4				
Partner's educational	**		**	
Level:	16.03	83.97	19.85	80.15
no education	26.82	73.18	35.19	64.81
Primary	37.00	63.00	51.49	48.51
Secondary	66.67	33.33	60.24	39.76
Higher				
Desire for more children:	**		**	
W/within 2 yrs.	8.73	91.27	14.40	85.60
W/after 2+ yrs.	15.38	84.62	40.90	59.10
W, unsure tmin	6.70	93.30	22.04	77.96
Undecided	9.48	90.52	39.05	60.95
Wants no more	7.65	92.35	32.76	67.24
Sterilized	na	na	100.00	0.00
D/ infecund	2.06	97.94	6.45	93.55
Child loss :	**--		**--	
0	9.17	82.41	34.02	63.46
1	27.78	72.84	28.75	70.61
2	0.00	75.00	26.21	73.74
3	na	na	15.79	83.33
Region/District:	**		**	
Butha-buthe	10.89	89.11	8.38	61.14
Leribe	5.88	94.12	34.66	64.24
Berea	6.94	93.06	34.57	64.88
Maseru	10.27	89.73	34.37	64.96
Mafeteng	5.71	94.29	42.70	56.90
Mohale's hoek	10.14	89.86	32.71	66.55
Quthing	15.34	84.66	26.58	72.80
Qasha's nek	9.17	80.83	32.44	67.21
Mokhotlong	3.52	96.48	18.66	81.22
Thaba-tseka	6.57	93.43	24.08	75.50

**** Statistically significant at 5% level (or P<0.05).**
****-- Statistically not significant at 5% level (or P# 0.05).**

Table 4 above shows the percentage distribution of women using modern contraceptives controlling for age. The result shows that the level of association of adolescent women using the modern method of contraceptive living in the urban area is almost twice the level of those living in the rural area. However, the level of those living in the rural area using no method is slightly higher than those living in urban area, even if both level of associations are very high. The result of the adults also follows the same pattern but showing that those using the modern method are almost twice those using no method among the adults living in the rural area. The variable is also significant at controlling both categories of ages.

Adolescent women with no education and secondary education (11%) are the highest associated with the use of modern methods and the least with no method, with the levels of association generally higher with those using no method. On the other hand, adult women with no education (6%) has the lowest level of education and those with higher, the highest level among women using no methods. Also, the higher the level of education among those using no method; the lower her level of association and the higher among those using the modern method. As a background characteristic, this variable is only significant with the adolescent category.

In Lesotho, the level of association of adolescents using the modern methods to all number(s) of children are low and completely unpronounced with those in families with four children. While that of the adolescents is about one tenth (up to the third child) using the modern method that of the adults is about one-third average. The result also showed no association with adolescents having four children using the modern method. In overall, these illustrations go to say that the levels of associations of all women using no method to their number of children are higher. The number of children is only significant controlling for the adults women and not for the adolescents.

From the result, adolescent women using the modern method from male headed homes have a lower level of association compared to those from female headed homes. This situation is however completely the opposite with the adults using the modern method. Generally, women from female headed households using no method has a higher

association than those using the modern method and the association of adolescent female using the modern method are almost twice those of the male. Unlike in other cases, the number of children is only significant controlling for the adolescent women only and not for the adults in the country.

Adolescent and adults married women using the modern method in the country have a higher level of association than the unmarried, while those married in both group using no method have a lower level of association. The result follows an opposite pattern with those using no method and further shows that the variable is highly significant to the use of contraceptive controlling for both categories. Adolescent women with birth in the last five years using the modern method reports a low level of association with the use of modern method with just a little increase to that of the adults. This goes to say that women using any other method in Lesotho has a higher level of association and hence, a higher relationship in both category. The result also showed that births in the last 5 years are significant controlling for both categories of women in the country.

Adolescents and adults women in the country with partners who have a higher educational attainment using the modern method shows the highest level of association while those whose partner's has no educational attainment shows the least. With the opposite being the case with any other method, the result further shows that as the level of a woman's partner educational attainment gets higher, the increase in the level of association with women using the modern method and decrease with those using no method. The result also indicated that the variable is highly significant to the use of contraceptive controlling for both categories.

The result also showed that as the desire for more children changes, so does the level of association to both methods vary for both adolescents and adults women in the country. Understandable, adolescents women sterilized through the modern method are unpronounced among the adolescent. While those declared In-fecund (6%) are the least, those who are sterilized are the highest associated among the adults who use the modern method in the country. Generally, those who use no method are highly associated compared to those who use modern method and the adolescents declared infucund under the modern method are three times association compared to the adults' counterparts. The

result also indicates a significant association with the use of contraceptive, at both age categories.

Women in Lesotho have either not lost a child or have lost between 1-3 children plus. Those who have lost one child (28%) have the highest level of association while those who have lost two children (defined as losing a pregnant three months up or any living child) have the lowest association among those using the modern method. On the other hand, adults women who have lost no child is the highest among those using the modern method but only half of the least of those using no method in the country. As usual, all women who use no method have higher associational level than those who use the modern method in both categories. The result also shows that perpetual rise in child loss does not result in a perpetual increase in level of association for both adolescent and adults women in Lesotho. The result however shows that although the variable is not too significant controlling for both categories of age.

In Lesotho, the levels of association among adolescent women using the modern or any other method are almost evenly distributed among all region/district except for some few regions. Here, adolescent women using the modern method living in the Quthing region (15%) have highest level of association. This is almost one-fifth of those using no method which is the lowest among the whole regions. This case also follows a similar patter with the adults women but with those living in Mafekeng (43%) and Mokhotlong (81%) having the highest among the modern and no method respectively. The result however shows that although the variable is significant controlling for both categories of age.

In general, Testing at 5% level of significant, the result shows that a women type of place of residence, her marital status, births in the last five years, her desire for more children and the region were she is are all significant controlling for her age for both the adolescents and adults. Child loss is not too significant for both categories of women. Surprisingly, women educational level and her number of children 5 and under is only significant with the adults and in reverse, sex of house hold head for the adolescents only.

4.5 Summary:

The results above indicate that women aged 15-49 years in Lesotho displays a normal characteristic profiles. Like most traditional society, the men are more, the level of education is generally low and people with middle education are more than those with higher education in the country. Those living in the rural area are far higher than those living in the urban area and as the pattern of use shows, those using no method are far more than those using the modern method with the condoms and pills being the most popular method among users of modern method. The bivariate result shows that all tested variable are significant with the exception of sex of household head and child loss variables which are not. The control outcomes show little or no changes from the original results.

CHAPTER 5

CORRELATES OF CONTRACEPTIVE USE IN LESOTHO

5.1 Introduction

In this chapter, the multivariate analyses are carried out. The purpose of the multivariate analyses carried out here are to examine the critical determinant of contraceptive use, by testing for level of critical predictability and significance. In all, four models of analysis were ran and presented. Ie the model fitting process involves four stages of estimations.

The first model involves including only the individual background set of variables. At the second, fertility variables are then introduced into the regression equation. The third model incorporates the contextual variables. Then, the stepwise regression where the three classes of variables are run together to get the general outcome (effect). All these help us to estimate simultaneously, the additive effects of the micro-level and macro level variables at the same time.

5.2 Individual correlates of contraceptive use: Model 1

Table 5: Results of logistic regression showing Odds Ratio for individual characteristics predicting modern Contraceptive use in Lesotho (LDHS, 2004).

Predictive Variables	Odd Ratio
Age:	
Adolescents (15-24)	RC
Adults (25-49)	1.7**
Women Highest Educational Level:	
No Education	RC
Primary	4.8**
Secondary	7.8**
Higher	8.1**
Partner's Education Level:	
No Education	RC
Primary	1.9**
Secondary	2.9**

Higher	4.4**
Marital Status:	
Married	RC
Unmarried	1.6**

**** Statistically significant at 5% level (or P<0.05).**

Table 5 above shows results of odd ratio of logistic regression for individual characteristics predicting contraceptive use in the country. The results show that all variables are all statistically significant testing at 5% level. Age has a 1.7 (OR=1.7) odd ratio of use among the adults women which is strong compared to the reference category. This result suggest that adult women (aged 25-49) have a higher odd of using modern contraceptives (OR=1.7) as they are almost twice more likely to use modern contraceptives than those aged 15-24 years ($p<0.05$).

In Lesotho, women's with primary, secondary and higher educational levels have a very higher odd ratio of use at every response level and hence, a very strong predictor compared to the reference category. With those with Primary education (OR=4.8), Secondary (OR=7.8) and higher education (OR=8.1) odd ratio of use. Hence, the likelihood for women with primary, secondary, and higher educational level predicting the use of modern contraceptive method are 5, 8 and 9 times likely, compared to those with no education i.e., the reference category.

A woman partner's educational level is also very influential in her use of contraceptive. The odd ratios shows strong predictive powers at all level of attainment, maintaining consistent increases in value as their partners' advances in education. The likelihood of those women whose partners educational attainment is either primary, secondary, and higher educational to predict her use of contraceptive method are 2, 3, and 4 times more likely compared to the reference category.

In Lesotho, the marital status of a woman is a predictor of her contraceptive use. With those unmarried having a 1.6 (OR=1.6) Odd ratio of use, the likelihood that a women who is unmarried to use contraceptive method is 1.6 times more likely, compared to the reference category i.e. those married. In all, testing at 5% level of significant, the result shows that all Individual variables are highly significant and good predictors of contraceptive use among women in Lesotho.

5.3 Fertility correlates of contraceptive use: Model 2

Table 6: Results of logistic regression showing Odds Ratio for fertility Characteristics predicting modern Contraceptive use in Lesotho (LDHS, 2004).

Predictive Variables	Odd Ratio
Number of Children ever born (Parity):	0.9
Child Loss:	0.9
Desire for more Children:	
Wants within 2 years	RC
Wants after 2 years+	3.3**
Wants, unsure timing	0.8
Undecided	1.9**
Wants no more	2.7**
Declared infecund	0.3

**** Statistically significant at 5% level (or P<0.05), Parity is defined as a continuous variable.**

Table 6 above shows results of odd ratio of logistic regression for fertility characteristics predicting contraceptive use in the country. The result shows that among Lesotho women, parity and child loss are almost but not good predictors of contraceptive use. With an odd ratio of 0.9 at both cases, the odd of women with any number of children and women with any loss of children not using is 0.9 times less likely compared to the reference category of each variable. The result also shows that both variables are not statistically significant.

The desire for more children has very strong predictive power in all cases with the exception of women who are unsure and declared in-fecund which are both weak. All response categories have values between 2 (OR=2) and 3 (OR=3) odd ratios of use, except those declared unsure and in-fecund which has less than 1 odd ratio, compared to the reference category. In other wards, those declared unsure and infecund have about

20% and 70% time less likely to predict use of contraceptive compared to the reference category.

In all, the result shows that testing at 5% level of significant, a woman desire for more children is significant at all response level. This however is with the exception of those who are declared unsure and in-fecund. Parity and child loss are seen as a continuous variables and hence, indeterminate.

5.4 Contextual correlates of Contraceptive use: Model 3

Table 7: Results of logistic regression showing Odds Ratio for contextual characteristics predicting modern Contraceptive use in Lesotho (LDHS, 2004).

Predictive Variables	Odd Ratio
Type of Place of residence:	
Urban	RC
Rural	0.5
Region/Districts:	
Butha-buthe	RC
Leribe	0.9
Berea	0.9
Maseru	0.9
Mafeteng	1.4
Mohale's Hoek	1.0
Quthing	0.8
Qasha's nek	1.0
Makhotlong	0.4**
Taba-tseka	0.6**

**** Statistically significant at 5% level (or P<0.05).**

Table 7 above shows results of odd ratio of logistic regression for contextual characteristics predicting contraceptive use in the Lesotho. The type of place these women resides is a weak predictor of contraceptive use. With an Odd ratio of 0.5 (OR=0.5) among those residing in the rural area, a women in these area will 56% time less likely use contraceptive compared to those in the reference category i.e. those in the urban area . Although, the table shows that this variable at this level of testing is significant.

Also, the Region/District a women lives in is also a weak predictor of contraceptive use. This is however with exception of Mafeteng 1.3 (OR=1.3), and Qasha's nek (OR=1.00) regions which are not. In contrary, the result also shows that all Region/Districts are insignificant with exception of Makhotlong and Taba- tseka which are both significant compared to the reference category. From the result it is expected that Qasha's nek and Mafeteng should, since they are both good predictors.

5.5 Correlates of contraceptive use: Model 4

Table 8: Result of stepwise logistic regression showing odds ratios for characteristics predicting contraceptive use in Lesotho (LDHS, 2004).

Predictive Variables	Individual	Fertility	Contextual	General
Age:				
Adolescents (15-24)	RC			
Adults (25-49)	1.7**			1.5**
Women Highest Educational Level:				
No Education	RC			
Primary	4.8**			5.0**
Secondary	7.8**			7.4**
Higher	8.1**			6.7**
Partner's Education attainment:				
No Education	RC			
Primary	1.9**			1.6**
Secondary	2.9**			2.2**
Higher	4.4**			3.4**
Marital Status:				
Married	RC			
Unmarried	1.6**			1.8**
Number of Children ever born (Parity):		0.9		1.0**
Child Loss:		0.9		0.9
Desire for more Children:				
Wants within 2 years		RC		
Wants after 2 years+		3.3**		5.3**

Wants, unsure timing	0.8**	4.8**
Undecided	2.0**	3.8**
Wants no more	2.7**	4.1**
Declared infecund	0.3	0.4
Type of Place of residence:		
Urban	RC	
Rural	0.5	0.6
Region/Districts:		
Butha-buthe	RC	
Leribe	0.9	1.0**
Berea	0.9	0.8
Maseru	0.9	0.8
Mafeteng	1.4**	1.3**
Mohale's Hoek	0.9	1.0**
Quthing	0.8	0.7
Qasha's nek	1.0**	0.9
Makhotlong	0.4	0.3
Taba-tseka	0.5	0.5

**** Statistically significant at 5% level (or P<0.05).**
Parity is defined s a continuous variable.

The table 8 above shows the result of stepwise logistic regression showing odds ratios for characteristics predicting contraceptive use in Lesotho. It is important to note that this table and analyses is important in order to determine the effect of predictive power with each added set of variables on contraceptive use, whether their effects changes or remain constant and also if the changes effect there significant or not.

The result shows that age is significant and a good predictor of contraceptive use in Lesotho at a general level. This is so because the odd ratio values are big and far above one, which means that their predictive power are strong; although decreasing slightly as new sets of variables are added. From the result the likelihood that in general, an adult women will use contraceptive in Lesotho is 1.7 (odd ratio=1.7) times more likely compared to the reference category.

Also, a woman's highest educational level as a variable on a general level i.e. as all group of variables are added are all significant at all respond category. The odd ratios of use values are all far above one which means that their predictive powers are very

strong. The result also shows that as new groups are added, the value of predictive power increases although very slightly indicating that the result is inline with expected pattern The variables also remains significant at the addition of new groups.

All levels of educational attainments of women partner' are significant. Also, as their partners education attainment also increases, so does their odd ratio which also remained strong. The addition of fertility and contextual characteristics results to a increase in ratio even if the different is very small. From the result, the likelihood of use in all group of a woman with primary and secondary education is about 2 times more and higher 3 times more likely, compared to the reference category.

The result shows that marital status at both model (individual and general) predicting contraceptive uses are significant. The odd ratio of use values are all high which means that their predictive power are strong; and increases slightly as new group of variables are added i.e. at the general level. From the result, the likelihood that an unmarried woman in Lesotho to use contraceptive is 1.8 times more likely, compared to those married which is the reference category at the general level (model).

Parity has to do with the number of children a woman will have in her life time and Child loss has to do with the number of children a woman has lost in her life time. Both are considered as continuous variables in the study. However, the result from the table shows that while the predictive power of Parity at 1.0 (Odd ration= 1.0) is high, that of child loss at 0.9 is low to the use of contraceptive among women in the country at the general level (model). The result also shows that both variables are insignificant at this level as it is testing at the individual level.

The desires for more children variable in all responses levels at the general model are significant except with those who are declared in-fecund. The odd ratios of use are also all very high but weak with those declared in-fecund. This result indicates that at all respond level, the desire for more children variable has very strong predictive powers compared to the reference category. A pattern which is also similar to that of individual characteristic model. The addition of news class of variable also brought about a slight increase in the odd ratio value even if it is very small in each respond. From the result, the desired likelihood for a woman to want a child after 2 years and want with unsure

timing are 5 times more likely. Those that want no more and undecided are 4 times more like compared to those who wants within 2 years i.e. the reference categories.

The result shows that the type of place a woman lives in Lesotho has a 0.6 predictive power at the general level which is almost close to what is obtainable with the contextual model. With such a low odd ratio of use, the type of place a woman resides is a very weak predictor but however highly significant to the use of contraceptive as a general model. That odd ratio of use values is not high but still significant means that although the predictive power is weak but the variable is still related to the use of contraceptive among women in the country looking at it in general. From the result, the likelihood of use for a woman living in the rural area is about 40% less likely compared to those living in the rural area which is the reference category.

Also, the region/district a women lives in is not significant to contraceptive use. This is however with exception of those living in Makhotlong and Thaba-tseka which are significant, a pattern which is also applicable with the contextual model. All regions have weak predictive power with the exception of Leribe and Mohale's hoek which are strong compared to others. With odd ratios ranging between 0.34 (minimum) and 1. (maximum). This result indicates that the likelihood of region/district predicting the use of contraceptive use of women in Lesotho are between 22% and 66% less likely and 1 time most likely compared to the reference category which s the Butha-buthe region.

5.6 Summary:

From the tables above, the result of all model shows that at the critical level, all level of variables are highly significant and good predictor of contraceptive use in the country. This is with the exception of marital status, and child loss due to their nature and women declared infecund in model two. All variable response in model three shows week predictive power. This is however with exception of Mafeteng and Mohale's Hoek. The stepwise regression (general model) shows a similar pattern of Odd ratio of use (although different in value is not too high) i.e. at the addition of new class of variables.

CHAPTER 6

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

6.1 Introduction:

In this chapter, an attempt will be made to discuss the major findings of the study. In other words, discussions of the research findings or results will be carried out, conclusions reached and recommendation made.

6.2 Discussion of Findings:

The purpose of this study is to examine the factors influencing factors of contraceptive use in Southern Africa, with Lesotho as a case study; using the LDHS 2004 data. Among other findings, it can be observed that at the bivariate level, women using no method are higher in number and hence more associated testing for all background characteristics. In other words, this goes to say that the overall level of association is higher among the non users of method than those using the modern method. This development is possible considering the fact that the level of education among Lesotho women is not too high compared to other women in country like South Africa. This finding I believe is inline with the finding of Caldwell, (1982) who has done extensive works concerning contraceptive use in Africa.

Referring to some variables, the result shows that women in the country use less of contraception at the youth level (15-24years) and the old age (45+), which demographically is possible. Demographers have traced this normal trend to some couple of reasons. Firstly, contraceptive use may decline at old age even among very fecund women because of declining frequency of intercourse which I believe is common more with women of all races even if this is a conviction that calls for more attention. In some cases, older women may wish to have more children and therefore contracept less. The findings here are in line with the finding of demographers like Bongaarts, et al, (1984)

and Caldwell, (1982) who have all come to agreed with these reasoning and all stood by it.

Married women using the modern method are twice the number of those unmarried and one-fourth of those using any method. This goes to say that married women in the country are two times more associated than the unmarried women. A situation I found rather not surprising having the kind of culture and society they come from in mind.

The desire for more children is usually a measure of a woman motivation to practice fertility and as assumed, controlling for child spacing. Usually, demographers expect that women who still want to have more children will less likely use modern contraceptives and vice versa. Findings in this study do not however agree with this. This may be as a result of the fact that the population of Lesotho is more of youth than any other group and that having children at this level is not always a priority, but usually by accident with the exception of those into early marriage. In recent time extensive study done by Adair, (2007) have come to agree with this. In his research, Adair, (2007) insisted that the use and no use of contraceptives are usually based on unmet need of a women.

Education as the result shows is the most important of the whole characteristics tested. That it has a very strong predictive power and highly significant at all level, makes it indispensable. Also, as these women level of education increases, so does their level of association to the use of modern method and decreases to the use of no method. This goes to say that in Lesotho, the more educated women tend to use and hence are more associated to the modern method and less to no method of contraceptive. This finding is line with demographic thinking and a confirmation of other research finding (Tanfer, Cubbins, et al, (1992); Dung, (1995); Caldwell, (1982), etc). It is also important to mention that the increase in level of education in Lesotho in the present time can be linked to improvement in educational policy that has taken place in the last ten years in the country.

The study also found out that a woman partner's education is critically predictive and at the same time significant to the use of contraceptive in Lesotho. This finding is not far from the truth as even result from this study shows that most home in the country are

male headed. Practical experience and research (Makatjane, 2006) has shown that Lesotho men especially the less educated, make's sure their women does not use methods as they believe that their wives will cheat on them if they do. To further support this Dung, (1995) wrote that "a woman education is an influencing factor but the husband's education is a stronger predictor of method use than is the education of the wife" (Dung, 1995).

As expected, those living in the urban area uses more of the modern method and hence are higher associated than those using no method and in contrary. The study further reveals that all variable tested at this level are significant to both categories. This is however with the exception of the sex of household head (at both categories) and marital status which is not with those using any other method in the country. This finding is close to that of Makatjane, (2007) who associated the use of contraceptive to spousal agreement and place of residence i.e. spouse separation stemming out of labour migration.

Controlling for marital status and age, the result shows that all variables follows that same pattern of association but only changes in their levels of association to the use of contraceptive. The study revealed that controlling for marital status, all variable tested are highly significant (p-value = 0.000). This is however with the exemption of the child loss variable. On the other hand, the picture is a bit different controlling for age. Here, women educational level, the number of children variables are significant, their partner's educational attainment is not too significant with the adolescents but significant with the adults. Finally, the child loss variable also is not too significant at both categories.

At the multivariate level, the critical predictive powers of the various variables were put into test. All variable of interest were grouped into three: The individual, fertility and contextual variables (micro effects) and a stepwise regression (general effects) carried out to find out the effect of the addition of all the groups. The result in the first model shows that all the individual variable responses are all significant and have strong predictive power over the use of contraceptive. That the marital status is not weak and significant can probably be linked to the fact that marriages are well institutionalized and respected in Africa and Lesotho is not an exception. In Lesotho, a woman marital status does influence her use or non use of contraceptive. The situation is that those

unmarried tend to use more than those married. This situation can also be liked to the fact that people expect married women to justify their bride price and hence, contracept less than those unmarried whose bride price have not been paid.

The model two shows that all fertility variables are significant with the exception of child loss variable and the number of children variable which in this case are seen as continuous variables. The predictive power responses of the variables are almost strong depending on the individual. However, those declared in-fecund and wants more children but unsure also shows a very weak predictive power and is not significant to contraceptive use in Lesotho. The case of infecund can be linked to the fact that women in this class see's themselves as infertile and hence, have no need for contraceptives. Extensive researches done by Caldwell, (1982), and Adair, (2007) have gone a long way to prove these.

Model three, which has to do with the contextual variable; showed results that are different from what other models have shown. The type of place of residence were women resides has a weak predictive power, but highly significant which is not a common future. Finally, the regions were these women resides are strong in some areas (Mafeteng and Qasha's nek) and weak in other regions. It is also significant in some (Makhotlong and Taba-tseka) and insignificant in others. This is in line with the finding many other demographic results.

The stepwise regression i.e. general model carried out also revealed some interesting findings. The result shows that the addition of the fertility and contextual variable did not bring about much changes and even in same cases, no changes to the predictive power of the variables. However, at the addition of each group of variable, all variables remain significant. This is with exception of the child loss variable and parity which are not and which shows weak predictive power at all addition. A situation I found rather interesting. This situation can be associated to the fact that these variables are seen as continuous variable in the research. Women who are infecund also reported insignificant at this level.

As a contextual variable, the region also showed a weak predictive power at the general model level with the exception of Leribo, Mafeteng and Mahale's hoek regions. A situation different from the results observed in model one. However, Mokhotlong and

Thaba-tseka remaining significant inline with model one. In model two three and four, women declared in-fecund showed a very weak predictive power and insignificant. A situation which can be likened to the fact that it is a method that has to do with the reproductivity of a woman. A decision rarely taken by a woman and if taken, cannot be reversed. In summary, it is important to note that the results of models above are all close to the findings made in the study done by demographers like Dung, (1995); Njogu, (1991) and most especially, that of Chen, (1991).

6.3 Conclusion and Recommendation:

From the above results, it can be concluded that all variables has a place in any effort to bring an increase in contraceptive use and hence, contraceptive prevalence in the country. They are all correlated or impacts on contraceptive use at different level. With the exception of sex of household head and child loss variables as fertility characteristics at bivariate level. All variables have a relationship and are all significant (although at different level depending on the variable) to the use of contraceptive in Lesotho. The multivariate level also came up with the same pattern and even showed very strong significant and predictive powers especially with the woman educational level, her partner's educational attainment and number of children ever born which is in line with common sense thinking and what a lot of demographers have come up with.

Thus, it is recommended therefore that the government should incorporate appropriate information that will encourage people to settle down early, bring development to the rural area, and open up educational opportunities in order to attain increase in the use of contraceptive methods in the country. In other words, in the policy formulation and implementations, these factors should be considered and well instituted especially in the present Lesotho if the government wants to achieve its national objectives concerning contraceptive use.

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