WOMEN STATUS, CONTRACEPTIVE USE AND FERTILITY IN KENYA

OKOTH^RUTH LILIAN

This project is submitted in partial fulfillment of the Postgraduate Diploma at Population Studies and Research Institute University of Nairobi

July 1996
DECLARATION

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

SIGNATURE

OKOTH RUTH LILIAN

SUPERVISORS

This Postgraduate diploma project is submitted for the award of postgraduate Diploma in Population Studies under our approval as University supervisors.

SIGNATURE

DR. ZTBEON MUGANZI

SIGNATURE

MRS MONICA MAGADI

Population Studies and Research Institute
University of Nairobi
DEDICATION

Dedicated to:-

My Father, Mr. H.J. Okoth,
My Mother, Mrs. Mary Okoth,
My only Beloved Sister, Christine,
My Brothers, Charles, Moses, and Jacob,

and to

My husband, Charles, for all the
Love and caring.
I am grateful to the United Nations Fund for Population Activities (UNFPA) for the financial assistance that enabled me to undertake a full time study for a post-graduate Diploma in Population Studies at the University of Nairobi.

I am greatly indebted to Prof. J.O. Oucho, The Director Population Studies and Research Institute, my Supervisors Dr. Zibeon Muganzi and Mrs. Monica Magadi for their tireless effort, guidance, encouragement and keen supervision throughout the study. I am also very thankful and I appreciate the co-operation and assistance given to me by the entire staff and students of Population Studies and Research Institute.

I extend my sincere thanks to Mr. Stephen Mbuge Odhiambo for his help and guidance in data processing, analysis and the use of computer facilities and special thanks to Mrs. Agnes Anyango Olulo-Odero for her efforts which greatly contributed towards the completion of this thesis and for giving me both moral support and encouragement throughout this study. I cannot escape giving her my heartfelt appreciation.

Finally, my utmost appreciation goes to my parents, brothers and sister for their full time support and encouragement, without whom this project would not have been completed.
ABSTRACT

The objective of this study was to analyse the status of women, current contraceptive use and relate all these to their fertility. The data used was from the Kenya Demographic and Health Survey, 1993.

Two statistical methods of data analysis were used i.e. cross tabulation and correlation analysis. Chi-square statistic was used to determine the significance of the association between selected demographic, socio-economic and cultural variables and current contraceptive use. Correlation analysis was used to determine the strength of the relation between current contraceptive use and fertility. Fertility was measured by children ever born.

The use of chi-square has shown that level of education, age and marital status have a significant relationship with current contraceptive use for both women in the rural and urban areas. However, the relation between religious affiliation and current contraceptive use is only significant for women living in the urban areas. Type of marriage has no significant relationship with current contraceptive use. The study also found that young women living in the rural areas tend to use natural methods of family planning (abstinence and withdrawal) while the relatively young women living in the urban areas tend to use pills and other modern contraceptive methods. A significant proportion (about one fifth) of women who are Catholics use natural method of contraception both in the urban and rural areas.

The study recommends that family planning campaigns should be enhanced in the rural areas and young women and husbands should also be targeted. Further, the education of girls should be enhanced for the status of women to be improved.
Fig. : KENYA — ADMINISTRATIVE DISTRICTS, 1989
**TABLE OF CONTENTS**

CHAPTER ONE: GENERAL INTRODUCTION ................................................. 1
  1.1 Statement of the problem .......................................................... 1
  1.2 Objectives of the study ............................................................. 2
  1.3 Justification of the study .......................................................... 2
  1.4 Scope and limitation ............................................................... 3
  1.5 Literature review ................................................................. 3

CHAPTER TWO: METHODOLOGY ................................................................. 6
  2.1 Definitions of the status of women ............................................. 6
  2.4 Sources Of Data and Methods of Data Analysis ............................ 11
    2.4.1 Cross tabulation ............................................................. 12
    2.4.2 Correlation analysis ....................................................... 13

CHAPTER THREE: RESULTS OF CROSS TABULATION CORRELATION

  ANALYSIS ...................................................................................... 14
  3.1 Age ......................................................................................... 14
  3.2 Marital status ........................................................................... 16
  3.3 Religion ................................................................................... 18
  3.4 Type of marriage ....................................................................... 20
  3.5 Education Level ....................................................................... 21
  3.6 Correlation analysis ............................................................... 23

CHAPTER 4: SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND
  POLICY IMPLICATIONS ..................................................................... 24
  4.1 Age and current contraceptive ................................................. 24
  4.2 Marital status and current contraceptive use ............................ 24
  4.3 Religion and current contraceptive use .................................... 25
  4.4 Marriage type and contraceptive use ....................................... 25
  4.5 Education level and contraceptive use ..................................... 25
CHAPTER ONE

GENERAL INTRODUCTION

1.1 Statement of the problem

Although demographers and policy makers have long been interested in the effect on birth rates of such successes as urbanization, industrialization, modernization and elements of economic such as occupation, education and income, little interest has been expressed, to date, on the effect of the status, roles of women and their fertility.

Given the difficulty in defining the meaning of the term 'status of women' and to ascertain the various ways in which the status of women may affect fertility especially in the developing world, a lot of research has not been carried out, especially in East Africa, though there has been considerable improvement in the status of women.

In Kenya, though knowledge in family planning methods is widespread, there is still variations in contraceptive usage, even though, contraceptive prevalence rose from 7.7. per cent in 1978 to 27 per cent in 1989 and to 33 per cent in 1993 (KDHS). The problem therefore, is that despite improvement in contraceptive knowledge and use in general, there are still widespread differentials, with some areas of high fertility especially Nyanza, Western, Eastern and Coastal provinces having still very low contraceptive prevalence. This study will thus try to ascertain whether there is a relationship between fertility levels and contraceptive usage given the different roles of women and their general status in Kenya.
1.2 Objectives of the study

The general objective of the study is to analyse the relationship between status of women, their use of contraception and fertility.

The specific objectives are outlined below:-
1. To investigate the impact of women status on contraceptive use levels.
2. To determine whether there is a relationship between the status of women and contraceptive method used.
3. To determine whether there is a relationship between the status of women and fertility decline.

1.3 Justification of the study

Women in traditional Kenyan culture have low status despite having some measure of economic independence. Children have been viewed both as a symbol of social status and as a source of domestic labour, and this has precipitated a high demand for children. Kenya is experiencing a decline in fertility and this decline has been attributed to the use of family planning. Due to improved literacy level, more women are now adopting family planning methods for either limiting or spacing their families.

However, given the fact that majority of women are rural based and therefore find the availability and accessibility of family planning services, both in quality and quantity inefficient or lacking, it is important to determine whether there is a relation between female status and fertility, given that women of various status will prefer certain contraceptive methods. Also given the availability, in terms of access to clinics and the cost of family planning services, there is a limitation in the type of contraceptive used by women of different socio-economic status. This study is therefore justified on the grounds that it will investigate the association between the status of women in relation to type of contraception and its effects on fertility.
1.4 Scope and limitation

This study takes into consideration the whole country by using Kenya Demographic and Health Survey Data (KDHS, 1993) based on the country as a whole. This being a study based on secondary data, the analysis cannot be very exhaustive as the data is already collected. All the errors that were encountered during data collection would somehow affect the findings and the author has no control over that. Also given the difficulty and confusion that arises from trying to define the term 'women status' and also in trying to determine the indicators of women status, this study will use socio-economic, socio-demographic and cultural variables to try and determine women status.

Due to limited time and resources, a field survey to collect the data required for this analysis could not be possible, however, this study used secondary data from the KDHS, 1993. Secondary data, as already noted, may sometimes have certain biases based on sample size, incompleteness of data and sampling errors.

1.5 Literature review

As has been true in many academic disciplines, in demography the subject of women's status was until recently, been viewed as a 'special' topic rather than one central to mainstream theories of reproductive change. Although papers were written that mentioned women's roles and status (e.g. Ridley 1968), general statements about the determinants of fertility for the most part ignored these variables.

This is not to say that all demographers ignored the topic of women's status in the past. On the contrary, beginning in 1960s, a small group of feminists (e.g. Blake 1965, Ridley 1968, Dixon 1975, Germain 1975) argued that the status of women has important demographic implications. Currently, the status of women, or some related aspect of gender inequality, plays an important role in Caldwell's (1982) theory of wealth flows, in Cain's (1982) ideas about risk
insurance and fertility transition, and in the work of Dyson and Moore (1983), Safilious - Rothschild (1980, 1982) and others.

Various studies have focused on the negative relationship between female education and employment on fertility. Education is an important determinant of contraceptive use and unmet need. Berta et al (1985) studied female labour force participation and fertility in Hungary using data from population census for the period 1949 to 1980. They found that in recent decades, the greatly increased economic activity of women has played an important role in the general reduction of fertility. They also found that the number of children of married women both at the time of study and previous decades, is negatively related to higher education.

The U.N.(1987) using evidence from a world fertility survey found that within the economic and social commission for Asia and the Pacific (ESCAP) region, total fertility rates were inversely related to education in all the countries with the exception of Indonesia and Sri Lanka.

Ware (1979) in her paper 'women, work and fertility in Africa' states that 'if there were any inherent incompatibility between female labour force participation and high fertility levels, then Africa should have fertility levels appreciably lower than the rest of the developing world where women play a much less important role in the total labour force'. Tropical Africa is, a region where both fertility and rate of female work force participation are among the highest in the world. Oppong and Abu (1984) studied the changing maternal roles of Ghanain women. Oppong asserts that there are certain roles women play that can be used to assess status of women vis:

1). Paternal role
2). Occupational role
3). Conjugal role
4). Domestic role
5). Kin role
6). Community role
7). Individual role
Their findings supported the contention that education, employment and migration had an impact on women's various roles and consequently, upon motherhood and fertility.

As Ware (1977) notes, in parts of West Africa, women are expected to be largely self-supporting and are rarely secluded within a household of strangers, far from their own kin, yet they have high fertility desires. Nevertheless, economic independence and/or integration with natal kin may affect the value of children as securers of women's position in the family. The idea that children are important as a source of 'status' to women has been found in literature for some time now (Blake 1965). Especially when a woman must marry into an extended-kin household of strangers and operate without the support of her natal kin, or without an independent economic base, her position in the family is usually described as being without security or respect until she has borne at least one child or son.

In Kenya, Muinde and Mukras (1979) studied some aspects of fertility determinants in five selected districts of Kenya, and found an inverse relationship between educational level and number of children ever born to a woman during her child-bearing years. The result of their study also indicated that female employment has a negative relationship with fertility. According to Smith (1983), female education and premarital employment both usually have a positive statistical relationship to female age at marriage in developing countries.

The factor most consistently argued to involve women's status and to influence their fertility is women's education. Women with some secondary education are twice as likely to use contraception for limiting and spacing births as compared to women with no education.

Although the status of women has not become the central variable in most theories of the fertility transition, it has at least entered the main-stream of demographic thinking. In this context, understanding what is meant by the 'status of women' and related concepts is important.
2.1 Definitions of the status of women

Despite increased attention to the concept of female status in demography, the meaning of this concept has remained unclear. Indeed, as the literature on the status of women has grown, alternative definitions and terms have proliferated. A review of the different ways in which demographers and other social scientists have defined female status and related areas such as female autonomy and patriarchy is therefore useful.

Among the terms used in social demographic literature are not only 'status of women' (e.g. Dixon 1978), but also 'female autonomy' (Dyson and Moore 1983), 'patriarchy' (Cain et al 1979), 'rigidity of sex stratification system' (Safilios-Rothschild 1980), 'women's rights' (Dixon 1975) and 'mens situational advantage' (Caldwell 1981). All of these terms refer, in part, to some aspect of gender inequality. For example, implicit in most definitions of the status of women is the comparison with the status of men. Similarly, 'female autonomy' usually refers to the extent to which women are free of men's control.

Epstein (1982: 155 -156) notes; 'a woman's status indicates the esteem in which she is held by different individuals and groups who come into contact with her'. Other authors focus on women's power or freedom from control by others, especially within the family or household. For example, Dyson and Moore (1983: 45) begin by stating that female status or 'attitudes' towards women on the part of men (esteem) should be clearly separated from the concept of female autonomy.

Cain et al (1979 : 406) also focus on power. Their definition of 'patriarchy' is: 'a set of social relations with a material base that enables men to dominate women............patriarchy
describes a distribution of power and resources within families such that men maintain power and control of resources, and women are powerless and dependent on men'.

Dixon (1978:6) defines the status of women as 'the degree of women's access to (and control over) material resources (including food, income, land and other forms of wealth) and to social resources (including knowledge, power, and prestige) within the family in the community, and in the society at large'. Safilious-Rothschild (1980) also emphasizes the control of resources when she states that 'the sex stratification system .... determines that men only will occupy major decision-making positions and will control the valued resources of the society such as wealth, income, credit, knowledge, technology, valued skills, valued income - generated activities, food health, power and prestige'.

Most terms and definitions refer to at least in part to gender inequality, and most specifically focuses on one of three basic dimensions of gender inequality namely:

1) inequality in prestige
2) inequality in power or
3) inequality in access to or control over resources

For example, Safilious-Rothschild (1982:117) States that "Women's status refer to women's overall position in the society" and differs from power, which refers to "Women's ability to influence and control at the interpersonal level. Although this makes clear what power means, it does not make very clear what the status of women refer to.

Confusion or disagreement about the meaning of such terms as 'status of women' appears to have two general sources. One is the inherent complexity of gender inequality, the fact that it involves more than one dimension on which the sexes are unequal and more than one social situation in which inequality is exercised. The other is a weak group of stratification theory by some social demographers, something that has led to a confounding of class and gender stratification and to a confusion between access to resources and control of resources.
2.2 Conceptual framework

Some of the most commonly used indicators of female status, especially in statistical studies of fertility, are, measures of women's labour force participation or extra-domestic participation in economic production. It is widely believed that such participation enhances women's domestic autonomy by giving them independent source of income (e.g., Cain et al 1979).

Several factors have been documented to have an effect on fertility levels in the third world, These factors range from socio-economic, cultural, environmental to demographic factors.

Christine Oppong (1980) asserts that there are certain roles women play that can be used to assess status of women, vis:

1). Parental role
2). Occupational role,
3). Conjugal role,
4). Domestic role,
5). Kin role
6). Community role
7). Individual role

These roles provide are used as indicators of the status of women and they provide a framework for the study. The factors determining the status of women are divided into socio-economic, socio-cultural factors and type of contraceptive used by different women as they affect fertility levels.

To illustrate the relationship between the various socio-cultural, socio-economic and demographic variables examined in the theoretical framework a number of conceptual hypothesis may be propounded that may help simplify and conceptually assist in the understanding of the study.
The following conceptual hypotheses can be derived from the above theoretical framework:

1. Socio-economic factors influence the status of women.

2. Socio-cultural factors influence the status of women.

3. Women of various socio-economic and cultural status determine fertility levels, by using various contraceptive methods.

CONCEPTUAL MODEL

An operational framework can be derived from the above conceptual model. Various socio-economic factors that determine 'women status', namely education attainment levels, type of occupation and area of residence are assumed to have an influence on the type of contraceptive method used and consequently on the fertility levels. Some socio-cultural determinants of 'women status' e.g marital status, type of marriage and religion are also assumed to have an influence on the method of contraceptive used by various women, thus affecting fertility.
It is also assumed that given that women who can read and write, and who believe they can plan ahead and thus control their fates, will presumably be more likely than other women to learn about effective contraceptive technique and use them to control their fertility. In the conceptual model above, it is assumed that contraceptive method that is used, is determined by a woman's status.

Age is an important factor in determining fertility levels and contraceptive usage, thus in the model, the demographic variable that will be used is the current age of the respondents, which will have a direct influence on fertility levels.

**OPERATIONAL MODEL**

*The following operational model can thus be used:*

```
      SOCIO - ECONOMIC VARIABLES
        . Educational level
        . Residence

      SOCIO - CULTURAL VARIABLES
        . Marital status
        . Type of marriage
        . Religion

      DEMOGRAPHIC VARIABLE
        . Current age

      CONTRACEPTIVE METHODS
        . Pill
        . Injection
        . Condom
        . Natural Family Planning

      TOTAL FERTILITY RATE (TFR)
```

**Independent Variables**  **Dependent Variables**
1. Educational Level  1. Fertility level
2. Residence
3. Marital status
4. Type of marriage
5. Religion
6. Age

**Operational hypothesis**

The operational hypotheses to be tested in this study are:

1. Increased women educational levels affects contraceptive method used thus influencing fertility levels.

2. The residence of a woman will affect the type of contraceptive method she uses and will also influence fertility levels.

3. Marital status and type of marriage have an influence on the method of contraceptive used by women and will also affect fertility levels.

4. Women’s religious affiliation has a direct influence on the type of contraceptive method used and has an inverse effect on fertility levels.

5. Age has an influence on the type of contraceptive method used and an effect on total fertility levels.

**2.4 Sources Of Data and Methods of Data Analysis**

This study will utilize data from the 1993 Kenya Demographic and Health survey (KDHS), which will provide data concerning various background characteristics of women from all over the country, contraceptive use age and knowledge and the general status of women.
2.4.1 Cross tabulation

Cross tabulation measures the association between two or more variables and the significance of the association is measured by a Chi-square statistic.

The Chi-Square X:

The Chi-square is used to measure the significance of the association between two variables in a cross tabulation analysis. This is based on observed cell frequencies of a cross tabulation (joint contingency table) with the frequencies that would be expected if the null hypothesis of no relationship were in fact true.

The chi-square is calculated using the following steps:

1. Find the frequencies for each variable i.e. observed frequencies.
2. Find the expected frequencies by multiplying the number of row by the number of columns, then divide the expected result by the grand total or the sample size.

\[ F_{\text{expected}} = \frac{(R \times C)}{N} \]

3. Find the difference between the observed and expected frequencies in each cell, then square it, then divide it by the expected frequencies for each cell, then sum all results for all cells of the table.

The equation is written as follows:

\[ \sum \left( F_{\text{observed}} - F_{\text{expected}} \right)^2 / F_{\text{expected}} \]

note E represents summation sign, c represents columns, r represents rows and F represents frequencies. In this analysis the results of the chi-square will be obtained by the use of computer because of the large data set. If the observed significance printed out for a cross tabulation is
less than 0.05 then the variables in the cross tabulation have a relationship that is significant at 95 percent confidence interval.

2.4.2 Correlation analysis

The correlation coefficient $r$ can be defined as the ratio of the covariation to the square root of the product of the variation in $X$ (independent variable) and the variation in $Y$ (dependent variable) (See Hubert Blalock 1979 pp 398).

The steps followed in calculating the correlation coefficient between two variables is as follows:

1. Calculate the means of the variables i.e. mean of $X$ and mean of $Y$.
2. Second calculate the deviations of each variable from its mean.
3. Square the deviations of each of the variables in step two and sum them up.
4. Multiply each of the variables and sum them up.

The final formula would thus look like this

\[ r = \frac{E(X \cdot Y)}{\sqrt{(E(x))^2 (E(y))^2)}} \]

Note: $E$ represents the summation sign, $X$ and $Y$ are the variables while $x$ and $y$ are the deviations from the mean.

The results of the correlation analysis in the study will be obtained by the computer due to the amount of data involved.
CHAPTER THREE

RESULTS OF CROSS TABULATION CORRELATION ANALYSIS

The study analyses the status of women and how it affects their contraceptive use and eventually fertility levels. As already indicated in chapter one, it is difficult to define the status of women generally. However, in this study level of education and the place of residence are the socio-economic factors used to define status of women while marital status, religion and type of marriage are the socio-cultural factors used to define status of women. Occupation was found to be highly correlated with level of education therefore only level of education was used instead.

Since, level of education has a relationship with place of residence because the highly educated women tend to live in the urban areas while the less educated live in the rural areas place of residence has been used as a control variable in the analysis. The analysis has tried to investigate how the other factors used as indicators of status of women are associated with contraceptive use in the rural and urban areas respectively. In this analysis, natural method of family planning includes abstinence and withdrawal while ‘other methods’ include IUD, diaphragm/foam/jelly, Norplant and female sterilization among others.

3.1 Age

The age of a woman in the child bearing age may affect her current use of contraceptives since younger women may not have access to the contraceptives while relatively old women may not readily accept the modern contraceptives. It is also likely that women in the urban areas have more access to the contraceptive outlets. Thus, irrespective of the age a higher proportion of them are likely to use contraceptives. In table 3.1 the association between age and type of contraceptive currently used is reported for women in urban and rural areas.
Table 3.1: Age and type of contraceptive used

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Rural</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Urban</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pill</td>
<td>Injection</td>
<td>Condom</td>
<td>Natural</td>
<td>Other</td>
<td>Pill</td>
<td>Injection</td>
<td>Condom</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-24</td>
<td>120(32)</td>
<td>50(7.7)</td>
<td>29(7.7)</td>
<td>141(37)</td>
<td>17(4.5)</td>
<td>375</td>
<td>47(13.8)</td>
<td>14(11.5)</td>
<td>8(6.8)</td>
<td>19(15.7)</td>
<td>33(34)</td>
</tr>
<tr>
<td>25-34</td>
<td>202(30.3)</td>
<td>221(33.2)</td>
<td>19(2.8)</td>
<td>83(12.5)</td>
<td>14(21.2)</td>
<td>666</td>
<td>72(36.9)</td>
<td>104(15.4)</td>
<td>10(15.3)</td>
<td>32(16.4)</td>
<td>51(26.1)</td>
</tr>
<tr>
<td>35-44</td>
<td>50(12.1)</td>
<td></td>
<td>100(2.4)</td>
<td>40(9.7)</td>
<td>204(49.3)</td>
<td>414</td>
<td>17(28.9)</td>
<td>12(11.1)</td>
<td>4(6.3)</td>
<td>55(35.5)</td>
<td></td>
</tr>
<tr>
<td>45-49</td>
<td>6(6)</td>
<td></td>
<td>11(21)</td>
<td>9(9)</td>
<td>63(83)</td>
<td>100</td>
<td></td>
<td>21(24)</td>
<td></td>
<td>2(8)</td>
<td>31(24.1)</td>
</tr>
</tbody>
</table>

r = 563.65; N = 1537, Significance = 0.0000

X² = 73.93245, N = 377, Significance = 0.0000

Note: The figures in brackets are row percents.

In the age group 15-24 years, the highest proportion, 37.6 percent, of those living in the rural areas use natural (withdrawal, abstinence) method of family planning. The proportion using pills was 32 percent while the proportion using injection was 13.3 percent. The proportion using the remaining methods was less than 10 percent in each case. For the same group of women living in the urban areas, the highest proportion, 38.8 percent use pills, 11.5 percent use injection, 6.6 percent use condoms and 27.3 percent use 'other methods'.

Among the women aged 25-34 years, the highest proportion of those in the rural areas, 33.2 percent use injection, 30.3 percent use pills, 2.8 percent use condoms while 12.5 percent use natural method. For this age group of women in the urban areas 38.8 percent use pills, 11.5 percent use injection, 6.6 percent use condom 15.7 percent use natural method while 27.3 percent use 'other methods'.

In the age group 35-44 years, the highest proportion of those women living in the rural areas, 49.3 percent, were using 'other method', 26.6 percent were using injections, 9.7 percent were using natural method while 12.1 percent were using pills. On the other hand, for women in urban areas, 26.9 percent use pills, 11.1 percent use injection while 6.3 percent use natural method.
For the women in the age group of 45-49, the highest proportion of women appear to be using 'other methods' both in the rural and urban areas. In the urban areas, the highest proportion, 44 percent were using pills.

The analysis shows that the majority of women living in urban areas, were using pills while for the same category of women living in the rural areas, the majority were using natural method of contraception. This finding could be explained by the fact that in urban areas young women may have more access to contraceptives than in the rural areas. Further contraceptive knowledge is higher in the urban than in the rural areas.

The analysis further revealed that whether a woman is living in the rural area or in the urban area, her age is highly associated with current contraceptive use. The cross tabulation between age and current contraceptive for women who were staying in the rural and urban areas respectively showed significance at 95 percent confidence interval.

### 3.2 Marital status

Marital status of a woman influences her use of contraceptives. Some married women cannot use contraceptives without the approval of their husbands. The results of cross tabulation between marital status of women and their current use of contraceptives is reported in table 3.2.
Table 3.2: Marital status and contraceptive use

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Injection</th>
<th>Condom</th>
<th>Natural</th>
<th>Injection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never Married</td>
<td>49(23.8)</td>
<td>29(14.1)</td>
<td>18(8.7)</td>
<td>96(46.6)</td>
</tr>
<tr>
<td></td>
<td>304(27)</td>
<td>335(29.7)</td>
<td>39(3.5)</td>
<td>64(5.7)</td>
</tr>
<tr>
<td>Widowed/Divorced/Not Living</td>
<td>25(23.1)</td>
<td>38(35.2)</td>
<td>2(1.8)</td>
<td>13(12)</td>
</tr>
<tr>
<td>Living together</td>
<td>28(25.9)</td>
<td>21(45.6)</td>
<td>6(13)</td>
<td>5(10.9)</td>
</tr>
</tbody>
</table>

\[ X^2 = 21.20985, \quad N = 1437, \quad \text{Significance} = 0.0000 \]

\[ X^2 = 55.30500, \quad N = 377, \quad \text{Significance} = 0.0000 \]

Note: The figures in brackets are row percentages

Among the women in the rural areas, the highest proportion, 46.6 percent, of those who have never been married use the natural method of family planning. In the same category of women, 23.8 percent use pills and 14.1 percent use injection. For women who were never married and living in the urban areas, the highest proportion, 34.7 percent use pill and 30.7 percent use the natural method.

Among the married women who are living in the urban areas, 34.8 percent use pills, 13.6 percent use injection, 3.6 percent use condoms, 13.2 percent use the natural method, and 34.8 percent use other methods. In the same category of women living in the rural areas, the highest proportion, 31.2 percent use other methods while 24.6 percent and 27.4 percent use pills and injection respectively.

Very few women were enumerated as living in the urban areas with partner and were current users of contraceptives, however for those living in the rural areas, 31.1 percent use pills, 26.7 percent use injection and 33.3 percent use 'other methods'.

In the category of widowed women, living in urban areas, very few were enumerated as current users of contraceptives, however, for widowed women staying in the rural areas, 32.3 percent use injection, 48.4 use other methods while only 12.9 percent use pills.
For women who were married or living with their partners in the rural areas, the highest proportion, 34 percent, were using other methods; 29.7 percent were using injection and 27 percent were using pills respectively. In the urban areas, the highest proportion 35 percent were using pills while 34 percent were using 'other' methods.

Women in the category of widowed, divorced and those not living with their partners in the rural areas, the highest proportion 35 percent were using injection. About one quarter (25.9%) were using 'other' methods. For women in this category in the urban areas, the highest proportion, 45.6 percent were using pills. The proportion using injection was 13 percent while those using natural method was 10.9 percent. Slightly above one fifth (23.9%) were using 'other' methods.

The results show that in both the rural and urban areas, the highest proportion of women use modern contraceptives. The association between marital status and current contraceptive use is significant for both the rural and urban women. In each case, the observed significance was less than 0.05 (i.e results are significant at 95 percent confidence interval).

### 3.3 Religion

Religion has a strong influence on contraceptive use. Some religious organisations like the Catholics advocate only natural methods of family planning unlike other religious groups like the protestants. The results of the analysis between religious affiliation and contraceptive method used is reported in table 3.3.
Table 3.3: Religious affiliation and contraceptive use

<table>
<thead>
<tr>
<th>Religion</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pill</td>
<td>Injection</td>
</tr>
<tr>
<td>Catholic</td>
<td>131(27.1)</td>
<td>107(22.2)</td>
</tr>
<tr>
<td>Protestant/other</td>
<td>235(23.5)</td>
<td>283(28.2)</td>
</tr>
<tr>
<td>Muslim</td>
<td>8(108.5)</td>
<td>3(15.8)</td>
</tr>
<tr>
<td>Other</td>
<td>1(50)</td>
<td>1(50)</td>
</tr>
</tbody>
</table>

The proportion of Catholics in the rural areas using pills was 27.1 percent. About 22.2 percent use injection, 20.9 percent use natural method while 25.9 percent use other method. For the Catholics in the urban areas, 37.4 percent use pills, 14 percent use injection, 17.8 use natural method and 26.2 percent use other methods.

In the category of women in the rural areas and are protestants or other christians, 23.5 percent use pills, 28.2 percent use injection, 4 percent use condom and 16.1 percent use natural method. Women in this religious affiliation and are in urban areas 32 percent use pills, 15.8 percent use injection, 6.4 percent use condom, 19.2 percent use natural while 26.6 percent use other method.

The highest proportion 33.3 percent of muslims and those in other religious organisations living in the rural areas use pills. About one quarter of them use natural method. In the urban area, the highest proportion uses pills while those using 'other' methods was 31.8 percent.

Further analysis revealed that the association between religious affiliation and type of contraception currently being used is not significant for women in the rural areas. However, for women in the urban areas the association is significant at 95 percent confidence interval.
3.4 Type of marriage

The relationship between marriage type and contraceptive use for women living in the rural and urban areas is presented in Table 3.4 below.

Table 3.4: Type of marriage and contraceptive use

<table>
<thead>
<tr>
<th>Marriage type</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pill (24.8)</td>
<td>Pill (13.2)</td>
</tr>
<tr>
<td></td>
<td>Injection (27.7)</td>
<td>Injection (14.1)</td>
</tr>
<tr>
<td></td>
<td>Condom (13.2)</td>
<td>Condom (13.9)</td>
</tr>
<tr>
<td></td>
<td>Natural (31.1)</td>
<td>Natural (12.7)</td>
</tr>
<tr>
<td></td>
<td>Other (31.1)</td>
<td>Other (32.4)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>1 Monogamous</td>
<td>310 (24.8)</td>
<td>105 (37)</td>
</tr>
<tr>
<td>1 Polygamous</td>
<td>15 (20.3)</td>
<td>5 (31.3)</td>
</tr>
<tr>
<td></td>
<td>26 (35.1)</td>
<td>16 (37.5)</td>
</tr>
<tr>
<td></td>
<td>40 (51.3)</td>
<td>10 (6.3)</td>
</tr>
<tr>
<td></td>
<td>12 (16.2)</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td></td>
<td>2 (27)</td>
<td>2 (12.5)</td>
</tr>
<tr>
<td></td>
<td>1250</td>
<td>74</td>
</tr>
</tbody>
</table>

Note: The figures in brackets are row percentages

X² = 3.59133, N = 1324, Significance = 0.4641

X² = 3.53805, N = 300, Significance = 0.4721

The women living in the rural areas and are in monogamous unions, 24.8 percent use pills, 27.7 percent use injection while 31.1 percent use other methods. Further, for the women in the rural areas and are in polygamous unions, the highest proportion 35.1 percent use injection followed by 'others', 27 percent and those using pills formed 20.3 percent.

For women in the urban areas and they are in monogamous unions, 37 percent use pill, 14.1 percent use injection, 12.7 percent use natural method while 32.4 percent use other methods. Further, for women in polygamous unions and staying in urban areas, 31.3 percent use pills and 37.5 percent use 'other' methods. In this category of women, very few were using injection, condom or natural methods. The trend here is that women in monogamous unions tend to use pills irrespective of their place of residence.

Further the analysis showed that the relationship between type of marriage is not significant at 95 percent significance level for the women staying in the rural or urban areas. The observed significance values were both more than 0.05.
3.5 Education Level

Level of education does influence contraceptive use among women and it also affects their status significantly. In this study the association between level of education and contraceptive use was analysed and the results are presented in table 3.5.

Table 3.5: Level of education and contraceptive use

<table>
<thead>
<tr>
<th>Level of education</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pill</td>
<td>Injection</td>
</tr>
<tr>
<td>No education</td>
<td>26(12.5)</td>
<td>70(33.7)</td>
</tr>
<tr>
<td>Incomplete primary</td>
<td>117(21.8)</td>
<td>143(26.7)</td>
</tr>
<tr>
<td>Complete primary</td>
<td>90(28.8)</td>
<td>102(30)</td>
</tr>
<tr>
<td>Incomplete secondary</td>
<td>127(31.6)</td>
<td>84(20.9)</td>
</tr>
<tr>
<td>Complete secondary</td>
<td>81(17.4)</td>
<td>36(5.5)</td>
</tr>
<tr>
<td>Higher</td>
<td>2(40)</td>
<td>1(20)</td>
</tr>
</tbody>
</table>

X² = 137.11424, N = 1537, Significance = 0.0000
X² = 52.49749, N = 377, Significance = 0.0000

The highest proportion of women with no education living in the rural areas, 39.4 percent use 'other methods'. In the same category 13.5 percent use natural method, 33.7 percent use injection and 12.5 percent use pills. For women with no education and staying in the urban areas, 48 percent use pill, 12 percent use injection while 28 percent use 'other methods'.

The highest proportion of women with incomplete primary and staying in the rural areas, 29.7 percent, use 'other methods'. In the same category 18.3 percent use natural method, 26.7 percent use injection and 21.8 percent use injection. For women with primary level of education
incomplete and staying in the urban areas, 29.7 percent use pill, 18.8 percent use injection, 18.8 percent use natural method, 29.7 percent use 'other method'.

Among the women with primary complete and staying in the rural areas, 30 percent use injection, 28.8 percent use pills, 15.6 percent use natural method and 22.9 percent use 'other method'. In the same category of women staying in the urban areas 43.9 percent use pills, 13.4 percent use injection, 25.6 percent use 'other methods' while less than 10 percent use condom and natural method.

The highest proportion of women with incomplete secondary and staying in the rural areas, 31.6 percent, use pills. Further, 20.9 percent of this women use injection, 4.5 percent use condom, 17.9 percent use natural method and 25.1 percent use 'other method'. For women in urban areas with incomplete secondary, 38.3 percent use pills, 15 percent use injection, 15.6 percent use natural method and 28.1 percent use 'other method'.

Among the women with secondary education complete and staying in the rural areas, 17.4 percent use pill, 21.7 percent use condom and 45.7 percent use natural method. For the women in the urban areas 50 percent use natural method, 21.4 percent use 'other method'. Very few women were enumerated as having higher education and using contraceptives in the rural areas and urban areas.

— v

The results show that as the level of education increases the proportion of women in the rural or urban areas using modern contraceptives also increases. The analysis also show that the relationship between level of education and current contraceptive use is significant at 95 percent level of significance.
3.6 Correlation analysis

The relationship between various variables and current contraceptive use has already been outlined in the first sections of this chapter. This last section, therefore outlines the relationship between current contraceptive use and fertility. The indicator for fertility was children ever born.

The results of the analysis show that the correlation coefficient between current contraceptive use and children ever born was $r=0.1788$ and it was significant at 99 percent confidence interval using one tailed significance test. The observed significance was $p=-0.001$ (1-tailed significance). There is a strong correlation between current contraceptive use and children ever born. Further $r^2=0.031684$ and this shows that about 3.2 percent of the variations in number of children ever born was due to current contraceptive use among other factors.

Since current contraceptive use has a strong positive correlation with fertility then conceptually the factors which were found to be strongly related to current contraceptive use like age, marital status and education also have a strong relationship with fertility.
SUMMARY, CONCLUSIONS, RECOMMENDATIONS AND POLICY IMPLICATIONS

This study had the broad objective of determining the relationship between status of women and contraceptive use and how this eventually affects their fertility. The findings of the study can be summarized as follows:

4.1 Age and current contraceptive

The findings of the study have shown that age is strongly related to contraceptive use and that women in the rural areas use natural methods while the majority of the women in the urban areas use pills. Since the natural methods are relatively inefficient, the young women in the rural areas are more at risk of getting unwanted pregnancies compared to their counterparts in the urban areas who are instead using relatively modern and efficient methods. It can be concluded that the low status of women in the rural areas due to lack of facilities including proper family planning facilities and methods will still contribute to high fertility and thus deteriorate further their already relatively low status.

4.2 Marital status and current contraceptive use

The findings of the study have shown that the majority of the women using modern contraceptives like pills are those who have never been married (over 60%) and those who are widowed and are staying in the urban areas. This shows that the majority of those using modern contraceptives are the women not staying with their partners or those not having partners. Again the results showed that a significant proportion (46.6%) of the women who have never been married and staying in the rural areas use natural methods that are inefficient although the majority (49%) use pills.
It was also found that the association between marital status and current contraceptive use is very strong irrespective of the place of residence. It can be concluded from the findings that married women in both rural and urban areas are likely to have unwanted pregnancies because a relatively lower proportion of them are using modern contraceptive methods compared to single or widowed women. This again may contribute to lowering their status.

4.3 Religion and current contraceptive use

Religion was expected to have a strong influence in contraceptive use because some religious organisations like the Catholics advocate only natural family planning methods. The findings of the study indicate that about one fifth of the catholics both in the urban and rural areas use natural method of family planning. However, the proportion using pills in each case is slightly higher than this proportion. The study also showed that religious affiliation and contraceptive use are not related for women in the rural areas. The relationship is significant for women in the urban areas. It can be concluded that most religious organisations have not started fully fledged contraceptive campaigns in the rural areas and as such their followers are lacking contraceptive knowledge.

4.4 Marriage type and contraceptive use

There was no significant relationship between marriage type and contraceptive use and therefore no conclusions can be drawn from this findings.

4.5 Education level and contraceptive use

The study showed that education had a very strong relationship with current contraceptive use. The findings further showed as the level of education increases for women in the rural areas, the proportion of women who use natural methods also appear to increase. For the women in the urban areas the proportion of women using pills and other modern methods also appear to increase as level of education increases. The conclusion that can be drawn here is that education
empowers women to make informed choices such that they can use a various methods of effective modern contraceptives. This is irrespective of whether they are staying in the rural or urban areas. Education also raises the status of women.

4.6 Policy implications

This study has come up with findings that have various policy implications. These include the following:

1. Family planning campaigns should be intensified in the rural areas and the young women should be targeted.

2. Husbands must be incorporated in the family planning. The study showed that relatively single women are likely to use contraceptives compared to the women staying with their partners.

4. Although some religious groups have a very strong stand on contraceptive use among their followers, the effect has only been effective in the urban areas and not in the rural areas. These religious need to increase their contraceptive campaigns in the rural areas.

5. Education of women need to be intensified further and age at marriage should be increased so that young women get into marital unions when they are well informed and can make informed decisions on having babies. This is likely to enhance their status.
4.7 Recommendations for further research

The following recommendations should be undertaken for further research;

1. A detailed research need to be undertaken to analyse the socio-cultural and socio-economic status of women and this should be related to their contraceptive use and fertility levels. The data used should be primary and not secondary data which has limitations.

2. A prospective study need to be undertaken to measure the changes in the status of women and their contraceptive use and their fertility. This analysis cannot be achieved effectively using secondary data.
REFERENCES

Blake, Judith 1965
Demographic Science and the Redirection of Population Policy,
Journal of Chronic Diseases. 18 (November): 1181-1200.

Berta, et al 1985
Working Women in Socialist Countries, the Fertility Connection
edited by V. Bodrova and R. Anker- AWEP study.

Bultao, Rodofo A., 1975

Cain, Mead, 1980
"Risk, Fertility, and Family Planning in a Bangladesh Village". Studies in
Family Planning 11 (June): 219-223.

Cain Mead, 1982
Perspectives on Family and Fertility in Developing Countries. Population Studies
36 (July) 159-175.

Cain Mead, Syeda Rokeya Khanam and Shamsun Nahar,1979
"Class Patriarchy and Women's Work in Bangladesh" Population Studies 33
(November): 395-413.

Caldwell, John C. 1979
"Education as a factor in Mortality Decline: An examination of Nigeria Data".

Caldwell, John C.,1983
"Direct Economic Costs and Benefits of Children" pp. 370-397 in R.A. Bulatao
and R.D. Lee et al, eds., Determinants of Fertility in Developing Countries

Caldwell, John C.,
1981 "The mechanisms of demographic change in historical perspective"
Population Studies 35 (March): 5-27.


28
Coale, Ansley J. 1973

Cochrane, Susan H. 1979
Fertility and Education. What do we Really Know? Baltimore: John Hopkins University Press.

Cochrane, Susan H. 1983

Dixon, Ruth B. 1975

Dixon, Ruth B. 1978

Dyson, Tim and Nick Moore 1983

Epstein, T. Scarlet 1982

Germain Adrienne 1975

Oppong, Christine 1983

Oppong and Abu:

29
Mason, Oppenheim K, 1984
The Status of Women, A Review of its Relationships to Fertility and Mortality.
(Population Studies (Enter) University of Michigan.

Muinde and Mukras, 1979
Some Aspects of Determinants of Fertility in Kenya.

Ridley, Jeane Clare 1968
"Demographic Change and the Roles and Status of Women".

Safilious-Rothschild, Constantina 1982

Safilious-Rothschild, Constantina 1980

Smith, Peter C. 1985
"Age at Marriage and Proportions Marrying Levels and Trends, Fertility Impact and Determinants" pp. 902-947. in R.A. Bulatao and R.D. Lee et al., Determinants of Fertility in Developing Countries (Washington, D.C. National Academy Press).

Smith, Peter C. 1983
"Age at Marriage and Proportions Marrying Levels and Trends, Fertility Impact and Determinants" pp. 902-947. in R.A. Bulatao and R.D. Lee et al., Determinants of Fertility in Developing Countries (Washington, D.C. National Academy Press). *

U.N. Department of International Economic and Social Affairs. 1987
Fertility behaviour in the context of Development Evidence from the WFs 1987.

Ware, Helen, 1977