Factors that influence low utilisation of natural family planning methods among child bearing women (aged 15-49 years) in Mongu urban district Zambia

Cecilia S. Lubinda
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FACTORS THAT INFLUENCE LOW UTILISATION OF NATURAL FAMILY PLANNING METHODS AMONG CHILD BEARING WOMEN (AGED 15-49YEARS) in MONGU URBAN DISTRICT ZAMBIA

BY

CECILIA SHANKANGA LUBINDA

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
ABSTRACT

The purpose of this study was to explore and analyse factors that influence the low utilisation of natural family planning methods. A theoretical framework adapted from Betty Neuman's Systems Model was used to guide the study. Using Betty Neuman's Systems Model the person or client's behaviour influenced by the continuous interaction with the environment.

The factors investigated were the women's personal characteristics, age, occupation, marital status and education, cultural influences which included the relationship between the husband and wife and the religious belief of the women. The last factor investigated was the influence of the information practices and family planning methods by the health personnel.

A descriptive survey design using a personal interview schedule and focus group discussion was used to collect data. The target population consisted of women of child bearing age (15-49 years) living in Mongu urban district, a western province of Zambia. One hundred women participated in the personal interview in their own homes. Twenty women of the same group participated in two focus group discussions conducted at two health centres.

Data were analysed and presented using frequency distribution statistics, cross tabulation and content analysis of main themes for open ended questions in categories.
The major findings were that age, marital status, occupation, the husband and the practices of health performed had either facilitative or disruptive effects on whether the women used natural family planning methods. For example, the results strongly demonstrated that older women had more knowledge of, and used natural family planning more than younger women. Employed women had more knowledge of, and used natural family planning more than the housewives; those at school and at home. Some women did not use natural family planning because their husbands were not willing. Other women did not use natural family planning because it was not encouraged by the health personnel.

Education had very little influence on use of natural family planning methods in this study, compared to previous research studies which had indicated that women with higher education used family planning methods more than those less educated.

Although the results could not be generalised due to the convenience sample used, they supported some of the factors identified in previous research studies. A number of implications for nursing practice were outlined and nurses need to be trained in natural family planning in order to increase the number of health professionals who can teach natural family planning methods. The husbands need to be involved in the issues of natural family planning.
DECLARATION

"I certify that this thesis does not incorporate, without acknowledgment, and material previously submitted for a degree or diploma in any institution of higher education and that to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in text."

Signed

CECILIA SHANKANGA LUBINDA

Date

25th September, 1996
ACKNOWLEDGEMENTS

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CHAPTER ONE

Introduction

The Background to the Study

Zambia is a landlocked country in Southern Africa covering a total of 752,614 square kilometres. The country shares borders with eight countries, Malawi, Mozambique, Zimbabwe, Botswana, Namibia, Angola, Zaire, and Tanzania (Figure 1). It has a total population of 8.6 million people, with an average population density of 10.4 million. The fertility rate of Zambia is 6.3% higher than Zimbabwe, which has 5.3%, according to a demographic survey (UNICEF, 1995). The current Zambian infant mortality rate (under one year) was 114 per 1000 live births, a reduction over three decades, compared to 1960 when it was 135 per 1000 live births (UNICEF, 1995). Maternal mortality was 150 per 100,000 live births between 1980-92 (UNICEF, 1995). The infant mortality rate is high compared to that of Zimbabwe, where it is half the rate at 58 per 1000 live births (under one year) and was 109 per 1000 live births in 1960 (UNICEF, 1995). There were no statistics available for the maternal mortality rate of Zimbabwe in the demographic survey (UNICEF, 1995). The two statistical measures of infant and maternal mortality are very important indicators showing the health status of a country.

The population of Zambia will continue to grow at a fast rate for some years to come, because over half the population is under 15 years of age. The total contraceptive prevalence rate has remained fairly static overtime, as demonstrated by research conducted between 1980-93 at a rate of 15% compared to Zimbabwe, the total prevalence rate of which was more than three greater at 43% (UNICEF, 1995).
Figure 1. Map of Zambia and the bordering countries (Instituto del Tercer Mundo, 1995, *The world (a Third World Guide 1995/96)*. Montevideo, Uruguay, p. 593
Possible reasons for low contraceptive use, as outlined by the Government of the Republic of Zambia (GRZ), Ministry of Health Zambia (1995a) are: inadequate supplies of family planning methods, restricted contraceptive method mix; poor logistics; and information systems and inadequate technical capacity on the part of health care providers.

To try and increase the utilisation of family planning services and to make available more choice of birth control methods for individual women, the Zambian Government formulated policy guidelines and standards of practice. Objectives of these family planning guidelines and standards were stated as follows (GRZ, Ministry of Health, 1994):

a. To enhance the welfare of the Zambian family by preventing premature deaths and illness amongst women and children;
b. To ensure that all couples and individuals have the basic right to decide freely the number of children they will have and how they shall space their children;
c. For all couples and individuals to have access to appropriate and relevant information to enable them to exercise their right of choice of method;
d. To systematically integrate family planning into all primary health care activities;
e. To ensure that service providers at all levels, particularly those at district and community level, are fully aware of the method mix and are able to deliver services to clients according to their needs (p. iv).

It is clear from these guidelines that the Zambian government is trying to achieve, through a family planning programme, an overall decrease in maternal and
infant mortality. In line with the policy guidelines, the Zambian Government laid down the strategies which would ensure that all people would receive the most appropriate family planning services. Crucial to the success of this programme is the availability of information from health care providers on all methods of birth control. There should also be the freedom for all clients to choose and obtain the birth control methods most appropriate for their lifestyle. To ensure that all the eligible clients for family planning received the methods, no written consent should be required from the husband in case of the married woman, or from the parents in the case of the adolescent children.

As a result of the government policy, all family planning services are made free to all those requiring them, in 1994. Family planning services are to be made available as an integral part of the already existing outreach activities (for example, antenatal care and children’s clinics and immunization clinics, the treatment of minor ailments). This new focus of the outreach health services would complement the existing community based distribution of family planning services. All adolescents (14-19), whether they were attending school or not, are to be taught about family planning methods, family life education and fertility awareness. Young people living in rural areas would be able to learn about these topics from the outreach health workers. School health services now provide a range of health services including screening programmes, physical examinations to all children attending school. To increase knowledge about family planning methods, the health workers in these school services would now be required to provide family planning education and services. Family planning is to be emphasised with components added into the curricula of medical,
para-medical and all nursing training schools and in-service training shall be continuous process for those health professionals already in practice.

This short introduction into the context of family planning in Zambia reveals that the government has recognised the need to improve the quality of life for families and that the maternal and infant mortality rates remain high. However, little is known concerning women's perspectives on the use or non-use of natural family planning methods. Knowledge of what influences a woman's choice of family planning methods will help to contribute valuable background information to assist the Zambian government in reaching their goals. As a contribution towards the family planning goals set by the Zambian government, this research study examined the women's perspectives on the utilisation of natural family planning methods, in Mongu district of Western Province, Zambia.

According to research conducted in Mongu urban district of Western Province, Zambia (Kufuna Chipukuma, Mwasheka, Kashumba, Chimwaso & Malambo, 1993), the maternal mortality rate was found to be 889 per 100,000 live births, four times higher than the national Zambian rate. The authors of this survey gathered data from health facilities and communities, in order to determine the number of maternal deaths in the district. There is a direct connection between family spacing and reductions in maternal and infant mortality rates. By spacing the births of the children, the mother is able to recover from the stress of pregnancy and delivery. According to a survey conducted by GRZ, Ministry of Health (1995), findings showed that artificial methods of family planning were more popular than were natural family planning methods. It was thought important by the author to discover what women thought about natural
family planning methods, whether the women used them, and if so why, if they did not use these methods, why not.

**Significance of Study**

This research study was carried out for three main reasons: (a) the lack of research from women’s perspectives; (b) the expense of artificial methods of family planning to the client; and the lack of qualified personnel to administer artificial methods of birth control. Most research has dealt with professionals’ perspectives concerning family planning. The study looked at the women’s perspectives on utilisation of natural family planning methods as this aspect had not been studied before in Zambia. Because of the low economic status of people in the Zambian communities, it is not appropriate to continue promoting only the use of artificial methods of family planning, as these methods are more expensive for the women compared to natural family methods. The low economic status of the country has also led to the drifting of qualified health personnel to the neighbouring countries in search of larger salaries. “Zambia on average loses about 60% of specialised health personnel each year to neighbouring countries (GRZ, Ministry of Health, 1991, p. 73).

In summary, Zambia has low utilisation of any family planning method but especially of natural methods. The government is trying to encourage the use of family planning methods. This is difficult to achieve as artificial methods need qualified health personnel to conduct medical check ups and to prescribe these methods. There is a shortage of adequate qualified health personnel, because they are going to other countries for employment. Because of lack of qualified health personnel and expensive
artificial methods of contraception, it was felt appropriate by the author to understand what women thought about and knew about natural family planning methods which did not require the two mentioned factors to implement.

Currently, natural family planning is least used by the clients. To try and answer the problem of low utilisation of natural family planning methods, research questions were formulated, based on the assumption that the individual woman’s behaviour and her actions are influenced by her own knowledge and experience and also personal characteristics and by the environment, in which she lives. For the purpose of this study, the central concern was on the social environment of the woman, which influences her utilisation or non-utilisation of family planning methods. The factors of interest were the individual woman, the culture she lived in, and the health personnel she interacted with.

**Purpose of the study**

The purpose of the study was to explore and analyse the factors that influence the low utilisation of natural family planning methods. The research findings were intended to be used by the policy makers and all those health care workers involved in outreach activities and school health services (family planning programme managers), when designing strategies aimed at improving family planning services. These findings will also benefit the educators in all health related programmes, for example nurses and doctors. Ultimately, the health of women in their reproductive age could be improved, as they would be given more choice of appropriate family planning methods and be able to plan the size of their families.
Research questions

1. What influence do personal characteristics have on the choice and utilisation or non-utilisation of natural family methods by Zambian women?

2. How does culture influence the use or non-use of natural family planning methods by Zambian women?

3. What influence do the health personnel have on the choice and utilisation or non-utilisation of natural family planning methods by Zambian women?

Definitions

For the purpose of this study, the following concepts have been defined as follows:

1. Culture is used as a term to mean the attitudes, customs, beliefs and religion of a majority of members in a given community.

2. Natural family planning methods include basal body temperature, cervical mucus method (Billing's ovulation method), symptom-thermal methods and periodical abstinence from sexual intercourse.

3. Artificial family planning methods include the contraceptive pill, intra-uterine devices (IUD), condoms, vaginal tablets, jellies and foam.

4. Prescriptive methods of contraceptives include the contraceptive pill and the IUD.

5. Non-prescriptive methods of contraception include natural family planning methods, condoms, contraceptive vaginal tablets, jellies and foam.

6. Personal characteristics include age, marital status, education and occupation.
CHAPTER TWO

Literature review

The author deliberately reviewed literature on studies conducted in developing countries especially Africa, because of the similarities in the population under study. In the literature, a number of factors that influence the use of family planning methods were identified. The disadvantages of both artificial and natural family planning methods have been explored. The cultural and personal characteristics of both men and women have been studied to understand why and which type of contraceptive is utilised and not utilised. The third main area of research examined was the economic context, in which the woman finds herself, which tends to have an effect on all these above mentioned factors.

Disadvantages of Artificial Methods of Family Planning

Generally, in health surveys conducted between 1991 and 1992 in Indonesia, Zambia, Tanzania and Namibia, it was demonstrated that the side effects of various family planning methods were the major reason that married women did not wish to continue using family planning methods. Although these results did not indicate the specific methods that the women were referring to, the findings reveal why women would not continue using family planning methods.

Research findings have identified a number of disadvantages of artificial birth control methods especially the contraceptive pill and intra-uterine devices (IUDs). Some of the side effects reported when using contraceptive pills are, deep vein thrombosis, high blood pressure and weight gain (Kene & Porter, 1984). Findings of
research which was conducted by Wasserleit (1989) in rural Bangladesh demonstrate that overall, 22% of the 2,929 women interviewed, who were using IUDs as the method of family planning, were four times more prone to reproductive tract infections than were non-users. In the same study, out of the 472 women with symptoms of reproductive tract infections, 68% had clinical or laboratory evidence of infection. These results indicate that a large number of women, which is more than two thirds of women in this one study, developed reproductive tract infections. These findings were supported by the results from another large study, in which 41% of the 4,500 women who were interviewed had discontinued use of IUDs due to infection they had experienced (Lesetedi et al., 1989). Raikes (1990) study conducted in Kissi district, Kenya indicated that women were unable to work because of the pain and discomfort experienced, including developing pelvic infection when using IUDs.

Some of the factors predisposing women to developing pelvic inflammatory diseases are the exposure to bacteria, either from unhygienic practices of health workers, or through the practices of women themselves. In two separate studies, one conducted in Kenya and one in Bangladesh, findings demonstrated that family planning providers did not wash their hands before performing a pelvic examination or inserting IUDs (UNICEF, 1995). In the study conducted in Nairobi Kenya, fewer than half of the family planning providers washed their hands before performing a pelvic examination. In another observation study conducted in Bangladesh, fewer than one half (only nine out of 19) health workers washed their hands before inserting an IUD. In a study conducted among Aboriginal women in Northern Territory, Australia, the women did not use IUDs, because they had previously experienced abdominal pain and bleeding,
when using the methods (Daylight & Johnstone, 1986). The heavy periods would lead to anaemia thereby worsening the situation.

In Zambia while no published research has been conducted on women’s menstrual practices, the risk of pelvic infection is more likely to occur. From the author’s experience, some women use pieces of cloth to catch the menstrual flow because they cannot afford to buy sanitary pads. Pelvic inflammatory diseases eventually can lead to blockage of the fallopian tubes and then infertility. In some cases, the woman died from septicaemia because she did not receive prompt treatment. The delay in treatment happens in many developing countries like Zambia, because the woman has to travel for long distances to seek medical attention. While no research has been conducted into the practices in Zambia, it can be assumed that research findings from the other countries with similar living conditions would be relevant.

In spite of the serious side effects experienced by women who use the contraceptive pill and IUD, studies have shown that these methods are more popular compared to natural family planning methods (Brown, Coeytaux, et al, 1987; GRZ, Ministry of Health, 1995; Lesetedi et al 1989; Samisoni, Samisoni & Admin, 1980). However, the question which needs to be asked is, are these methods actually more popular, or are these methods simply more apt to be recommended by health personnel. A study conducted in Lusaka demonstrated that, out of the 478 women interviewed, 360 women had received the contraceptive pill on their first visit (75% of the women attending the clinic) and 21 women, or 4% of the women attending the clinic had received IUDs, a total of 79%. The contraceptive pill and IUDs were more popular among
the married women interviewed in the health surveys conducted in Zambia, Namibia, Indonesia and Tanzania between 1991 and 1992.

These research findings need to be closely analysed and compared in the context of Zambia. In a Lusaka study which was conducted to discover the characteristics of contraceptive acceptors, none of the 478 clients who were asked what contraceptive method they had received on their first visit to the clinic, used natural family planning methods (Brown et al, 1987). Almost a decade later, the Zambian government studied the utilisation of family planning methods for five provinces in the country. The focus of their research was to identify what factors influenced the low utilisation of family planning. The findings revealed that natural family planning methods were the least used with the contraceptive pill and IUDs as more popularly utilised methods (GRZ, Ministry of Health, 1995).

These results of the studies contradict those of another study conducted in Zambia. According to a report given by Reverend Cremns (1990), during an international seminar on natural family planning, it was indicated that when women were followed over a period of five years, findings demonstrated that 4,000 women were using natural family planning methods in Zambia. This highlights the difficulty of conducting research on this topic, due to few baseline studies, lack of statistics which could be compared overtime and due to conflicting findings (Zarkovich, 1993)

**Disadvantages of natural family planning methods**

The periodic abstinence of sexual activity required in natural family planning methods could cause frustration and resentment in the couple, especially in the husband.
This especially could be true with the young couples who tend to have a high coital frequency. 76% of young couples reported having sexual intercourse at least once or more a week (Laing, 1984). In order for natural family planning to be effective, it requires highly motivated couples (WHO, 1988; Rosenfield & Mohamaud, 1990). It was difficult to use natural family planning methods in developing countries because of persistent ill health among the women. This ill health meant that it became difficult to get correct basal body temperature readings and cervical mucus readings (Kleimen, 1983; Rosenfield & Mahmaud, 1990). The successful utilisation of natural family planning methods also depends on the openness in the relationship between man and woman. The openness in the relationship between man and woman depends on the cultural influence of a given community which is exhibited in the roles of male and female.

**Cultural Factors influencing women's use of natural family planning methods**

a. **Male and Female relationship**

One of the strongest cultural influences is the type of relationship found between husband and wife. From the author’s professional experience, African couples do not commonly talk about sex between themselves. The woman would discuss sex issues with friends, a grandmother and auntie, while the man would also discuss with his friends, grandfather and uncle. In this case, the couple has little opportunity of using natural family planning methods which require communication among the woman and the man. The scant research that has been conducted into the influence of male and female relationship in the use of family planning supports the above mentioned
statements. The studies conducted by Klaus, Labbok, & Barker (1988), Kleimen (1983), Rosenfield & Mohammaud (1990) demonstrated that one of the reasons for low utilisation of natural family planning methods was that it was not common among couples to discuss sex.

In most African communities, decision making depends on the man. The man assumes such responsibility because of certain roles he plays in society. For example, in Zambia the paying of a bride price (Lobola) by the man in marriage gives him more power over the woman. The men were quoted as saying that, the "duty of the woman in marriage was to either be pregnant or to breast feed" (GRZ Ministry of Health, 1995, p. 11). These results were also supported by the study conducted by Ezeh (1993), who demonstrated that the man's power over the woman was stronger in the case where a bride price was paid by the man in marriage.

In three separate studies conducted on the influence of spouses on the utilisation of family planning methods, in Indonesia, Botswana, and Ghana, focus group discussions were held among men and women. In these studies, it was strongly felt by both men and women that decision making in family planning was the responsibility of the man (Ezeh, 1993; Kgositintsi & Mugabe, 1994; Mohamad, Baughman, & Utomo, 1988). Research conducted in Botswana studied the opinion of men only. Their findings demonstrated that 45% of the men believed that in a relationship, the man should have the major say in deciding whether or not to practice family planning. Only 12% of the men believed that the woman should decide and 28% said both man and woman need to discuss the matter. In this study conducted by Ezeh (1993), among 1,010 matched husband wife pairs included in the survey indicated that male influence
covered almost all areas of family relations, from food consumption to reproductive behaviour.

It was so strong that even culture to some extent did not influence the man’s final decision.

b. Influence of religion on use of family planning methods

The other cultural factor considered was religion. Religion was seen as having an influence on the utilisation of natural family planning methods (Iyun & Oke 1993; Nofziger, 1988; WHO, 1988). The Roman Catholic Church is the most strong advocate of the utilisation of natural family planning. For example, in a study conducted in the Philippines, Roman Catholic doctors could not provide artificial methods of contraception to their clients due to their religious beliefs (Laing, 1984). In the same study, it was revealed that when women, who were Roman Catholic, were asked which methods their church encouraged them to follow, they did not know.

In another study conducted in Zimbabwe by Mbizvo and Ademchak (1991), it was revealed that the Roman Catholic Church was strongly opposed to members of the congregation using contraceptives. They were not able to actually prevent those who wanted to use them, doing so in this case, probably other factors became more influential than religion. Such factors could be, as discussed earlier, the influence of the husband and even other relatives on the practices of the women, although not elaborated in this study.
The personal characteristics of women and the information received from the health personnel also needed to be studied as they would influence the woman’s behaviour.

**Influence of personal characteristics on use of family planning methods**

To some extent personal characteristics of the women themselves have influence on the utilisation of family planning methods. The personal characteristics reviewed were, age, education, marital status, and occupation. According to the studies done in Botswana, Nigeria, and Zambia, results showed that older women used contraceptive methods more than younger women did. Lesetedi, et al. (1989) in their survey in Botswana, found that the young and older women were less likely to use family planning services compared to those in middle child bearing years.

Research studies have revealed some of the possible influences on young women’s knowledge and actual use of family planning methods. To some extent, the government laws restricted availability of family planning methods to young women. In two studies conducted in Kenya and Zambia, young girls were not allowed to openly practice family planning (GRZ, Ministry of Health, 1995; Raikes, 1990). In the Zambian study, the young women could receive family planning methods, if they obtained written consent from their parents or guardians. In a study conducted in western Nigeria, it was found that of the 48 girls interviewed concerning teenage pregnancy, 60.4% included in the study were not using contraceptives because they had not heard about contraceptives (Alade, 1989).
Knowledge, or lack of knowledge about contraceptives was also pointed out by Raikes (1990) in research conducted in Kenya, where findings showed that older women had more knowledge about contraceptive methods than did younger women. In a study conducted in Zambia which involved five provinces, it was found that the majority of girls were not receiving any information on contraception (GRZ, Ministry of Health, 1995). Knowledge of the contraceptive methods was crucial to the young women if they had to use the methods. The research conducted in North America by Davis (1989) on pregnancy in adolescents, demonstrated that teenage girls avoided going to the same health practitioners, where older women went. The young girls feared that the older women would learn that they were sexually active, and this was not acceptable in their society. This would also apply within the Zambian context.

**Influence of education level of women on the use of family planning**

Education of girls has been shown to be one of the most basic determinants of fertility decline (UNICEF). It has been argued that educated women use family planning methods more than do less educated women, because they have more opportunities to learn about the methods (Lesetedi et al., 1989; UNICEF, 1994). For example, a survey conducted in Botswana, showed that the family planning prevalence rate increased from 18% among women with no education, to over 40% among women who had some secondary or higher education. Educated women have opportunities to meet other people and even to read different types of literature, to learn about family planning methods.
In a study by Ezeh (1993) conducted in Ghana, findings demonstrated that 60% of the husbands who were educated, approved of the use of family planning methods, while only 40% of the less educated husbands did. In the same study, it was also indicated that couples where both husband and wife were educated, the couple was more likely to approve of family planning, than were the less educated couples. The idea of educated couples being more inclined to use family planning methods was further described and analysed by UNICEF (1994). It was observed that educated women were more likely to discuss and decide with their partners how many children to have and when. The average number of children born to women with no secondary education was approximately seven; while for women whose education had progressed to secondary level the average was approximately three.

Influence of marital status on utilisation of family planning methods

When it came to the influence of marital status, those who were married were using family planning services more than were those who were not married (Lesetedi et al., 1989). Probably this occurred because the men who were responsible in decision making in family planning issues, as discussed earlier, allowed their wives to use contraceptives, in order to limit their family size (Andrew, 1994).

Influence of occupation on use of family planning methods

Occupation of the women was the last factor which was considered in this research study. However, few studies have been conducted in Africa and in Zambia on this topic. The author assumed that in most cases, those women who were in formal
employment were expected to have some degree of education, as such, the same conclusions could be made as under the discussion on influence of education, to family planning. A study conducted in Nigeria on family planning among women who were marketers, revealed that the majority of these women were using IUDs (Iyun & Oke, 1993). The women said this practice was more convenient for them, than was the taking of contraceptive pills which required swallowing. Women, therefore who were in an occupation, were practicing family planning methods.

**Influence of health providers on use of family planning methods**

The health providers also had an influence on the utilisation or non utilisation of family planning methods. The type of information the women received about contraception had an effect on the utilisation rates. Findings of research conducted in Indonesia indicated that the women generally received insufficient information to make a well founded choice. In this study, 85% of the women who had not received the contraceptive of their choice, had dropped out of the programme within one year of those who were using the method of their choice only 25% had stopped using birth control methods (Bruce & Jain, 1995).

Lack of privacy and negative attitudes of the health workers also contributed to discontinuation of family planning services by the women. In the study conducted in Kisii, women who came for family planning had to be examined in the presence of other women because of lack of adequate room (Raikes, 1990). This probably could be one of the reasons why women would not come to the family planning clinic in the near future, because of lack of privacy. In the same study, it was observed that there was deep
hostility and antagonism between the staff and the clients. In another study conducted by Daylight and Johnstone (1986) in Australia, among Aboriginal women seeking to understand their practices of family planning, it was revealed that the women were not examined by the doctor, because the women were poor and sometimes they were dirty. The doctors did not respect the women and did not consider that the women could or did want to learn. Those who examined the women did not explain things to them or speak to them about what was to happen in the medical visit.

Restrictions in the practice of health care professionals in offering family planning methods also have some influence on utilisation of these methods. There is a gap between the stated government policies concerning family planning and the reality of the health care practices within the countries. Health care providers working in Zambia, Botswana and Zimbabwe were directed to offer all methods of family planning, but they actually only offered certain methods of their own preference, mostly contraceptive pills and IUDs (GRZ, Ministry of Health, 1995a; Kgosidintsi & Mugabe, 1994; Lesetedi et al. 1989). The contraceptive pill and IUDs were viewed by the health providers as being most effective and easy to use. In Zambia, only women with consent forms from husbands or from parents in the case of adolescent females were allowed to receive family planning methods (Brown, et al, 1987; GRZ Ministry of Health, 1995a, Kgosidintsi & Mugabe, 1994;). Women were returned by the health providers if their menses had not started (Raikes, 1990). Two things could happen in such a situation. The women would not come back to the family planning clinic because they had become pregnant; while others would not come back because of the previous negative
attitude which discouraged them. Either way the health clinics were not offering appropriate services to the women.

The lack of trained personnel

The last restriction to the full utilisation of natural family planning methods of analysed was the reality that only health providers specially trained in natural family planning could teach it (Botswana Ministry of Health, 1987; GRZ, Ministry of Health, 1995a). In most cases, there was only one such officer in a health institution (GRZ, Ministry of Health, 1995a). These studies showed that the practice of natural family planning methods was greatly hindered in terms of availability. Probably the providers did not offer natural family planning methods because the majority of them were not trained in the field.

Consistently, these studies have shown the influence of culture on utilization of family planning. In the case of the husband and parents having to give permission for either the woman or the adolescent female to use family planning methods, the status of the woman, either as wife or as daughter, restricts her accessibility of family planning methods. Her actions overall were restricted by the laws of her country and the environment in which she lived.

Influence of economy on the use of family planning methods

The economic status in which the woman finds herself has also strong effect on the woman’s behaviour and choice of option of family planning methods. Economic status affects the individual’s personal ability to be educated and it also affects what
type of health care structure is implemented in the country. Zambia’s economy has been
deteriorating since 1975. This situation has worsened with the drought which has
devastated the country for the past four years ago. This physical geographic problem
has intensified the poor economic situation in the country. For example, the Zambian
Gross National Product (GNP), per capita (US $ 290) is considerably lower by half of
that of the Zimbabwe GNP per capita which is US 5570 (Grant, 1994).

Given the incidence of poverty in the country, 69% of the national
population is estimated to be ‘very poor’ according to the recent World
and the most severely poor are found in the most isolated areas. Western,
where Mongu district is found, North- Western, Luapula, Northern and
Eastern provinces have the most severe problems (GRZ Ministry of
Health, 1995b).

The low economic situation of the country has contributed to the situation that
is now commonly known as ‘brain drain’. This is a situation where by people go to look
for better employment opportunities outside their country of origin. This problem has
led to the event whereby, even if the government is training enough doctors, nurses and
other paramedical staff to support the population, the country does not benefit, because
these educated people leave upon completion of studies. These health personnel have
gone to neighbouring countries like Botswana, Namibia, and Zimbabwe. In view of
such a situation, the government is left with no choice, but to continue using the
available human resources in the communities. Such type of health providers are the
Community Health Workers, Traditional Birth Attendants, Traditional Healers, and
family members including others whose work is related to health. The practice of these health workers is limited to being permitted to administer non prescriptive methods of contraceptives. These methods of contraception are condoms, tablets, jellies, foam and natural family planning methods.

According to the study conducted by GRZ, Ministry of Health (1995a) the Traditional Birth Attendants (TBAs), both trained and untrained, were offering valuable reproductive health care to women. This was understood as especially appropriate in offering ante-natal care, delivery and post-natal care including traditional family planning methods. The traditional family planning methods used are prolonged breast feeding with abstinence from sexual activities and withdrawal from intercourse method. These traditional methods of family planning were also practised by the Aboriginal women (Daylight & Johnstone, 1986). Given their acceptance as respected members of the community, TBAs would be very important health workers in the Zambian National Family Planning Programme. In the same study, Traditional Healers were found to be addressing a wide range of reproductive health concerns including tradition family planning methods. The Traditional Healers like TBAs were widely respected and their advice was actively sought by many Zambians at all social levels.

The offering of non prescriptive methods of family planning is done through the programme of community based distribution of family planning. Community based distribution of contraceptives has proven itself worldwide to be an effective means of disseminating family planning information and services. An example of the benefit of this service has been realised in Zimbabwe, where the contraceptive rate for adult women is 43%, one of the highest in Africa. This high rate has been attributed to the
government’s system of community based distribution of birth control methods (Andrew, 1994).

Unfortunately, at present, all of Zambia’s community based distribution programmes of family planning are completely external donor dependent. Being external donor dependent, means that these are not sustainable programmes, therefore donors will have to pull out after a specified period of time. Given the economic crises of the country, the Zambian government would not be able to continue these health programmes. There is also a geographic restriction of the programmes which are found in only three areas, Copperbelt, Luapula, and Eastern provinces. The remaining five provinces are not even covered by this programme. This means that not even 50% of the country is being served by the programme.

Summary

From this literature review it is obvious that the issue of family planning in developing countries is complex. The women’s use of family planning methods is influenced by the personal characteristics and the environment in which they live. The woman is exposed to a number of potential health hazards from the use of artificial methods of contraception and certain inconveniences from the use of natural family planning methods. Women are at risk due to the close births of their children and due to the lack of resources required to support them. Without adequate use of family planning methods, infant and maternal mortality rates will remain high and women and children will continue to suffer.
Most of these studies were conducted in countries other than Zambia. However, the results are of importance to use as baseline information in conducting the current study, because of the similar context to Zambia. The studies tend to focus on the whole issue of family planning methods and did not address specifically the women’s perspectives. In spite of a stated commitment by the Zambian government to encourage method mix of family planning services, there is low utilisation of natural family planning methods compared to the utilisation of the contraceptive pill and IUDs.

Little research has been conducted in Zambia to find out the factors which affect a woman’s choice of natural family planning methods. This research study was conducted in Mongu Western Province which has a high maternal mortality rate compared to that of the national Zambian rate. Western Province is one of the provinces with the highest poverty rates in the country. It is also not covered by the community based distribution of family planning methods which is seen as an appropriate approach to increasing contraceptive prevalence rates.

The Neuman’s Systems Model was used as framework to guide this research study. The Model encompasses the broad inter-relationship between the woman, her family, community and the health professionals. It is this framework which will be described in the next chapter.
CHAPTER THREE

Conceptual framework

Betty Neuman's Systems Model:

An adapted Betty Neuman's Systems Model was used to guide this research study (Neuman, 1989) as this model is the most appropriate for a community nursing research study. The development of this model began in the 1970's and has been refined over most of the last 20 years, through its use in nursing practice, nursing education, nursing administration and nursing research. The first publication of the model was in 1972 (Neuman, 1972) and the second publication was in 1989 (Neuman 1989).

The model is based on the systems theory as conceptualised by Bertallanfy 1968). It has also incorporated ideas from other theories. The major contributing concepts to this systems model: adapting concepts of prevention (Caplan, 1964); conceptualisation of viewing the as person a whole being (Chardin, 1955); application of systems theory as a theoretical framework to incorporate concepts of adaptation by the individual within the environment (Patt, 1975); Gestalt psychology in which the interaction of people and their environment are described (Eddison, 1970); and ideas about stress and bodily responses to stress (Selye, 1950) have also had strong influences on the development of the model.

"The focus of this model is to examine the parts of the system and their relationships at a given time" (Fawcett, 1989 p. 14). Fawcett further stated that the major features of a systems model are the system and its environment. For the purpose of this study, the system is the woman in her child bearing age whose environment is
the family and the community. "People are viewed in the context of a larger
macrostructure of system. And that the individual is seen as being in continuous
interaction with the environment or community" (McMurray, 1993, p. 56)

**Concepts**

There are four main concepts in all nursing models. These concepts are the core
concepts of any nursing model. These concepts are person, environment, health and
nursing. The inter-relationships of these core concepts and the emphasis on various
aspects of these concepts is what distinguishes one model from another. The concepts
have been defined by Neuman (1989) as follows:

**Client or person:** The person or client in the Neuman Systems Model
is a composite of the relationship between physiologic, psychologic, socio-cultural,
developmental and spiritual variables.

**Environment:** The environment is broadly defined as all internal
and external factors or influences surrounding the identified client or client system. The client may
influence or be influenced by environmental factors either positively or negatively at any given point in
time.

**Health:** Health or wellness is seen as a condition in which all parts or subparts are in harmony with the whole
individual. Wellness exists when the parts of the client system interact in harmony, system needs are
met. Illness, disharmony among the parts of the client systems considered illness in varying
degrees reflecting unmet needs.

**Nursing:** The goal of nursing according to Neuman is to facilitate for the client optimal wellness through
retention, attainment or maintenance of client system stability.
Figure 2. Schematic illustration of the Neuman model to an aggregate community client on influences on women in choice of family planning methods adapted from Beddone p367 in Neuman Systems Model (1989)
In this research study, the population of women of child bearing age (15-49) were viewed an aggregate client, following the work of Beddone (1989), who applied the Neuman Systems Model to assessing the community as client. Beddone viewed the community/client as one whole system, with its various inter related, sub systems (Figure 2).

She has described three subsystems. The extrasystem defines community/client, which reflects the physiological, psychological, developmental, socio-cultural, and spiritual characteristics of the Neuman model. The aggregate intersystem is concerned with the immediate environment of the community/client, who are the close family members. The extrasystem includes areas of influence on the community/client, for example the system of government, laws, religion and customs.

There is continuous interaction between the variables of the intrasystem with the intersystem and extrasystem. This continuous interaction influences the intrasystem and facilitates or inhibits the overall health of the community/client.

Women in their child bearing age (15-49 years), who have the potential of using family planning services are conceptualised as community aggregate client, in this research study. In Mongu urban district, there is low utilisation of natural family planning methods among these women. This has a negative effect on the maternal and infant mortality rates. When the births of children are not spaced, the mother has too frequent pregnancies, which in a developing country like Zambia leads to either nutritional anaemia or anaemia from possible bleeding during delivery. The mother does not find enough time to look after the children. She has too many children with too
little food and, as stated in the literature review, Mongu urban district in western province is one of the areas with high poverty margins.

The intrasystem was seen as the internal environment of the women. In this case, the personal characteristics of the population of women were conceptualised as, age to refer to the physiological variables of the women. The socio-cultural variables were defined as the occupation of the women, and the psychological and developmental variables were viewed as the marital and educational status of the women.

The intersystem is the system within the boundaries of the women’s immediate environment. This was conceptualised as the women’s relationships with their family network. In this study, the emphasis was on the women’s relationship with their husband or partner. This relationship would either influence the women to use or not use natural family planning methods. For example as reviewed from the literature, the women were not using natural family planning methods often because the husbands were not willing. The husbands or partners resisted the periodic abstinence from sexual activities required in practicing natural family planning methods effectively.

The extrasystems are all those influences which occur outside the women’s immediate environment. These influences included the practices of the health personnel which have been restricted by the laws of the country. As demonstrated from the literature review, health personnel were offering family planning methods to only those women who had written consents from either husbands or parents in case of adolescents, as was required by law. The health personnel encouraged women to use contraceptive pills and IUDs. The other factors were the customs and beliefs of the community in which the women lived. For example, from literature review young girls
used family planning services least because it was regarded by society as not acceptable 
behaviour. Religion was an influencing factor in using natural family planning methods 
with the Roman Catholic Church seen as the strongest advocates.

This is a dynamic model which accommodates and accounts for change. All of 
these influences which are constantly being generated from the various subsystems 
need to be considered as to their possible effects on the aggregate community/client of 
women in their child bearing years. The community/client responds and changes the 
effect of these influences based on her contextual environment and demographic 
characteristics and personal experience. These influences either inhibit or facilitate the 
women in their utilisation or non utilisation of natural family planning methods. An 
amended Neuman Model (Figure 2) has been used as a framework to guide the research 
from conception to completion, to formulate the questions, the data collection 
procedure and the analysis of the findings of the study.
CHAPTER FOUR

Methodology

Design

This study used a descriptive research design. The purpose of a descriptive research design is to obtain information about the current status of a phenomenon of interest about which little is known. In this study, the researcher explored the factors that influence women of child bearing age to use or not use natural family planning methods, as this topic has not been studied in Zambia. The most appropriate instruments for data collection were the personal interview and focus group discussions. The interview was used because of the mixed education level of the women in the study and the information which was to be collected was of a personal nature. To collect more in-depth information on the topic, focus group discussions were included as an integral part of the research.

Setting and Sample

The study was based in Mongu urban district, the provincial administrative headquarters of Western province in Zambia (Figure 1). The whole district is served by one general hospital and 25 health centres. All these health institutions offer free family planning services to the members of the community. The urban district is served by one general hospital and four health centres. These four health centres are divided into catchment areas, each comprising 12.5 square kilometres radius. Each catchment area is composed of four different population densities. These population densities are described as, squatter, low, medium, and high densities.
Mulambwa catchment area has a population of 17,975 thousand with 3,955 of those being women in their child bearing age. New acceptors of family planning methods were, 95 women for oral contraceptives and 75 women who chose to use condoms. There were no records concerning the use of natural family planning methods. Lewanika catchment area had a population of 8,000 thousand with 1,760 women in their child bearing age. New acceptors for family planning were as follows: I71 women who chose oral contraceptives; ten women chose natural family planning methods: 16 women used foam tablets; six chose IUDs; and ten women chose to use condoms.

Liyoyelo catchment area had a population of 10,220 thousand with 2,248 women in their child bearing age. New acceptors for family planning were I76 women who were using oral contraceptives. There were no records for other family planning methods. Prisons catchment area had a population of 14,308 thousand with 3,148 women in their child bearing age. There were 80 women who chose to use oral contraceptives, with no records for other methods of birth control available (Ministry of Health, Mongu District Annual Report, I 994). There are no lists of the household populations within any of these population densities.

Given this research context, in which no household populations were known, the most appropriate sampling approach for the research study was the convenience method. The sample population were women in their reproductive age, between 15-49 years old. 120 women were included in the study, with 100 women personally interviewed by the researcher and the two research assistants. 20 women were chosen from each catchment area. Six women were chosen from each of the four population
densities to a total of 96 and the remaining four were chosen from each of the catchment areas in the different population densities. Twenty women took part in focus group discussions.

Instruments

Interview

An interview schedule, which addressed the following questions (Appendix C) was developed for data collection. The first six questions focused on the influence of personal characteristics on the choice and utilisation or non utilisation of natural family planning methods by Zambian women. Questions seven to nine focused on the influence of culture on the use or non use of natural family planning methods. Questions 10-11 addressed the influence that health personnel exerted on the choice and utilisation or non utilisation of natural family planning methods.

Focus group discussions

Two focus groups were deemed sufficient because on completion of the second group, no new information was surfacing in the discussions. Ten women participated in each focus group. The women were those who attended maternal child health care clinics on the particular day of the focus group. They came for different health services ranging from family planning, antenatal, post-natal care, child health care and the treatment of minor ailments. This was possible because these health centres offered, what is known in Zambia as, “supermarket” services. Supermarket means the offering of health services based on individual requirements, therefore the person can attend a
clinic at anytime and expect to be treated. People do not have to visit or attend a special clinic. Four open-ended questions were designed to promote discussion in the focus groups (Appendix D). These questions were derived from the categories of the main research questions. These questions were designed to augment the information obtained from personal interviews.

Validity and Reliability

The researcher developed the research questions after an in-depth literature review of related studies to the topic under study. The questions were then given to people who had knowledge of question writing and to people from Africa who understood the context of the study situation. All these experts were either teaching or studying at Edith Cowan University. These included three lecturers from the School of Nursing, who were midwives and two doctoral students from Africa. These people with different expertise and experiences were asked to make suggestions as to the questions format and on the organisation of the questions. Further developments and modifications of the tools were made based on these people’s comments, with the assistance of the research consultant from Edith Cowan University.

The study, to be completed within one year of the academic calendar, was carefully planned and a time plan was drawn out to guide the carrying out of the study as seen (Appendix B). A budget was designed to meet the expenses as required (Appendix A). Permission to carry out the study was sought from the Mongu urban district management team (Appendix F) and permission was granted to proceed with the study (Appendix G).
Pilot Test

A pilot test was conducted in Mongu district before the main data collection commenced, to determine whether there were any problems in the data collection tools, the participants could understand what was being asked of them, and if the tools would be considered to be appropriate for the research. Modifications were made to two of the questions in the interview schedule. The methods of data collection proved to be satisfactory to achieve the goals of the research.

Procedure

Before starting field work, the two research assistants were given some training by the researcher, on how to conduct interviews and how to record the answers. These assistants were local midwives who had experience in interviewing and who had already been involved in research surveys being conducted in the district from time to time. The data collection tools were then translated into Lozi, the main vernacular language spoken in Mongu urban district as well as the whole Western province. These questions were then translated back into English to check whether or not the meaning was altered. Two staff members from the Mongu district management team and one from provincial level were used to do the translation. The background and purpose of the study was briefly outlined to the participants verbally and by using the letter of introduction (Appendix E) before data collection, at the homes of each of the participants. Each interviewer had to interview at least two women in each population density area. The responses were recorded directly onto the individual interview schedules.
After the personal interviews were completed, two focus group discussions were conducted using the process as outlined in the previous paragraphs. Field notes were written and tape recordings the discussions were carried out. At the end of each day, the researcher did some transcribing from the tape recorded discussions and checked with her field notes made during the discussions. The researcher made field notes based on her observations and feelings during the data collection procedure, to enrich the data collected by interview format.

**Observations and feelings during data collection**

On the first day of the personal interview, the researcher was anxious that the people in the community might not want to participate in the study. This fear was unfounded, as was evident by the willingness of the women to participate in the study. Those who could not be included were politely told that it was only possible to interview a certain number due to time constraints. After the first day, the research student no longer feared rejection by the women. To make the participants and researchers relax, some amount of humour was shared with the women. The researchers had to act as researchers throughout data collection, even though they were also health workers. This was done to avoid biases being introduced in the study. Probably, knowing that we were health workers, the women asked questions on family planning. The questions were not answered as such. The women were told that time allocated was for the researchers to get information from the women on their views concerning family planning services being offered in the district. They were referred to go to the family planning clinic for further counselling if it seemed appropriate.
The length of time for the personal interviews ranged from 15-45 minutes depending on how conversant the women were. Some of the women needed more time to express their thoughts than did others. From personal observation, some participants were a bit shy. This was more commonly seen among the younger women compared to the older women. Some participants asked why we did not require them to give their names to the researchers. It was explained to them, that the information given was confidential and personal, so names were not required. In summary, the researcher attempted to be prepared psychologically as well as theoretically and practically, when conducting the field research. What one plans theoretically might not be possible practically. As such, one has to be prepared for adjustments.

Ethical Considerations

To maintain confidentiality throughout the research, the respondents’ names did not appear on the interview schedules, only the respondents’ identification numbers. Approval and permission to carry out the study was obtained from the Ethics Committee of Edith Cowan University and from the Mongu district health management team where the study was conducted. Participation in the study remained on voluntary basis and women were given the option to withdraw from the study at any time. Permission to participate in the study was obtained verbally at the women’s homes using the letter of introduction (Appendix D).

The researcher conducted the study in the community where she was not a stranger. She had lived in this community since 1985 and speaks and writes Lozi fluently. She had interacted with the community through the delivery of health services,
before conducting this current research study. The women were advised that they would receive the results of the research when available. To get the results of the study, the women were given the contact address of one of the research assistants in Zambia. Only the researcher would have access to the data and all the interview schedules would be destroyed, including the tape recorded information will be destroyed upon the completion of the research.

**Data analysis**

Because this is a descriptive research study aimed at revealing influences concerning the utilisation of family planning methods, simple hand analysis of data was used. The researcher constructed a tally sheet for counting data in different categories. The tally sheet was used to organise the raw data into frequencies to enhance comparisons. The closed ended questions were coded, while the open ended questions were grouped into categories representing the actual content of the data as it appeared. These categories were then arranged in frequency distributions using percentages. Data were further presented in cross tabulations to show the relationships of the variables. In some cases data were presented in graphs.
CHAPTER FIVE

Findings

Presentation of findings

In this chapter, the major findings of the research will be presented in table, graph and descriptive literary form.

100 women were interviewed in their homes and 20 women participated in two focus group discussions held at the local health centres. Results of both are included here.

Table 1

Percent distribution of all women by current marital status, according to age.

<table>
<thead>
<tr>
<th>Age*</th>
<th>Never married</th>
<th>Married</th>
<th>Divorced</th>
<th>Widowed</th>
<th>Total women</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>77</td>
<td>23</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>20-24</td>
<td>55</td>
<td>36</td>
<td>9</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>25-29</td>
<td>16</td>
<td>79</td>
<td>5</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>30-34</td>
<td>17</td>
<td>66</td>
<td>0</td>
<td>17</td>
<td>100</td>
</tr>
<tr>
<td>35-39</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>40-44</td>
<td>0</td>
<td>80</td>
<td>20</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>45-49</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>don’t know</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>43</td>
<td>50</td>
<td>5</td>
<td>2</td>
<td>100</td>
</tr>
</tbody>
</table>
The results show that the majority of young women were not married. By the age of 25 on, most women became married. It is also clear that as women got older, they went into marriage, even if they either became divorced or widowed afterwards. ¹

Table 2

Percent distribution of highest level of education attained according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Never attended school</th>
<th>Primary</th>
<th>Secondary</th>
<th>Tertiary</th>
<th>Total</th>
<th>Number of women</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>0</td>
<td>38</td>
<td>62</td>
<td>0</td>
<td>100</td>
<td>26</td>
</tr>
<tr>
<td>20-24</td>
<td>6</td>
<td>52</td>
<td>36</td>
<td>6</td>
<td>100</td>
<td>33</td>
</tr>
<tr>
<td>25-29</td>
<td>0</td>
<td>58</td>
<td>37</td>
<td>5</td>
<td>100</td>
<td>19</td>
</tr>
<tr>
<td>30-34</td>
<td>0</td>
<td>25</td>
<td>50</td>
<td>25</td>
<td>100</td>
<td>12</td>
</tr>
<tr>
<td>35-39</td>
<td>0</td>
<td>67</td>
<td>0</td>
<td>33</td>
<td>100</td>
<td>3</td>
</tr>
<tr>
<td>40-44</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>40</td>
<td>100</td>
<td>5</td>
</tr>
<tr>
<td>45-49</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>don’t know</td>
<td>0</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>45</td>
<td>43</td>
<td>9</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The majority of women had some form of education. 45% of women had primary level of education and 43% of women had secondary level of education.

¹ Among the women interviewed only one did not know her age but nevertheless she was included in the analysis of data.
The majority of women were housewives (39%). The next category were those who were doing nothing specifically at home (29%).

The relationship between attendance of women at family planning clinics and the marital status of the women according to age were then analysed. None of the women in the age group 15-19 attended family planning clinic. In the age groups of 20-29, the majority of women did not attend the clinic. By age 30-34, 50% the women

<table>
<thead>
<tr>
<th>Age</th>
<th>Other* Attending School</th>
<th>Employed</th>
<th>Marketeer</th>
<th>Housewife</th>
<th>Total</th>
<th>No. of Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>37</td>
<td>37</td>
<td>0</td>
<td>11</td>
<td>19</td>
<td>100</td>
</tr>
<tr>
<td>20-24</td>
<td>45.5</td>
<td>3</td>
<td>3</td>
<td>21.2</td>
<td>27.3</td>
<td>100</td>
</tr>
<tr>
<td>25-29</td>
<td>16</td>
<td>0</td>
<td>5</td>
<td>16</td>
<td>63</td>
<td>100</td>
</tr>
<tr>
<td>30-34</td>
<td>17</td>
<td>0</td>
<td>25</td>
<td>8</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>35-39</td>
<td>0</td>
<td>0</td>
<td>33</td>
<td>0</td>
<td>67</td>
<td>100</td>
</tr>
<tr>
<td>40-44</td>
<td>0</td>
<td>0</td>
<td>40</td>
<td>0</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>45-49</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>don’t know</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>10</td>
<td>8</td>
<td>14</td>
<td>39</td>
<td>100</td>
</tr>
</tbody>
</table>

*Other category included those who were just at home doing nothing specifically.
interviewed had attended family planning clinics, including those who were between the ages of 35-39. In conclusion, these findings show that women who were not married did not attend family planning clinic. The women in the remaining age categories, over 40 years, all had been married at one time. Those who were married up to age 24 did not attend family planning clinic. The majority of women, 53% aged 30-34 years, 62.5% of women 35-39 years old, 67% of women aged 40-44 had attended family planning clinics. Only one woman in age group 45-49 had attended family planning clinic, while the one who did not know her age, did not attend the clinic. These results show that attendance of women at family planning clinics increase with age and is related positively with marital status.

**Relationship between education and attendance of family clinics**

Findings showed that attendance of women at family planning clinics increased with women’s higher levels of education and attendance was highest with those who had attained tertiary education. Among those women who had never attended school, there were none who utilised the family planning clinic services. There was a direct relationship between education and attendance of family planning clinic by the women, the more education, the greater likelihood of attending a clinic.

**Relationship of occupation and attendance at family planning clinics**

One hundred percent of the women interviewed, who were attending school did not attend family planning clinics. The majority of those women who were employed,
62.5% had attended family planning clinic, with decreasing figures for the women with the occupation of housewives 38.5% while only 21% of the marketeers, had attended.

Influence of religion on utilisation of natural family planning methods

Results demonstrated that 98% of the women belonged to some religious denomination with only 2% who did not. Majority of women 46% were New Apostolic Church, 20.4% others who included, New Apostolic Faith, Jehovah’s Witnesses, Evangelical Church. Then United Church of Zambia were 17.3%, Roman Catholic 14.3% and Seventh Day Adventist 8%.

The majority 81% said their church did not encourage them to use a specific type of family planning method, while 10% said yes their church encouraged them to use a method. Out of the ten women who said their church preferred a method, 6 women (60%) said natural family planning methods, and 4 women (40%) said artificial methods.

From these results religion had little influence on the utilisation of natural family planning, since 81 women said their church did not encourage them to use a specific method.

Influence of the husband on use of natural family planning methods

The three women out of 20 in the focus group discussion who knew about natural family planning were able to elaborate about it. The women said it was difficult to use natural family planning methods because the husbands were not willing.
The majority of women (68%) had not talked to their husbands about family planning in the last one year.

**Influence of health professional on use of natural family planning methods**

Out of the 100 women interviewed only 27% had attended family planning clinic, while 63 women (63%) did not attend family planning. Out of the 27 women who had attended family planning 25 women (93%) had received information on family planning when they attended family planning while 2 (7%) had not. For the 25 women who received information most of the responses said how to use the pill, 55% of those responses out of 42 response followed by condoms 17% (7) then 12% IUD, while natural family planning was 9% and then those who said injections, tablets, tubal ligation were 3 women 7% responses.

When asked about general comments both in focus groups discussions and personal interviews, women said three main issues. They wanted more information about natural family planning methods. Secondly they said it was necessary to use family planning methods because the women’s reproductive organs got weaker as they became older. Thirdly it was difficult to use family planning methods because the final decisions depended on the men.

The next findings discussed focus on the women’s knowledge of natural family planning use, reasons for use and non utilisation according to age in relation to education, marital status, occupation.

The findings demonstrate that, as women got older (up to a point), the levels of knowledge concerning natural family planning increased, with higher attendance in the
age group 30-34. Those young women in the 15-19 year age group had little knowledge compared to the older women. By the time a women reached 30 years old, more than 50% of the women had gained some knowledge of natural family planning methods. However, the vast majority of young women between the ages of 15 and 29 had no knowledge of these methods.

Table 4

Knowledge and use of natural family planning methods according to age

<table>
<thead>
<tr>
<th>Age</th>
<th>Total No.</th>
<th>No. with knowledge</th>
<th>No. with no knowledge</th>
<th>No. using</th>
<th>No. not using</th>
<th>% with knowledge</th>
<th>% no knowledge</th>
<th>% (with knowledge) using</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>26</td>
<td>5</td>
<td>21</td>
<td>0</td>
<td>5</td>
<td>19%</td>
<td>81%</td>
<td>0%</td>
</tr>
<tr>
<td>20-24</td>
<td>33</td>
<td>13</td>
<td>20</td>
<td>2</td>
<td>11</td>
<td>39%</td>
<td>61%</td>
<td>15%</td>
</tr>
<tr>
<td>25-29</td>
<td>19</td>
<td>5</td>
<td>14</td>
<td>1</td>
<td>4</td>
<td>26%</td>
<td>74%</td>
<td>20%</td>
</tr>
<tr>
<td>30-34</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>67%</td>
<td>33%</td>
<td>50%</td>
</tr>
<tr>
<td>35-39</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>33%</td>
<td>67%</td>
<td>0%</td>
</tr>
<tr>
<td>40-44</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>40%</td>
<td>60%</td>
<td>100%</td>
</tr>
<tr>
<td>45-49</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>TOTALS</td>
<td>100</td>
<td>35</td>
<td>65</td>
<td>10</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The findings show that as the population of women aged, the knowledge of natural family planning methods increased with highest attendance of women at clinics in the age group 30 - 34 years. Those women in the age group 15 - 19 had little knowledge compared to others. By age 30 more than half of the women had some knowledge of natural family planning methods. However the vast majority of young women between the ages of 15 to 29 had no knowledge of these methods.

![Knowledge of Natural Family Planning Methods](image)

**Figure 3.** Knowledge of natural family planning methods according to age.

Findings show that up to age 29 years old, women had some knowledge of the methods with rising levels of knowledge in the ages of 20 - 24 years and then levels of
knowledge decreased again from age 30 and older to 49 years old. Many young women had some knowledge of natural family planning methods, however, this level of knowledge decreased dramatically in the population of women who were older than 35 years.
Findings show that even if the women had heard about natural family planning, they were not using the methods. In age groups 15 - 19 all the women who heard about the methods were not using them. While in age group 30 - 34 half of those who heard the method were using them and in 40 - 44 all of them were using the methods.
Table 5

Knowledge and use of natural family planning according to marital status

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Number of women</th>
<th>Heard methods</th>
<th>Using methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never married</td>
<td>43</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Married</td>
<td>50</td>
<td>19</td>
<td>6</td>
</tr>
<tr>
<td>Divorced</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The married women had heard of and were using natural family planning methods more than the other women, while those who were not in any union at the time of the interview were not using the methods. These women were in a variety of relationships never married, divorced or widowed.
Table 6

Knowledge and use of natural family planning according to level of education

<table>
<thead>
<tr>
<th>Educational level</th>
<th>Number of women</th>
<th>Heard methods</th>
<th>Using methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never attended school</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Primary</td>
<td>15</td>
<td>2</td>
<td>44</td>
</tr>
<tr>
<td>Secondary</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Tertiary</td>
<td>9</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>

Figure 6. Knowledge and use of family planning according to level of education

Those who had never attended school had not heard about natural family planning. While the majority of those with tertiary education, 4 out of 5 who had heard about the methods were using them. This was the same number of the women who had heard of, and were using natural family planning methods in both primary and secondary categories. In these categories, although women had heard about natural family planning methods, they were not using them.
Table 7

Knowledge and use of natural family planning according to type of occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number of women</th>
<th>Heard methods</th>
<th>Using methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended school</td>
<td>10</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Housewife</td>
<td>39</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Marketeer</td>
<td>14</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Employed</td>
<td>8</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>29</td>
<td>11</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 7. Knowledge and use of natural family planning according to main occupation.

The majority of those women, who had heard about natural family planning among the women who were employed, three out of four were using the methods, which is 75%. Although 12 women had heard about natural family planning, among the housewives only three were using the methods. Those attending school were not using the methods even if they had heard about them.
Reasons given for using natural family planning methods

The reasons given for using natural family planning methods did not vary according to either age, education or occupation as such the results are grouped according to what the women said. The results were very varied and small in number, as such only the commonly mentioned or important reasons have been described here. Some women gave more than one reason. The following reasons were given: the methods had no side effects; others said the methods brought commitment of both woman and man, because at present, men think that family planning is women’s business. It solves the problem of distance to the health centres especially in rural areas when one has to travel long distances to seek medical help.

Reasons given for not using natural family planning methods

Women said that husbands were not willing to use the methods. Others did not use the methods because they did not know enough about the methods. Others stated that it was because they were using traditional methods. Others felt it was not necessary because they had just been married, were attending school, or had either one or two children.

Reasons for recommending natural family planning methods

These were the same as for using the methods of natural family planning methods. The women recommended natural family planning methods because there were no side effects. The other reasons given were that the methods encouraged
commitment of both woman and man in family planning including that it was an easy method to learn.

**Reasons for not recommending natural family planning methods**

The methods were not easy to follow because the husbands were not willing to use the methods.

**Conclusion**

The results show that age had a strong influence on the behaviour of women. The other factor was the marital status. Those women who were married and were housewives, had more knowledge about natural family planning methods. These women were even using natural family planning methods more than the others. For those who were not using them, it was due to the husbands’ refusal to participate. As such, these are the only personal characteristics which have specific influence on the utilisation of family planning methods including education.

The majority of the women interviewed belonged to the New Apostolic Church with others, from the United Church of Zambia, Roman Catholic and Seventh Day Adventist Church. According to the results, 81%, the majority of women said there was no preferred method of family planning as promoted by their religious denomination. As such religion had no direct influence on use of natural family planning. In a relationship, the majority of the women 57% said that the man had a major say in making decision, as to whether or not they would use of family planning. While the
majority, 68% of the women had not talked to their partners about family planning. This means that in a relationship, decision making was the man’s responsibility.

The influence of health personnel on utilisation of family planning, was explored. Ninety three per cent, the majority of women had received information on family planning methods. For those who received information, on family planning methods, the majority said that they received the most information about the contraceptive pill and the least about the natural family planning methods. This was the same experience for the women who participated in the focus group discussions. In the focus group, only three out of twenty women had heard about natural family planning. The three women who knew about natural family planning were able to elaborate on it. They described similar problems as mentioned by the women in personal interviews.

The women were asked whether they verified information received from health personnel. Three main responses were given. First the women felt that it is important to follow the advice you receive from health workers, because others can give you wrong advice. Secondly, it is necessary to ask from others, because sometimes health workers are also bound to make mistakes. Thirdly, it is necessary to ask from other people who are experienced to avoid worrying over small issues. It appears that women seek advice from other women and from health workers. It seemed more important to trust the accuracy of the information, whether from a friend or from a health worker.
CHAPTER SIX

Discussion

Major findings

Age, marital status, husband's approval of the methods, information received from health personnel and occupation, were all factors which had influence on the woman's utilisation or non-utilisation of natural family planning methods. The influence of education level of women was not a significant factor in influencing women's decision to use natural family planning methods in this study.

Age as seen from the findings had a very significant influence on the utilisation of natural family planning methods. The percentage of women who attended family planning clinic increased as their age increased, reaching up to 80% by the age of 44 years and 100% in age group 45-49 years, were there was only one woman in this category. These results were supported by Davis (1989), who found that the women, mostly under 30 years old did not attend family planning clinics, while older women were more likely to attend. Teenagers did not attend the clinic because they were afraid to be seen by older women who would know their sexual activities. The inability of young women to discuss sexuality in the presence of older women was obvious in the focus groups. In this study, probably one of the reasons for this situation could have been the number of children one had. It was found in the focus groups that young women did not attend family planning clinics because they either were pregnant for the first time, attending school or had up to two children.
From the author’s experience it is taboo in an African society for young girls to be sexually active especially below the age of 20 years unless if the are married. It could also be that as women got older, they gain knowledge from other women and are more able to discuss personal issues. When it came to knowledge of natural family planning methods again, the knowledge increased as the women got older, as seen from (Table 4). Lesetedi at al (1989) in their study also found that older women had more knowledge in family planning methods than did younger women. While for using the methods, those women younger than 30 years, even when they had heard about the methods, were not using them, while those women between 30 years to 44 years they were using them (Table 5). Again here age is seen to have an influence on the use of the methods.

**Influence of marital status on utilisation of natural family planning**

The women who were either in marriage or had been married and are now either divorced or widowed had attended family planning clinics more than those who had never married. The married women had more knowledge of natural family planning methods than the others. These findings contradict those of Lesetedi et al (1989) who demonstrated that there was no difference in the amount of knowledge on family planning methods among the women whether married or not. When it came to use of the methods, those who were currently married, were using the methods more than those who were either divorced, widowed or were never married. These results were supported in the focus group discussions, when the women who were not married said it was not necessary to use the methods because they had no partners. From the author’s
experience in most African societies it is not acceptable for a single woman to be sexually active, just like in the case of the one who is young as mentioned previously. Probably this is why these women did not indicate that they were involved in family planning issues openly, although this might not be true.

**Influence of occupation on utilisation of natural family planning methods**

All those who were attending school did not attend family planning clinics and the majority of the women had not heard about the methods or were not using them. One would have expected this group to know about natural family planning methods because from the author's observation and experience the Family Life Movement of Zambia has been involved in teaching natural family planning in schools in Mongu. Probably these results were affected by the same reasons as in age and marital status situations. While the majority who were employed had attended family planning clinics, heard about natural family planning and were using the methods compared to the other groups of women. Probably the employed had more knowledge about natural family planning methods because they had more opportunities to meet other people in their working environments or come across literature on the methods. As for the housewives’ low rates of attendance of family planning clinic, knowledge of natural family planning methods, and use of natural family planning methods could be attributed to the husbands’ unwillingness to use the methods as stated by the women in this study. Refusal of husbands to use family planning methods was indicated as one of the reasons why married women did not use family planning methods in Indonesia, Nambia, Tanzania and Zambia. The women further said that if they insisted that the
methods should be used, the husband would divorce them. To use the methods could result in a divorce.

Influence of education on the utilisation of natural family planning methods

The majority of the women had not attended family planning clinics. Although findings showed that as education levels increased, the attendance of women at family planning clinics, knowledge of natural family planning methods and use increased. Although this was the case, the figures were very low except for those women with tertiary education had higher levels of utilisation (Table 6). These results showed that education had very little influence on the use of natural family planning methods. These results are supported by the study of Raikes (1990) conducted in Kenya, where she demonstrated that education was not a factor in the use of family planning methods. 87% of the women interviewed who had secondary education were not using family planning methods. The researcher further stated that Kissi had the highest level of women who were educated in the country compared to other areas with only 33% uneducated women. One would have expected education to have very strong influence on use of natural family planning, as educated women would have more knowledge since most of the women in this study were educated as indicated in previous studies (UNICEF, 1994; Lesetedi et al, 1989).

Influence of husband’s approval on use of natural family planning methods

The husband’s or partner’s approval to use natural family planning methods was seen as very important in the use of the methods. The women said they did not use
natural family planning methods because the partners were not willing as stated in the
previous paragraphs on the influence of marital status. Women did not use family
planning methods because their husbands were not willing (Bureau of Statistics
Planning Commission with Ministry of Health, 1992; Ministry of Health and Social
Services, 1993; Indonesia Ministry of Health, 1993; University of Zambia with Central
Statistics Office and Ministry of Health, 1993). The majority of the women said it was
the man’s responsibility to have a major say in deciding whether to use natural family
planning methods. These results are supported by four previous studies which
demonstrated that husband’s decision was very important in use of family planning
methods (Ezeh, 1993; Kgosidintsi & Mugabe, 1994; Mohamad, Baughman & Utomo,
1988). The majority of the women did not talk to their husbands about family planning.
Although the women did not raise the issue, it could be that they did not talk to then
husbands because sex issues are rarely discussed between husband and wife in most
African societies (Klaus, Labbok & Barker 1988; Mohamud & Rosenfield 1990).

Women who belonged to churches other than the Roman Catholic Church were
represented in this study, in contrast to the population of women who were Roman
Catholics in a study conducted by Klaus, Labbok & Barker (1988). Much research had
indicated that religion had very strong influence on the use of family planning methods,
This current study did not support these findings. The majority of the women said there
was no specific family planning methods their church encouraged. These findings are
supported by Mbizvo & Ademchak (1991) and by Laing (1984), who has revealed that
women were not aware of any methods that their church encouraged.
Influence of type of information received from the health personnel on use of natural family planning methods

In the current study, the findings indicated that the women received information mostly on the use of the contraceptive pill and IUDs and least information on natural family planning methods. These results are similar to those of other research studies (Lesetedi et al, 1989; GRZ, Ministry of Health 1995a; Kgosidintsi & Mugabe, 1994), where it was demonstrated that the contraceptive pill and IUDs were mostly used by the Women.

Findings from research conducted in Indonesia, Namibia, Tanzania and Zambia demonstrated that women were not using family planning methods, because they had no information about them. Probably this is why, to a large extent, that the women had little knowledge about natural family planning methods and so were not using them. In a study by Alade (1989), it was shown that 60.4% of the adolescents interviewed were not using family planning methods, because they had not heard about the methods.

Natural family planning was not seen as an option to of her methods of family planning by the health workers as observed in a study carried out in Zambia (GRZ Ministry of Health, 1995a). From what was observed by the author, all these factors mentioned had some effect on each other.

Reasons given by the women for wanting to use natural family planning methods

The women would like to use natural family planning methods for fear of side effects from artificial methods. In a study by Lesetedi et al, 63% of the women had
stopped using IUDs due to infection they had experienced. They also believed that natural family planning methods were easy methods to learn compared to artificial methods. Use of natural family planning methods would develop commitment to family planning issues by both man and woman. These results contradict the study findings by Daylight & Johnstone (1986), in which the women considered family planning as women's business. Also important to the utilisation of natural family planning methods was the practical factor that women did not need to attend health institutions which tended to be spread out greatly especially in rural areas. A study conducted by World Bank (1993) demonstrated that, in rural Uganda travel time to the nearest family planning health centres was one hour on average. While in the urban areas, it was expensive, because one had to spend money on transportation. This is not practical as Mongu was one of the highest poverty areas in Zambia (GRZ, Ministry of Health 1995b). While the two main hindrances to the utilisation of natural family planning methods described are the unwillingness of the husband to use the methods and the level of information available to the woman on the use of natural family planning methods as discussed previously.

**Summary**

For this study, age had very strong influences on the use of natural family planning methods. The older women had more knowledge about natural family planning methods, than did the younger ones. To some extent, those women who were married had knowledge and used the natural family planning methods more than those women who were single. Education, which other studies showed to have influence on
the use of family planning had little influence on the women in this study. The women interviewed were willing to know about natural family planning as they had received very little or no information from the health providers. Men were seen as having major say in deciding whether to use natural family planning methods or not. Confidentiality is a very important consideration in offering natural family planning methods and family planning as a whole to all clients. Client’s reputation should not be threatened, the young women therefore should also be given the family planning services as required. As a group young women deserve to have their special needs addressed. All methods of family planning especially natural family planning should be offered to all women. Natural family planning methods could also be best offered through community based distribution of family planning. Community based distribution of family planning offers privacy to the client, user or health provider interaction and the convenience of locally based services, meaning that women do not have to travel long distances or take expensive transport to reach health institutions.

**Implications of nursing practice**

Clients are not using natural family planning methods, partly because of lack of information. Nurses require education in all family planning methods especially natural family planning in order to make available more choice for clients. The husbands need to be involved in the issues of use of natural family planning methods because they are the ones who have most control in decision making. Facilities should be provided for different target groups to be able to use the services. This is because it was observed that the young women did not use the services used by older women. What was
required was to offer confidentiality in offering natural family planning to young women, not choosing specific groups being the married couples only. To encourage utilisation of natural family planning methods as a viable option, it needs to be incorporated into the total family planning services.

**Recommendations**

To try and improve the utilisation of natural family planning methods the Mongu urban district management team, including policy makers in the Ministry of Health Zambia should adopt the following approach:

1. All the health providers, especially nurses should be trained in natural family planning methods,

2. Natural family planning methods should be incorporated into family planning services as an option to other methods, now more readily available;

3. Community based distribution of family planning services should be extended to other parts of the country, not only in the three provinces as currently available.

**Limitations**

The conclusions drawn from this study are limited in that they can not be generalised to all women. The generalisations could only be made to the 120 women who participated in the study. However, the results could be generalised to the extent that these women are representative of other Zambian women in their child bearing age 15-49 years. The results can be used as base line data for use in implementation of a comprehensive family planning programme in Mongu urban district and in western
province as a whole. The results could also be used as base line data for further research
natural family planning methods in Zambia.

Further Research

In order to be able to generalise the findings to a larger populations, a bigger
sample should be used for future research study. The methods used in the study could be
used in future as well as they offer in depth information. For further research, it would
be valuable to study the lived experiences of women who had used natural family
planning methods. Findings from this study could offer more in depth situations on the
problems of using the methods. Further study should also investigate the quality of
information on natural family planning methods received from the health institutions. It
was revealed that while educating women about family planning methods is important,
this does not guarantee that women will choose to use birth control methods. The
choice and utilisation of family planning is complex and a systems approach allows for
an understanding of the broad influences on women's practices.
REFERENCES


APPENDIX A

INTERVIEW SCHEDULE

Administered to the women on individual basis.

Date of interview: Day/Month/Year

Respondents identification number (001-100)

Introducing remarks by the interviewer,

Hello, I’m Mrs.X. We have come to conduct a survey on family planning methods to help us provide a better service to you.

The first part 1-6 questions are on what influence do personal characteristics have on the choice and utilisation or non utilisation of natural family planning methods by Zambia women.

I would like to start the interview by asking you some general questions about yourself.

1. How old were you at your last birthday?

2. What is your martial status?
   - Never married 1
   - Married 2
   - Divorced 3
   - Widowed 4
3. What is your main occupation? (Please read out)

Attending school  1
Employed         2
Marketeer        3
Housewife        4
Doing nothing    5

4. What is your highest level of education? (Please read out)

Never attended school  1
Primary              2
Secondary            3
Tertiary             4

The next question are on attendance of family planning clinic knowledge and utilisation of natural family planning methods.

5. Have you ever visited a family planning clinic?

Yes     1
No      2 (go to question 6)

6 a. Have you ever heard about natural family planning method?

Yes     1
No  2 (go to question 7)

b. At the present time are you using a natural family planning method?
   Yes  1
   No  2

c. Can you tell me why you are using/not using natural family planning method?

d. Would you recommend natural family planning methods to other women?
   Yes  1
   No  2

e. What reasons would you give for recommending/not recommending natural family planning methods?

Questions 7-9, how does culture influence the use or non-use of natural family planning methods by Zambian women?

7 a. Do you belong to a religious denomination?
   Yes  1
   No  2 (go to question 3)
b. Which denomination do you belong to?

Roman Catholic 1
United Church of Zambia 2
Seventh Day Adventist 3
New apostolic church 4
Other:specific 5

c. Does your religious denomination encourage you to use one family planning in preference to others?

Yes 1
No 2 (go to question 8)

d. What method is preferred by your religious denomination?

8. In your opinion who do you think should have the major say in deciding whether or not to use family planning?

9 a. Have you talked with your partner about family planning in the past year?

Yes 1
No 2

b. How many times did you talk with your partner about family planning in the past year?
The next question 10-11 are on what influence do the health personnel have on the choice and utilisation or non utilisation of natural family planning methods by Zambia women?

10 a. When you visited the family planning clinic did you receive any information on family planning?
   Yes 1
   No 2

   b. What information did you receive?

11 a. Are you aware of any family planning policies on who should learn about natural family planning?
   Yes 1
   No 2

   b. What are the policies?

12. What other comments do you have about family planning?

Thank-you very much for taking part in the survey.
APPENDIX B

Focus Group discussion questions.

1. What information did you receive on family planning when you attended a family planning clinic?

2. What information do you know about natural family planning?

3. Making decision in the family or home is very important. Could you please tell me how decisions are made in your family?

4. Do you try to verify the information you receive from health workers with others?

5. Do you have any other comments about family planning?
APPENDIX C

Time Line for The Study

31 March 1995	Submission of proposal for review
12 April 1995 Submission of proposal to Higher Degree Committee, Cowan University.
   Edith
21 April 1995 Submission of proposal to Ethics Committee, Edith University.
   Cowan
End of May 1995 Travel to Zambia for data collection
June 1995 Refine tools and conduct pilot study
June-August 1995 Data collection
Sept-October 1995 Data analysis
Nov-Feb 1996 Report writing
End of Feb 1996 Completion of study
APPENDIX D.

Budget.

Required Resources

a) Material Resources

Stationary:

1 box of computer diskettes high density 3.3 formatted.

3 reams of photocopying paper.

2 reams of typing paper.

1 box file base.

fuel/transport- 3 drums.

engine oil 10 litres. subtotal $200

b) Human Resources.

1 driver lunch allowance.

1 principle investigator lunch allowance,

5 days per week for 6 weeks.

2 research assistants lunch allowance.

5 days per week for 6 weeks. subtotal $1780

c) Data analysis for 8 weeks.

report writing. subtotal $100

d) Secretarial services.

10% contingency (incidental expenses). subtotal $100

grandtotal $2,180
APPENDIX E

Letter to the Executive Director, Mongu District

Cecilia S Lubinda

20 November 1994

The Executive District Director
Mongu District
PO Box 910022
Mongu Zambia

Dear Sir

RE: Permission to carry out a study.

I am requesting to carry out a study in your district. The purpose of the study is to explore and analyse factors influencing low utilisation of natural family planning among women of child bearing age (15-49 years). This research is being conducted as part of the requirements for a Masters of Nursing at Edith Cowan University.

The results will be communicated to you hoping that such information will be helpful when developing programmes in family planning services. Hoping that my request will meet your favourable consideration.

Yours sincerely

C.S. Lubinda
MH/101/2/3.

REPUBLIC OF ZAMBIA
MINISTRY OF HEALTH

DISTRICT HEALTH MANAGEMENT TEAM,
P. O. BOX 910022,
MONGU.


Cecilia Lubinda,
AUSTRAUA.

RE:-PERMISSION TO PROCEED WITH THE STUDY TITLE:
FACTOR INFLUENCING LOW UTILIZATION OF NATURAL
FAMILY PLANNING.

Reference is made to your minute dated 20th November, 1994
in which you are kindly requesting this office to allow you to
proceed with your research.

Iam pleased, to inform you, that permission has been granted,
without the District getting involved into funding for your study.

I wish you all the success with your planned study.

K.N. Kufuna
ACTING DISTRICT DIRECTOR H.
MONGU DISTRICT HEALTH MANAGEMENT TEAM.
APPENDIX G

Letter to the Participant

Dear Mrs......

I am a registered nurse and midwife with 17 years as a practising nurse and educator, seven years as a practising nurse and midwife and nine years as a nurse educator.

I am currently conducting research on factors influencing the use of natural family planning among women of child bearing age (15-49 years). This research is being conducted as part of the requirements for a Master of Nursing at Edith Cowan University. Factors influencing women to use natural family planning is an area which has not been investigated before.

The purpose of this study is to enable health workers to understand the factors that influence women to use natural family planning. Such information will be helpful when developing programmes in family planning services. Each woman will be interviewed for a maximum of 90 minutes. It is hope that your participation in this study will help the implementation of natural family planning.

This study has the approval of the School of Nursing at Edith Cowan University and Monga district management team.

When the results of this study are reported you will not be identifiable in any way. Participation in this study are reported you will not be identifiable in any way. Participation in this study is entirely voluntary. You are free to withdraw from the study at any time. Should you have any queries at all, please feel free to contact me at any time.

Yours sincerely

CECILIA S LUBINDA

[Redacted]

Telephone:[Redacted]
APPENDIX H

Consent Form to Participate in the Study

I.......................................................................................................................

... (Client’s Family Name) (Given Names)

of.....................................................................................................................

...(Address)

having read the letter requesting me to participate in the study as explained to me by
Cecilia S Lubinda, agree to participate in this study designed to find out factors that influence
women of child bearing age to use natural family planning.

Client’s signature: ................................................ Date: ......................

Researcher’s signature: ........................................... Date: ......................
Committee for the Conduct of Ethical Research

Ms Cecilia Lubinda

Dear Ms Lubinda

Re: Ethics Approval

Code: 95-37

Project Title: Factors that influence low utilisation of natural family planning among women of childbearing age (15-49) in Mongu urban District, Zambia

Thank you for providing the additional information and clarification about those issues raised by the Committee following its consideration of your research proposal. The Committee is satisfied that proper consent is to be gained from all participants and that you have addressed the cultural beliefs of the people in the community where you will be conducting your research.

The proposal has been cleared for implementation and we wish you well for success in your work.

Period of approval is from May 1995 to February 1996.

Yours sincerely

ROD CROTHERS
Executive Officer

11 May 1995

Please note: Researchers are required to submit an ethics report as an addendum to that which they submit to their Faculty Research Committee or to the Office of Research and Development. Students report on any ethical issues through their supervisors.

cc: Dr Nancy Hudson-Rodd, Supervisor
Secretary, Higher Degrees Committee