Research Article

Knowledge and use of modern family planning methods by rural women in Zambia

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The main aim of the study was to determine knowledge and use of modern contractive methods among reproductive age group rural women in Zambia. The study is a descriptive cross-sectional study of 105 randomly selected rural women. Data was collected using semi-structured interview schedule and analyzed using EPI Info version 6 statistical packages. The findings revealed that 63% of the respondents were within the age group 21-35 years, 65% were married and 64% were peasant farmers. 90% of the respondents had heard about modern contraceptives and their main source of information was the Health worker (62%). 76% of the respondents stated that modern contraceptive methods could be obtained from public health facilities. 56% of the respondents were currently using modern contraceptive methods and 46% were not using modern contraceptive methods.

Reasons for non use of contraceptive methods were religious beliefs (50%), partner disapproval (30%) and side effects (20%). The results showed a relationship between educational level and use of contraceptives (Chi-square 7.83, df = 3, $P < 0.05$) and spouse approval or support of contractive methods and use of contraceptive (Chi-square 5.9, df = 2, $P < 0.05$). Therefore, efforts to promote modern contraceptive use among the rural women should be intensified to overcome barriers to contraceptive use and should involve men.

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Introduction

Zambia is among the sub-Saharan African countries with a high fertility rate of 5.9 births per woman (Central Statistical Office, 2002:6). It is located in the southern part of the sub-Saharan African Region and it is a landlocked country. It shares borders with the Democratic Republic of Congo (DRC) and Tanzania in the north, Malawi and Mozambique in the east, Zimbabwe and Botswana in the south, Namibia in the south-west and Angola in the west. Zambia lies between 8 and 18 degrees south latitude and between 20 and 35 degrees east latitude. The country has a population of 10.3 million inhabitants' (Central Statistical Office, 2002:48) and the population growth rate in 1990 and 2000 was 2.9% per annum.

The country's family planning programme came into being in 1970 and family planning services were first introduced in the urban areas and expanded to the rural areas very slowly. Family planning was integrated in Maternal and Child Health care services in 1973 and even today it still an integral part of the country's reproductive health program (Ministry of Health 2002:24). Despite the integration of family planning services in the reproductive health program, there has been a slow decline in fertility level for instance, from 6.5 births per woman in 1992 to 6.1 in 1996 to the current level of 5.9 births per woman. The increase in contraceptive use over the past decade has also been slow (from 26% in 1992 to 34% in 2002). Furthermore, about one in three of currently married women still have an unmet need for family planning (Central Statistics Office, 2002:276).

Zambia developed a national family planning policy in 1989 which was adopted as part of its fourth National Development plan (Ministry of Health 2002: 15). This policy recognizes the effects of rapid population growth on Zambia's socioeconomic development and the need to incorporate population concerns into the national development and planning process (PATH, 2005: 3).

The main objective is to ensure that all couples and individuals have basic rights to decide freely and responsibly the number and spacing of their children and have the information, education and means to do so (Ministry of Health 2002: 15). Other specific objectives include slowing the nation's population growth rate, initiate, improve and sustain measures to arrive at slowing down the nation's high population growth rate, enhance the health and welfare of all and prevent premature death and illness, especially among high-risk groups of mothers and children (Ministry of Health 2002:15).

The national family planning programme has strived to achieve the above stated objectives. To help the national and district levels in planning and implementation of the family planning component of their reproductive health programs, a policy framework was developed.

With regards to knowledge levels, the 2002 and 2007 Zambia Demographic and Health Surveys reported high knowledge levels of modern contraceptive method among the Zambian population but despite this, there is still low utilization of family planning services among women in Zambia (Nsemukila, Phiri, Diallo, Banda, Benaya & Kitahara 1998: 26; Central Statistic Office, 2002: 278).

Literature review

According to the 2007 World Bank report, contraception is a best buy for development. By helping individuals to choose when to have children, family planning saves lives, it prevents unintended pregnancies, averts maternal and child deaths and prevents abortions
(Smith, Ashford, Gribble & Clifton, 2009: 6). Family planning also saves public sector resources; for $1 a government spends on family planning service delivery, $2 to $6 can be saved in providing other interventions including basic health and education for fewer children, maternal health services and improvements in water and sanitation (United Nations Population Division, 2009: 4).

Sub-Saharan Africa has the highest fertility of any world region which is 5.4 births per woman on average (Clifton, Kaneda & Ashford, 2008: 2). Birth rates in the region are so high that even in the face of high AIDS mortality in some countries, the region's 2008 population of 809 million is projected to increase to 1.2 billion by 2025 (Haub & Kent, 2008: 9). The major factor underlying high birth rates is low family planning use for instance only 18% of married women in sub-Saharan Africa use modern methods of family planning (Clifton et al, 2008: 3). However, there are subregion differences in modern contraceptive use, for example, modern contraceptive use is 58% in Southern Africa, 22% in East Africa, 7% and 9% in Central and Western Africa respectively (Clifton et al, 2008: 3). It is also estimated that 35 million women in sub-Saharan Africa have an unmet need for family planning (Clifton et al, 2008:2). They want to delay or stop childbearing but are not using any contraceptive method.

Conde - Agudelo and Balizan (2000:1255) state that, in sub- Saharan Africa, rural women tend to use fewer contraceptives and have more children than their urban counterparts. In addition many rural women have gaps in their knowledge about available contraceptive methods and how effective each method prevents pregnancy (Conde - Agudelo & Balizan, 2000: 1255). Previous studies have shown that knowledge of modern contraceptive methods is an important determinant of contraceptive use (CSO, 2002: 278). Women who are well informed about the benefits of family planning tend to use it. However, women's perception that their husbands oppose family planning is a dominant factor discouraging contraceptive practice in a wide variety of settings (Joesoef, Baughman & Budi, 1988; Khalifa, 1988:236; Mbizvo & Adamchak, 1991: 32; Koblinsky, Timyan & Gay, 1993: 10; Grady, 1996: 221; Asturias de Barries, Rods, Nieves, Matula, & Yinger, 1998: 15; Elzanary, Sunita, & Casterline, 1999: 23). Another determinant for use or non use of contraceptives is lack of schooling (Catrol – Martin 1995: 187, Espejo, Tsunechiro, Osis, Duarte, Bahamondese, & De Sousa, 2003: 583, Hamid & Stephenson, 2006: 121, Nazar-Beuteelspacher, Monalisa-Roseles, Salvatierral-Zaba, Zapata-Martelo & Halperin 1999: 134, Unalan, Koc & Tezcan, 2003:8). Religious belief is also one of the reasons for non use of modern contraceptive methods ((Ba-

Table 3 Use and Reasons for nonuse of modern contraceptive methods

Characteristic	Frequency	Percentage
Use of modern contraceptive methods		
Yes	57	54%
No	48	46%
Contraceptive method in use		
Pill		80%
Intra Uterine Devise		5%
Condom		10%
Injectables		5%
Reasons for nonuse		
Religious beliefs	53	50%
Partner disapproves	31	30%
Fear of side effects	21	20%

dom, 24% mentioned a pill and 5% mentioned inject able contraceptive (Table 2). Only 5% of the respondents did not know any modern method of contraception. There was a small difference that existed in knowledge of modern contraceptive methods among the women in this study. Ninety two percent (92%) of women in the age group 21-35 years, 89% of the women in the age group 15-20 and 85% of the women with the age group 36-49 had hear of a modern method of family planning. There was a variation in contraception knowledge levels and education for instance, only 49% of illiterate women knew a method of contraception compared to 99% of women with secondary or higher education and 80% of women with primary school education. The most striking differences in knowledge of contraceptive method were by source information. Ninety five percent (95%) of women whose source of information was the Health workers were more knowledgeable about contraceptive methods, than those who had the family as their source of information (48%).

Fifty four percent (54%) of the women in this study were currently using a modern contraceptive method and the majority (62%) of the women who were currently using contraceptives were within the age group 21-35 years and most (62%) of these women had secondary school education (Chi-square 7.83, df = 3, P<0.05). In addition, the use of modern contraceptive method was significantly higher among women who were 21-35 years than women between 36 - 49 years (Chi-square test 3.38, df=2, P< 0.05). Among the women who were using modern contraceptive methods, 80% were using a pill (Microgynon). The study has shown that women who had good knowledge about contraceptive methods were more likely to use a contraceptive method than those with poor knowledge.

Forty six percent (46%) of the women were not using any modern contraceptive method (Table3) and these were within the age group 36 - 49 years and were illiterate (49%). The reasons for non-use of modern contraceptive methods are illustrated in table 3 and these included religious beliefs (50%), Partner disapprove (30%), and fear of side effects (20%).

In this study, women whose spouses approved (68%) of use of modern contraceptive method were more likely to use modern contraceptive method (Chi-square = df = 6, P< 0.05) than those whose husbands disapprove (32%).

Discussion

Knowledge of family planning is considered the first stage toward the adoption of a contraceptive method (CSO, 2002: 279). This study has revealed that a large number of the respondents (90%) had heard about modern contraceptive methods mainly from a Health worker. This could be due to the fact that one of the Health worker's roles involves giving health information to women whenever an opportunity arises and most of them have trust in them. Health workers especially nurses and midwives in particular are grass root workers providing health care to populations in the remote parts of the country, therefore they are easily accessible. The current study has also revealed that knowledge of modern methods of contraception and where the methods could be obtain was good, for example, many women could mention at least one method of contraception and stated that modern contraceptive methods could be obtained from a health facility. However, there is need for continued sensitization on the benefits of family planning especially among women who are illiterate.

The most popularly known and used method of contraceptive among the respondents was a male condom followed by a pill. These contraceptive methods were popular among the respondents because the methods are readily available and accessible in the Government health care facilities than other methods of family planning such as injections. In addition, condom use is currently being promoted by the HIV/AIDS program as one of the methods of prevention. However, knowledge of methods of modern contraceptives is necessary but it is not sufficient to encourage use of methods of contraception. For instance 46% of the women in this study were not using any methods of contraception despite them having good knowledge of modern contraceptive method.

In this study, women who were younger were more likely to use a modern contraceptive method than older women. This could be attributed to the fact that younger women were more enlighten on family planning than older women. An association was found between educational level and use of contraception. Respondents' who had secondary school education were using contraception than those who have never been to school. Education is the most consistent reported determinants of reproductive health services utilization; for instance, a Mexican study found an independent association between lack of any schooling and the use of contraceptives among women (Nazar-Beuteelspacher et al, 1999: 67). Similarly, the 2001-2002 Zambian Demographic

Health Survey reported similar findings that women who were educated were more likely to utilize modern family planning methods. Another study conducted in Pakistan by Hamid and Stephenson (2006: 121) confirmed the findings that women who have been to school are more likely to use modern contraceptive methods. In a population based Turkish survey, women with second level primary school and higher education were better informed than women with little or no education (Unalan et al, 2003: 8). Furthermore, higher educational level and better socio-economical status have been shown to be associated with better knowledge about contraception in a study from Brazil (Espejo et al, 2003: 583). This could be due to the fact that educated women are able to articulate their fertility desires.

The barriers to modern contraceptive use expressed by women in this study include religious beliefs, spouse approval and side effects. Half (50%) of the respondents believed that children are given and determined by God therefore they could not use contraceptive otherwise they would go against God's will. Although it is difficulty to ascertain the importance of religion in an individuals' decision making process, it quite clear from this study that religion could have a negative influence on the women's use of contraception. This result confirms the findings of a Yemen study which identified religious beliefs as a reason for non use of modern contraceptive method (Ba-Hubaish, 1999: 4).

Another barrier to contraceptive use revealed in this study is unwillingness for contraception by the spouse or husband. Husband's opinion on family planning can be strong to determine their wives use of family planning (Koblinsky, et al, 1993:10). In Zimbabwe, a study of males' family planning knowledge, attitudes and practices found that 80.6% of the sample had used contraception with their partners and 83.5% approved of family planning in general (Mbizvo & Adamchak, 1991: 31). Of the men who had ever used family planning, 58.8% said the male partner should have a major say to practice family planning; 48.3% said they were responsible for the decision to use a method; and 53.3% said that they decided on the number of children to have. Women had little involvement in the decision. A study of Sudanese men's attitudes, knowledge and practice concerning family planning suggested that men made the decision about contraceptive use and were responsible for obtaining the method (Khalifa, 1988: 236). In Indonesia husbands' approval was the most important factor in whether or not wives used contraception as husbands are seen as the protector and provider for the household and the decision maker (Joesoef et al 1991; 162).

As in most Sub-Saharan cultures, men in Zambia tend to dominate a couples' decision about family size and whether to use contraception. A husband is regarded as a decision maker in the home and if he opposes contraceptive use by the wife there is nothing a wife can do otherwise she risks a divorce or being beaten. Culturally men usually want their wives to have more children so as to earn respect. It is also perceived by husbands that use of contraception could encourage infidelity among wives.

This study has also shown that women whose spouses approved of use of contraceptive methods were more likely to use the modern methods than those whose spouses disproves of modern contractive use. This finding confirms results from a study conducted by Grady (1996: 222) which also found a positive association between spouse approval and contraceptive use. Therefore, it is clear; there is an urgent need to involve men in reproductive health matters because of the role they play in reproductive decision of their families. This information could be used to design messages targeted at men.

The other reason cited by women in this study for non use of contraception was side- effects of modern methods of contraception. According to Wasserheit, Harris, Chakraborty, Kay, Bradford & Mason (1989: 69), one of the most commonly cited reason for discontinuing contraceptive use is the perceived side-effects. These could be side- effects that are regarded as normal by health care professionals but may be of great personal or cultural importance to women (Koblinsky et al, 1993: 9). In addition women may blame any type of health problem, especially reproductive- tract problems on their contraceptives (Koblinsky et al, 1993: 10). This reaction results in part from poor counseling and information, education and communication and from information women receive about other women's experiences (Koblinsky et al, 1993: 10). Therefore health care professionals need to provide information, education and communication regularly to the women in order to encourage use of modern contraceptive methods.

Conclusion

Although there has been a steady change in the attitudes of women regarding family planning as means of spacing children and achieving a smaller family size, the country is still characterized by very high birth rates and low rates of contraceptive use. One of the perplexing findings is that the level of knowledge about contraceptive methods is good and yet the use of the methods is still very low. Rigorous research is needed to establish the reasons for slow rate of adoption of contraceptive. Efforts to promote contraceptive use among the rural women should be intensified. There is need to provide accurate information on management of side effects to these rural women. Improving knowledge about the side effects of contraception can increase the uptake of modern contraceptives. Men play an important role in the reproductive decisions of their families therefore there is an urgent need to involve men in reproductive health matters. Lastly, religious leaders hold great influence over public opinion, therefore they should be engaged in reproductive and family planning issues so that they support and promote reductive health and family planning to their congregations.

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