ORIGINAL RESEARCH ARTICLE

Modern Contraceptive Use among Women in the Asuogyaman District of Ghana: Is Reliability more Important than Health Concerns?

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Abstract

This study examines the socio-demographic determinants of modern contraceptive use among women in the Asuogyaman district of Ghana. The results reveal that although 97% of the survey respondents knew of at least one modern method of contraception, only 16% of them were using modern contraceptives. Statistical tests show that level of education, place of residence, and work status significantly influence modern contraceptive use among women in the study area. Fear of side effects, desire for more children, and partner's disapproval were the main barriers to modern contraceptive use in the study area. The use of traditional methods of contraception was very high because of the perception that they are safer. Based on these findings, it has been suggested that in addition to making family planning services available and accessible, health workers must address attitudinal factors such as fear of side effects and high fertility preferences. (Afr J Reprod Health 2013; 17[2]: 58-71).

Résumé

Cette étude examine les déterminants sociodémographiques de la contraception moderne chez les femmes dans le district d'Asuogyaman au Ghana. Les résultats révèlent que, bien que 97% des interviewées connaissaient au moins une méthode moderne de contraception, seulement 16% d'entre eux utilisaient des contraceptifs modernes. Les analyses statistiques montrent que le niveau d'instruction, le domicile et la situation de travail influencent de manière significative l'utilisation des contraceptifs modernes chez les femmes dans la région étudiée. La crainte des effets secondaires, le désir d'avoir encore des enfants, et la désapprobation du partenaire ont été les principaux obstacles à l'utilisation de la contraception moderne dans la zone d'étude. L'utilisation des méthodes traditionnelles de contraception est très élevée en raison de la perception selon laquelle elles sont plus sûres. En se fondant sur ces résultats, il a été suggéré que, en plus de rendre les services de planification familiale disponibles et accessibles, les membres de personnel de santé doivent tenir compte des facteurs comportementaux comme la crainte des effets secondaires et des préférences de fécondité élevée. (Afr J Reprod Health 2013; 17[2]: 58-71).

Keywords: Level of education, work status, place of residence, women, contraception, Ghana

Introduction

The search for an effective method for controlling rapid population growth rates, especially in the developing world, has resulted in an increased promotion of modern contraceptives, identified as the principal mechanism for fertility reduction¹⁻³ As a reliable method for birth spacing and controlling the spread of sexually transmitted diseases, the use of modern contraceptives also contributes to improvement in the health of women and children^{4, 5} It has been estimated that about 32% of global maternal deaths could be

prevented by the use of effective modern contraceptives⁶

recognition of the relevance of contraceptives for reducing fertility. government of Ghana has, since the late 1960s, adopted various policies and strategies to promote modern contraceptive use in the country^{7, 8} Despite these programmes, the level of contraceptive use in Ghana is still very low. Unlike the situation in some other African countries, such as Mauritius and Kenya where more than 50% of married women use modern contraceptives, only 16.6% of married women in

Ghana were using a modern method of contraception during the most recent nationwide Demographic and Health Survey^{9, 10}

While an understanding of the factors that influence the use of modern contraceptives in specific localities is useful for designing strategies to reduce fertility, few researchers have examined the determinants of modern contraceptive use Ghana^{11, 12} localities within specific in Furthermore, as the instruments used in National Demographic and Health Surveys are largely quantitative in nature, the role of certain socioeconomic factors in promoting or inhibiting the use of modern contraceptives has not been adequately examined. Again, while anecdotal evidence suggests that some women, in Ghana, have been using traditional methods contraception instead of the modern methods, there is little understanding of the reasons for such choices.

This paper examines the factors that influence modern contraceptive use among women in the Asuogyaman District of Ghana. This district has different ethnic groups, notably Ewe, Akan and Ga-adangme, and this ethic composition makes the district a suitable place for assessing the influence of socio-cultural factors on modern contraceptive use. The district also provides a very good setting for understanding the rural-urban disparities in modern contraceptive use. Although the paper focuses on modern contraceptives, it also highlights the use of traditional birth control methods among women in the study area.

Literature on the Determinants of Modern **Contraceptive Use**

A review of the literature reveals that the sociodemographic factors that determine modern contraceptive use are: age of the woman; number of living children; marital status; level of education; place of residence; religious affiliation; work status; partner's approval; and government policies. Holding all other factors constant, age of a woman determines her propensity to use modern contraceptives for birth spacing and birth stoppage. Women in their middle ages are more likely to use modern contraceptives than teenagers and older women 13, 14. After a study of 22 developing countries, Curtis and Neitzel (1996)

reported that modern contraceptive use was higher among women aged between 35 and 39 years than those in other age groups¹⁵

Number of living children is another determinant of modern contraceptive use. It has been suggested that women who have many children are more likely to use modern contraceptives than those with fewer children. 16 This is based on the assumption that women with children are more likely contraceptives for birth stoppage than counterparts with fewer children. Tsui (1985), however, contested this assertion, arguing that some women with many children may still not be using modern contraceptives because of lack of knowledge and or disapproval by their partners¹⁷ According to Maharaj and Cleland (2004), married women are more likely to use modern contraceptives than their unmarried counterparts¹⁸ This claim has, however, been challenged by Teye (2004) who argued that in some societies the level of contraceptive use among young unmarried women may be as high as that among married women¹⁹

Despite the general agreement that level of education positively influences contraceptive use^{20, 21}, some studies have shown that this relationship is by no means universal. For instance, a study in Jordan showed that the rate of modern contraceptive use among women with primary education is not significantly different from that of their counterparts with secondary education¹⁵ Similarly, a recent study in Mali did not show any relationship between level of education and modern contraceptive use⁴ According to Ezer (1993), the level of education of a spouse is also a strong determinant of modern contraceptive use among women. He demonstrated that uneducated women who are married to educated men are more likely to approve of family planning than their counterparts whose partners are not highly educated²² However, a research by Ainsworth et al. (1995), in fourteen sub-Saharan countries, did not find any significant relationship between level of education of a spouse and a woman's usage of modern contraceptives²³

Work status is also a determinant of modern contraceptive use among women. It has been shown that women who work outside their homes are more likely to use modern contraceptives than those who work in their own homes. This is explained by the fact that it is quite difficult for women employed in the formal sector outside home to cater for their children because of time constraints²⁰ A woman's religion may also determine her willingness to use modern contraceptives. Catholics, for instance, approve only the use of natural family planning methods like abstinence¹⁹ Ethnicity also determines modern contraceptive use. Caldwell (1982) reported that some ethnic groups in Africa have higher fertility preferences, and as such the use of modern contraceptives in such societies is usually lower than other ethnic groups²⁴ However, Tawiah (1997) noted that, in many Ghanaian societies, the influence of ethnicity on modern contraceptive use is not so significant²⁰ In general, modern contraceptive use is higher in urban than rural areas²⁵ The main reason for this pattern is the fact that modern contraceptives are more accessible to women in urban areas than those in rural areas¹⁹ Partner's approval also positively influences modern contraceptive use among women²⁶.

Apart from the individual factors, institutional factors, such as government policies and the availability of modern contraceptives, also determine their use⁶ Gabe (1995) asserted that media messages have significant influence on modern contraceptive knowledge and use²⁷ The universality of this relationship has, however, been challenged by Valent et al (1994), who argued that as a result of cultural and religious barriers, media campaigns do not have any significant influence on modern contraceptive use²⁸

It is clear from the above review that the influence of various socio-economic factors on modern contraceptive use varies from one society to another. Indeed, there is no agreement on how socio-demographic variables such as age, marital status, level of education, religion, actually modern contraceptive contradictions in the literature provide a strong justification for further studies on the sociodemographic determinants modern contraceptive use in specific localities.

Materials and Methods

Study Sites

The primary data used for this study were collected from the Asuogyaman District in the Eastern Region of Ghana. The district, which covers a total surface area of about 1,507 square kilometres, has an undulating topography. It lies within the semi-deciduous forest and coastal savannah zone of Ghana. The local economy depends on crop production, fishing and few industries. The most important secondary industrial establishment is the Volta River Authority, which produces Hydro Electric Power (HEP) for the entire Ghana. The Akosombo Textiles Limited (ATL) is also found in this region.

As it was not possible to collect data from all settlements within this district, primary data for the study was collected from two urban communities and three rural communities within the district (Figure 1). The urban communities were Atimpoku and Akosombo, which were the two largest communities in the area. Three rural settlements, namely Boso, Finte, and Yiti, were also selected based on the desire to ensure a geographical representation.

Methods of Data Collection and Analysis

There were two stages of the data collection. In the first stage, questionnaire survey was conducted on 629 women selected from the five study communities. Systematic sampling technique (see Bryman 2001)²⁹ was used to select houses in all the five communities for the survey. Each selected house was entered by research assistants, and a maximum of two women aged 15-49 years were interviewed in each house. If more than two women in union were met in a particular house, simple random sampling technique was used to select two of them for the questionnaire survey. This sampling technique was deemed to be the most appropriate, since there was no sampling frame. The purpose of the research was explained to the women, and only those who consented to take part in the research were interviewed. Parents gave informed consent for girls under 18 years. As

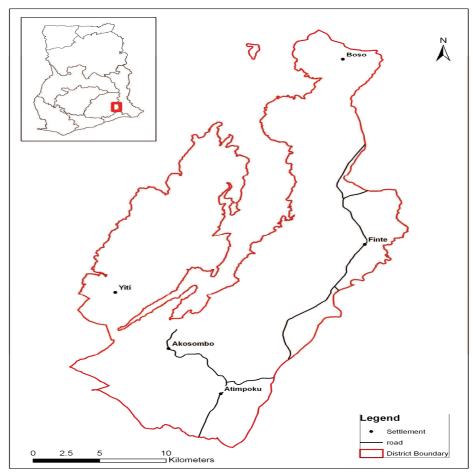


Figure 1: Map of Asuogyaman District showing study sites

stated already, only women who were in union (i.e. married or in a sexual relationship) at the time of the research were allowed to participate in the research. Twenty three of the women contacted declined participation for various reasons, including lack of interest, husband disproval, and lack of time.

The questionnaire comprises of two parts. The first part deals with the background characteristics of the respondents. It sought to collect information on respondents' demographic and socio-economic characteristics, such as age, number of living children, marital status, place of residence, work status, and level of education. The second part consists of questions related to the dependent variables, namely modern contraceptive knowledge and use. Most of the questions were pre-coded, but where necessary, additional spaces were provided so that respondents would have the

option of providing further explanation on behaviour.

Following an approach which was previously used by the Ghana Statistical Service¹⁰ Knowledge of a modern contraceptive was collected in two ways. First, each respondent was asked to state all the methods that couples can use to delay or avoid pregnancy. Both modern and traditional methods mentioned spontaneously were recorded. When a respondent did to mention a modern method spontaneously, the interviewer described it and asked whether the respondent knew of it. In this article, both spontaneous and prompted mentions of a modern contraceptive method counted as knowledge. Thus, knowledge of a modern method is defined simply as having heard of a method. Information on modern contraceptive use was obtained by asking respondents, if they had ever used any of the methods mentioned.

respondents were also asked if they were using any of the methods mentioned at the time of the survey.

After analysing data from the questionnaire survey, 40 women (made up of 15 modern contraceptive users and 25 non-users) were selected for further in-depth interviews to generate more detailed qualitative data. However, only 37 of the selected women were available for further interviews. In-depth interviews were also held with 7 health professionals, who were working in the study area. They include: four female family planning nurses, one midwife, and two male workers of two selected pharmacies in the study area.

The quantitative data was analysed by means of SPSS while content analysis was performed on the qualitative data. Two levels of analysis were performed on the quantitative data. First, the frequencies were computed for certain variables. Second, bivariate analyses were performed to identify the relationships between independent variables and modern contraceptive use.

Results

Distribution of Respondents by Socio-Demographic Variables

The distribution of the 629 study participants by socio-demographic variables is shown in Table 1. The proportion of women in each age group rises with age from 9.9% among the 15-19 years group to a peak of 18.4% among the 30-34 years group and then declines. Level of education among the women was generally low. Only 14.6% (n=92) of them had secondary or higher education. Although all women were in union, only 37.4% (n=235) of them were legally married. Majority of them were Christians (82.5%).

In terms of place of residence, 56.1% (n=353) of women were living in urban areas, while the rest were living in rural areas. Only a small proportion of women (17.2%) were working in the formal sector, mainly as civil servants in the education and health sectors. Majority (59.8%) of them were working in the informal sector (outside home) as petty traders and farmers. Another 23.1% of women were working in the informal sector in their homes. Most of these people were taking care

of their homes and children. Fertility levels in the study area were quite high, as about 38% (n=239) of women were having 5 or more children. Only 9.4% of women did not have any child at the time of the survey.

Modern contraceptive knowledge among the study participants was very high. About 96.7% (n=608) of them knew of at least one modern method. The proportion of respondents that knew of the condom was higher (93.2%) than any other method. The next popular method was the pill (91.7%), followed by injectables (82.7%), female condom (70.7%), implant (56.4%), female sterilisation (49.6%), intrauterine device (45.9%), emergency contraception (39.1%), and male sterilisation (29.9%). The least known methods were jelly/foam (16.2%), diaphragm (14.1%), and lactational amenorrhoea (LAM) (7.5%). All women knew of at least one traditional method of contraception. Among the traditional methods, withdrawal was the most commonly known (99.2%), followed by rhythm (coitus interruptus) -97.3%), and postcoital douching with water and vinegar (45.9%).

Spousal communication about modern contraceptives was very low. Only 26.6% of women discussed family planning with their partners within the past year. About 84.6% of women approved of family planning, but only 18.0% of them stated that their partners approved of family planning. Majority of women (65.8%) did not know if their partner approved of family planning. While this is quite disturbing, it is not surprising given the very low level of spousal communication about family planning. A family planning nurse explained that they have been encouraging women to "discuss family planning with the husbands", but the women have not been following this advice.

Socio-Demographic Determinants of Modern Contraceptives

Despite the fact that almost all the women knew of at least one modern method of contraception, only 15.6% (n=98) of them were using modern contraceptives at the time of the survey. Bivariate analyses were performed to establish the relationships between various socio-demographic variables and modern contraceptive use (see Table

Table 1: Socio-demographic characteristics of respondents

| Characteristic | % (N=629) | Characteristic | %(N=629) | |
|---------------------------|-----------|-------------------------------|------------|--|
| Age | | Work Status | | |
| 15-19 | 9.9(62) | Formal sector | 17.2(108) | |
| 20-24 | 14.3(90) | Outside home informal sector | 59.8(376) | |
| 25-29 | 17.5(110) | Home-based informal sector | 23.1(145) | |
| 30-34 | 18.9(119) | Total | 100 (629) | |
| 35-39 | 17.3(109) | | () | |
| 40-44 | 12.1(76) | Number of Living Children | | |
| 45-49 | 10.0(63) | 0 | 9.4(59) | |
| Total | 100 (629) | 1-2 | 20.3(128) | |
| 10001 | 100 (02) | 3-4 | 32.3(203) | |
| Level of Education | | > 5 | 38.0(239) | |
| No formal education | 13.8(87) | Total | 100 (629) | |
| Primary | 23.7(149) | 10.001 | 100 (02)) | |
| JSS/Middle | 47.9(301) | Knowledge of Contraceptives | | |
| Secondary+ | 14.6(92) | Knows modern method | 92.4 (581) | |
| Total | 100 (629) | Knows only traditional method | 4.1(26) | |
| 10.001 | 100 (02)) | Knows no method | 3.5(22) | |
| Marital Status | | Total | 100 (629) | |
| Formally married | 37.4(235) | 10.001 | 100 (02)) | |
| Sexually active unmarried | 34.0(214) | Discussed Family Planning | | |
| Living with partner | 28.6(180) | with Partner in Past year | | |
| Total | 100 (629) | Yes | 26.6(167) | |
| 10001 | 100 (02) | No | 65.2(410) | |
| Religion | | Doesn't remember | 8.3(52) | |
| Christianity | 82.5(519) | Total | 100 (629) | |
| Muslim | 12.1(76) | | () | |
| Traditional Religion | 4.8(34) | Approves family planning | | |
| Total | 100 (629) | Yes | 84.6(532) | |
| 10001 | 100 (02)) | No | 15.4(97) | |
| Residence | | Total | 100 (629 | |
| Urban | 56.1(353) | | 0 (02) | |
| Rural | 43.9(276) | Partner approves family | | |
| Total | 100 (629) | planning | | |
| | (0->) | Yes | 18.0(113) | |
| | | No | 16.2(102) | |
| | | Doesn't know | 65.8(414) | |
| | | Total | 100 (629) | |

Source: Field Survey, 2011

2). The proportion of women using modern contraceptives increases with age from 11.3% among the 15-19 years group to a peak of 19.3% in the 30-34 years group and then declines. However, chi-square test results show that these differences are not statistically significant (X^2 = 3.755, P > 0.05). Thus, the findings do not support claims that there is a strong association between age and modern contraceptive use15. Level of education was positively associated with modern

contraceptives use. For instance, while only 5.7% of the 87 uneducated women were using modern contraceptives, 43.5% of the 92 women who had completed secondary/tertiary education were using a modern method. Chi-square test shows that the relationship between level of education and modern contraceptive use is significant $(X^2 =$ 68.131, P < 0.05). The findings show that marital status also determines modern contraceptive use as well as the type of method that is used.

Table 2: Modern contraceptive use by selected variables

| Variable | % | No of | Variable | % | No of |
|-----------------------|------|-------------|----------------------|------|-------------|
| | | respondents | | | respondents |
| Age | | _ | | | _ |
| 15-19 | 11.3 | 62 | No of Living Childre | en | |
| 20-24 | 13.3 | 90 | 0 | 11.9 | 59 |
| 25-29 | 17.3 | 110 | 1-2 | 15.6 | 128 |
| 30-34 | 19.3 | 119 | 3-4 | 16.7 | 203 |
| 35-39 | 16.5 | 109 | ≥ 5 | 15.5 | 239 |
| 40-44 | 15.8 | 76 | | | |
| 45-49 | 11.1 | 63 | Residence | | |
| | | | Urban | 20.7 | 353 |
| Level of Education | | | Rural | 9.1 | 276 |
| No education | 5.7 | 87 | | | |
| Primary | 8.1 | 149 | Discussed Family | | |
| JSS/Middle | 13.6 | 301 | Planning with Partn | er | |
| Secondary+ | 43.5 | 92 | Yes | 24.6 | 167 |
| , | | | No | 13.2 | 410 |
| Marital Status | | | Doesn't remember | 5.8 | 52 |
| Married | 11.5 | 235 | | | |
| unmarried | 23.4 | 214 | Woman approves | | |
| Living with partner | 11.7 | 180 | family planning | | |
| 8 | | | Yes | 17.5 | 532 |
| Religion | | | No | 5.2 | 97 |
| Christianity | 16.2 | 519 | | | |
| Muslim | 14.5 | 76 | Partner approves | | |
| Traditional Religion | 8.8 | 34 | family planning | | |
| | | | Yes | 46.9 | 113 |
| Work Status | | | No | 5.9 | 102 |
| Formal sector | 35.2 | 108 | Doesn't know | 9.4 | 414 |
| Outside home informal | 12.5 | 376 | | | |
| Home-based informal | 9.0 | 145 | | | |

Source: Field Survey, 2011

The proportion of women using modern contraceptives was highest among sexually active unmarried women (23.4%), followed by those living with their partners (11.7%) and then married women (11.5%). These differences are statistically significant ($X^2 = 14.945$, P < 0.05). High fertility preference in the area may partly account for the low level of modern contraceptive use among married women. In fact, some married women see the reproduction of children as the primary purpose of marriage. Consequently, they do not make any attempt to regulate fertility, once they are married. This is captured in the following statement made by a 36 year old mother of four:

I was using pills when I was not married because I didn't want to be pregnant before marrying. Now that I am married, I don't need

any medicine [contraceptives] because I want to give him all the children in my stomach (Ajo, 16 August, 2011).

On the other hand, sexually active unmarried women were more likely to use modern contraceptives because most of them would want to prevent premarital pregnancy, especially when their partners are not yet ready to perform the marital rites. Some unmarried women also stated that they were using condoms to avoid sexually transmitted infections:

I always make sure that any man I meet uses the condom because I don't want to get any disease from men. You know they [men] will always promise so many things including marriage, but I don't trust them. One day, if any man marries me then I will stop using the condom (Narkie, 5 August, 2011).

The descriptive statistics show that while 16.2% of Christians were using a modern method of contraception, the proportion of Muslims and Traditionalists using a modern method of contraception were respectively 14.5% and 8.8%. Inferential statistics, however, showed that these differences are not significant ($X^2 = 1.395$, P > 0.05).

The relationship between work status and modern contraceptive use was very significant ($X^2 = 1.395$, P < 0.05). While 35.2% of women working in the formal sector were using modern contraceptives, only 9.0% of those working at home were using modern contraceptives. The findings also show that there is no significant relationship between number of living children and modern contraceptive use ($X^2 = 0.832$, P > 0.05). On the other hand, the use of a modern method of contraception varies significantly by place of residence ($X^2 = 15.906$, P < 0.05). The proportion of urban women using a modern method was more than two times that of rural women (20.7% vrs 9.1%).

relationship The between spousal communication and modern contraceptive use was also investigated in this study. About 13.2% of women who had not discussed family planning with a spouse in the past year were using a modern method. In contrast, 24.6% of those women who had discussed family planning with a partner in the past year were using a modern method. Differences here are significant ($X^2=15.833$, P < 0.05). This is in consonance with the assertion that spousal discussions on fertility regulation tend to result in stronger desire to use contraceptives^{30, 31}.

The proportion of women using a modern method was 17.5% among those approving of family planning, compared with 5.2% among those who did not approve. These differences are significant ($X^2 = 9.478$, P < 0.05). Similarly, the proportion of women using any modern method was 46.9% among those who believed their partners approved of family planning. On the other hand, only 5.9% of women whose partners did not approve of family planning were using a modern

method of contraception. It was revealed during the in-depth interviews that women in this latter group were mostly using contraceptives at the blind side of their partners. Some of these women were scared that their partners may beat them, if they see them use modern contraceptives. For instance, when asked if her husband is aware that she uses contraceptives, a 41 year old mother of five exclaimed:

Eii how can I tell him about this? He will beat me if he gets to know that I am using medicines to avoid pregnancy. I go to the clinic every three months for the injection but he does not know of this (Ama, 12 September, 2011).

Choice of Modern Contraceptives

Information on the type of modern contraception methods being used in any society is important not only for marketing purposes, but also for addressing the factors that make some methods unpopular.³² In this research, therefore, the women who were using modern contraceptives at the time of the survey were asked to state the methods that they were using. In response, a few women explained that they were using more than one method at the same time. For instance, some young unmarried women reported that they were using injectables to avoid premarital pregnancy, but they also sometimes used condoms to prevent sexually transmission diseases, especially when dealing with new partners.

In all, the most commonly used modern method among the respondents was injectables (5.4%, n=34), followed by pill (4.6%, n=29), male condom (4.1%, n=26), and implants (1.1%, n=7). Less than 1% of women were using each of the rest of the methods. Most of the women explained during further interviews that they preferred injectables because of convenience. Some women also explained that they preferred injectables because the method can be used at the 'blind side' of their husbands.

A critical analysis of the data collected from the women and key informants revealed that marital status also has some effects on the choice of methods of contraception. While married women were more likely to use non-barrier methods such as injectables and the pill, sexually active unmarried women tend to use condom for the dual purpose of fertility control and prevention of HIV/AIDs infection. One other reason why unmarried women tend to use condoms is the fact that some of these young women do not keep modern contraceptives at home. Consequently, they may just rush to any pharmacy to buy condoms for casual use. The following statement by a 17 year old respondent demonstrates this:

I can't keep any contraceptive at home. My mother will insult me, if she sees something like that in my bag. It is my boy [male partner] who has been going to the shop to buy some condoms, if we want to have fun. I told him to keep some so that he wouldn't be required to rush to the shop each time we want to meet, but he is also scared of keeping condoms in his room. He told me that he will be in trouble, if his father sees it (Akuyoe, 25 August, 2011).

Thus, given that sexual relationship among teenagers is generally abhorred by society, they have to keep their relationships from their parents, and this means that they cannot keep modern contraceptives at home. On the other hand, married women are less likely to use condoms because of the perception that condoms are only used in illicit sex to prevent HIV/AIDS infection. The following response by a 31 year old married woman throws more light on this wrong perception:

I am not a prostitute. As a married woman, I can't go to any drug store to buy condoms. It will be a disgrace because it means I am cheating on my husband. ... If I see condoms with my husband, I will conclude that he is seeing some prostitutes somewhere (Soyoe, 27 September, 2011.

elsewhere, argued these kinds misconceptions about the use of condoms are products of the increasing emphasis on the use of condoms for controlling HIV/AIDS^{31, 33} As shown in the following statement by a drug seller in one of the pharmacists, most people feel shy to buy the condoms because of the wrong notion that it is only prostitutes that use it:

It is still very difficult for both women and men in this area to buy condoms from this store [pharmacy], especially when there are other people here....Instead of coming here to buy condoms, some of them will write it on a paper and give it to children to come and buy it for them.

The data from this study also suggest that long term modern methods were rarely used by the study participants. One major reason for this is the fact that some of the women fear that long term methods such as sterilisation and implants are associated with undesirable side effects. A number of women also have not actually planned their family sizes. Consequently, they prefer to use hormonal methods for birth spacing. Indeed, only 17.34% (n=17) of the women who were using modern contraceptives indicated that they were using a method for birth stoppage. The rest were mainly using modern contraceptives for birth spacing.

Use of Traditional Methods of Contraception

The data gathered shows that traditional methods were also being used by a significant proportion of the women. About 22.4% (n=141) and 13.2% (n=83) of the women were using rhythm and withdrawal methods respectively. Another 2.7% (n=17) of women were using postcoital douching with water and vinegar. Interestingly, a few women also explained that they sometimes use the 'position of the man' to prevent unwanted pregnancy:

If I don't want to be pregnant, then I make sure that I lie on him instead of him being on me...This method once failed us, but it is still than using some medicines [contraceptives] that will later give me some diseases (Akumah, 12 September, 2011).

A few young girls also explained that they can prevent conception by 'jumping several times just after having sex'. This, they believe, ensures that the semen does not go down the female reproductive system to cause conception. While some women were using only the traditional methods, some of them were actually using traditional methods to supplement the modern methods. For instance, some of the women who reported using postcoital douching with water and vinegar said that they normally used the method when they did not have pill or condom but were pressurised by their partners to have sex. Some of the women stated that they prefer to use the traditional methods because of fears that the modern methods would give them health problems:

My baby is eight months old and I want to have the second one when he is three years. The nurses have advised me to use some of their medicines [modern contraceptives] for birth spacing, but I fear that these white man [western] medicines may affect my ability to have more children in the future. My husband also shares the same fears so we only use the withdrawal and rhythm methods now (Danje, 27 August, 2011).

Some rural women also stated that they were using traditional methods because it is difficult and expensive for them to travel to the urban centres, where clinics are located, for modern contraceptives. They explained further that they basically did not spend any amount of money in the use of traditional methods.

Reasons for Non-use of Modern Contraceptives

The 531 respondents who were not using any modern method of contraception were asked to state the reasons why they were not using any method. While most respondents gave only one reason for not using a method, some respondents mentioned more than one reason.

 Table 3: Reasons for not using modern contraceptive

| Reason for not using | Frequency | Percent |
|------------------------|-----------|---------|
| modern contraceptives | | |
| Fear of side effects | 201 | 37.9 |
| Wants more children | 174 | 32.8 |
| Partner opposed | 94 | 17.7 |
| Respondent opposed | 73 | 13.7 |
| Inconvenient to use | 62 | 11.7 |
| Religious prohibitions | 46 | 8.7 |
| Other reasons | 24 | 4.5 |

^{*}Total exceeds 100% because of multiple responses

As shown in Table 3, the most common reason for not using modern contraceptives is fear of side effects, cited by 37.9 % of the 531 women. There were some specific side effects associated with specific methods. For instance, some of women mentioned that the pill gives hypertension, while others believe that male sterilisation makes men impotent. Some women also said that the use of modern contraceptives leads to deformed children and bareness. Most women think the condom has relatively fewer side effects, but there were concerns that it robs them of the satisfaction from sex. Similar views were expressed by women in other localities in Ghana³³. A few women also reported that they have heard that the frequent use of the condom gives lower abdominal pains and urinary tract infections. It is clear that these side effects are mainly based on misconceptions based on the so called 'hearsay':

I know the medicines [modern contraceptives] are good for preventing unwanted pregnancies but I am afraid to use them... I have heard that these medicines can give hypertension, fibroid and some other diseases. So I have decided not to use them at all. What is more important than my health? (Yitati, 15 September, 2011).

The family planning nurses and the midwife interviewed in the area acknowledged that, like other medicines, modern contraceptives have a few side effects. However, they believed that these side effects are often exaggerated by women and their partners. The health professionals also reported that they have been trying to advise the women on the methods that will be good for them, but women tend to listen to their own friends more than the health professionals: "When we listen to their cases and advice that this contraceptive method will be good for them, they do not accept it until a friend tells them she has used it and there was no side effect" (Gifty, midwife, 29 August, 2011).

Apart from side effects, the desire for more children is another factor that prevents some women from using modern contraceptives. In fact, about 32.8% of women who were not using modern contraceptives stated that their desire for more children is the main reason for not using any modern method. Given the fact that the population

was young, it is not surprising that such a proportion of women cited desire for more children as a reason for not using modern contraceptives. However, some of these women stated that they would like to have another child after two years. Yet, they were not using any modern method. Asked why they were not using a modern method for birth spacing, some of these women stated that they were scared that once they use any modern method, they would not be able to give birth again. As stated already, given these fears, traditional methods such as withdrawal and periodic abstinence were rather widely used by these women for birth spacing. Their desire to use the traditional methods in spite of their relative ineffectiveness partly stems from the fact that most of these women just want any number of children. Hence, the failure of any traditional method to achieve the desired spacing is not a serious problem. As a 35 year old mother of 6 put it:

Which is a better choice? To use a reliable method that will harm me or to use an unreliable method that may fail? I prefer the second. If a method fails me and I become pregnant, I will still give birth to a loving baby (Yaa, 10 August, 2011).

As shown in Table 3, another 17.7% of women were not using any modern method because their partners were opposed to the use of the modern contraceptives, while 11.7% were not willing to use any method because they themselves were opposed to the use of modern contraceptives. Some women also cited other reasons, such as religious prohibitions, high cost of contraceptives, and infecundity as the reasons for not using modern contraceptives.

Discussion and Conclusion

The results of this study show that even though modern contraceptive knowledge among women in the Asuogyaman District of Ghana was very high, only about 16% of them were using a modern method of contraception at the time of this study. The relationship between age and modern contraceptive use was statistically insignificant. The proportion of sexually active unmarried women using modern contraceptives was higher than the proportion of married women using any modern method. This result was unexpected, given the assertion in the literature that married women are more likely to use modern contraceptives than their unmarried counterparts⁶. Most married women in the study area were not using modern contraceptives because of the belief that the reproduction of children is the main purpose of marriage. In contrast, a relatively higher proportion of sexually active unmarried women were using modern contraceptives to prevent premarital pregnancy.

The findings of the study support other studies that have reported a positive correlation between female education and the use of modern contraceptives^{20, 21} This relationship may be explained by the fact that a highly educated woman is more likely to be aware of the benefits of family planning. The education-contraceptive use connection can also be explained by the Theory of Ideation, which emphasises cultural factors as the primary determinants of fertility change and for that matter modern contraceptive use. Ideational influences reflect changes in the ideas, values, norms, and are subjected to change with time. As societies acquire western value system with associated characteristics like smaller family size and cohabitation outside marriage, fertility is likely to decline³⁴. In this study area, the desire for more children has been part of the traditional agrarian society, and this explains why using women were not modern contraceptives to reduce fertility. However, there is enough evidence to suggest that ideational changes are occurring among educated women. It is therefore not surprising that there is a significant positive relationship between level of education and modern contraceptives use. These findings lend credence to the argument of Caldwell (1982)³⁵ that when large segments of the population are educated, changes in traditional norms and values associated with large family sizes are likely to occur.

The findings of this study also make important contributions to the debates on the relationship between number of living children and modern contraceptive usage. In the literature, increased number of children has been linked to increased modern contraceptive use¹⁶. However, this author did not find any significant relationship between number of living children and modern contraceptive use. A number of factors may explain this trend. First, some of the women with many children stated that they were using traditional methods because of fear of side effects. Some women with many children were also not using any modern method because of spousal disapproval.

It has also been shown that short term hormonal methods, notably injectables and pills, were more commonly used than long term methods of contraception. Marital determines the choice of method. While married women were more likely to use injectables and for fertility control, their unmarried counterparts were more likely to use condom for regulating fertility and for controlling the spread of HIV/AIDS. The use of traditional methods of contraception was also higher than expected. About 22% and 13% of the women were using rhythm and withdrawal methods respectively.

Majority of the women who were not using modern contraceptives stated fear of side effects as the main barrier. These fears were largely based on wrong perceptions that have passed through informal channels, such as friends. The reported magnitude of side effects also results from the fact that most people do not consult any health official before using modern contraceptives. This is a common problem in Ghana where self medication is high. For instance, even though it is expected that the use of the pill must be monitored by health officials, only 59% of pill users in Ghana consult health officials before using the method³² A family planning nurse stated that even though they have been trying to dispel such health concerns, most of the women tend to rely more on the wrong information they get from their friends.

It is also worrying that a significant proportion of women were not using modern contraceptives because of partners' disapproval. This observation supports what has been noted by some researchers that husband's approval strongly influence contraceptive use among women in Africa^{22, 36}. Elsewhere in Ethiopia, a study by Hemmings et al (2008) has also shown that decisions regarding number of children and contraceptive use are dominated by husbands and subsequently

influence the attitudes of women towards the use of modern contraceptives³⁷. This means that family planning nurses must direct their messages towards men and women, rather than concentrating on only women.

It has also been demonstrated in this study that certain institutional factors have negative effects on modern contraceptive use in the study area. For instance, one reason why modern contraceptive use was much lower in rural areas than urban areas is the fact that the supply of modern contraceptives is still very poor in rural areas. Some of the rural women who were interviewed in this research stated that they were required to travel for more than 60 kilometres to the nearest clinic to get modern contraceptives. This buttresses the point made by some researchers that individuals' contraception behaviour could be influenced by state policies as well as economic factors^{38, 39} As Eschen and Whittaker (1993)⁴⁰ noted elsewhere, therefore, government policy in making modern contraceptives available and affordable strongly help promote modern contraceptive practice in Ghana. Although the government subsidizes contraceptives obtained from clinics, the cost of modern contraceptives obtained from private pharmacies is unaffordable to very poor women. Again, the fact that some rural women would have to travel to clinics far away means that cost in terms of time and distance must also be addressed. In this regard, the government can promote modern contraceptive use by ensuring that family planning nurses are posted to every locality to provide family planning services.

While family planning campaigners tend to emphasise the reliability of modern contraceptives for controlling fertility, this study has shown that a significant proportion of Ghanaian women are more concerned about the side effects of these contraceptives. In this regard, interventions that seek to promote modern contraceptive use among women can only achieve desired goals if the women are adequately educated on the side effects of the contraceptives. Programs that seek to increase partner's approval could also be helpful to increasing modern contraceptive use in Ghana. Finally, given that the women rely more on friends for information on the efficacy and side effects of modern contraceptives, the use of peer educators

will be useful for promoting modern contraceptive use, especially among less educated women in Ghana.

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