The same contraceptive method but different stories: A comparative qualitative study of the misconceptions associated with contraceptive use in southern and northern Ghana.

> Philip B. Adongo<sup>1</sup> James F. Phillips<sup>2</sup> Placide Tapsoba<sup>3</sup> Allison Stone<sup>2</sup> Philip Tabong<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> University of Ghana School of Public Health <sup>2</sup> Columbia University Mailman School of Public Health <sup>3</sup> The Population Council

# Abstract Background

High contraceptive use rates have been reported to positively impact maternal and child health. Despite these benefits, evidence from Ghana shows a generally low contraceptive acceptance rate, with many possible causal factors. This descriptive qualitative study was designed to elicit information on the nature and form of misconceptions associated with contraceptive use among residents in northern and southern Ghana.

# Method

Twenty-two focus group discussions (FGDs) with married community members were carried out in northern and southern Ghana. Community Health Officers, Community Health Volunteers, and Health Care Managers were purposefully selected and interviewed using a semi-structured interview guide. Focus group discussions and in-depth interviews were recorded digitally, transcribed verbatim and analyzed using QSR Nvivo  $10^{\circ}$ . Trend and comparative analyses were carried out to compare and contrast the findings in northern and southern Ghana.

# Results

Results indicate that misconceptions associated with the use of contraceptives were widespread but not very different in northern and southern Ghana. Contraceptives were perceived to predispose women to both primary and secondary infertility, uterine fibroids and cancer. As regular menstrual flow was perceived to prevent uterine fibroids, contraceptive use-related amenorrhea was believed to make acceptors vulnerable to uterine fibroids and cervical and breast cancer. Contraceptive acceptors were stigmatized and ridiculed as promiscuous. Condom use was generally believed to inhibit erection and therefore capable of making a man impotent in northern Ghana whilst in southern Ghana condom was perceived to reduce sensation and therefore not conducive to sexual gratification.

# Conclusion

The study indicates that misconceptions associated with contraceptive use were widespread in both northern and southern Ghana. This study highlights lack of accurate information underlying many fears and misconceptions in both southern and northern Ghana. Communication aimed at providing accurate information to address misconceptions is an important step toward dispelling these barriers.

Key Words: Misconceptions, Contraceptives, Northern Ghana, Southern Ghana,

### Background

Globally the burden of sexual and reproductive health remains considerable especially in developing countries. Estimates suggest that sexual and reproductive conditions account for 18.4% of the global burden of diseases and 32.0% of the burden of diseases among women who are between 15-44 years of age (WHO, 2008). Contraception and family planning are integral components of reproductive health and have demonstrated to have positive effects on the health of women. Family planning promotion has potential benefits of reducing poverty, maternal and child mortality (Cleland *et al.*, 2006). Family planning protects women from unwanted pregnancy thereby saving them from high-risk pregnancies or unsafe abortions. Family planning is critical for the health of women and their families, and it can accelerate a country's progress toward reducing poverty and achieving development goals. Because of its importance, universal access to reproductive health services, including family planning, is identified as one of the targets of the United Nations Millennium Development Goals (UN, 2005). The World Health Organization (2000) maintained that family planning enable couples and individuals to decide freely the spacing of their children, and to have the information and means to do so.

A report by United Nations Family Planning Agency indicate that only about 20% of African women use modern contraceptives, and in some regions of the continent the rate of usage is under 5%. Usage varies according to wealth, education, ethnicity, religion, and rural-urban location (UNFPA, 2006). Family planning can reduce the number of deaths among women by reducing the number of women who are at risk by averting unintended pregnancy, which accounts for about 30% of all birth in Sub-Saharan Africa (WHO, 2010). A study in Ghana revealed that majority of the unplanned pregnancy are often aborted through unsafe methods which may result in complicated requiring higher level medical interventions (Adongo *et al.*, 2013). This therefore has implications in Ghana attaining the Millennium Development Goals four (4) and five (5) that are concerned with improving child and maternal health respectively. In Ghana, 16% of births are unwanted, 40% are unplanned and 24% mistimed (GSS/GHS/ ICF Macro, 2009). It is estimated that maternal deaths would decline by an estimated 25-35% if contraception were accessible and used consistently and correctly by women wanting to avoid pregnancy (Lule, Singh & Chowdhury, 2007).

Contraceptive methods may be temporary or permanent. Temporary methods include periodic abstinence during the fertile period, coitus interruptus (withdrawal), and naturally occurring periods of infertility during breastfeeding and postpartum amenorrhea. Temporary contraception can also be achieved with the use of reproductive hormones such oral pills, long-acting injections, implants, placement of a device in the uterus such as copper-bearing and hormone-releasing intrauterine devices, inserting a barrier that prevents the ascension of the sperm into the upper female genital tract of the woman. The barrier methods include condoms, diaphragms, and spermicides. Permanent methods of contraception include male and female sterilization (Sadana, 2002).

The various contraceptive methods can further be categorized as barrier, chemical, natural or surgical (Weeks, 2002). The barrier contraceptives are the male and female condoms and the cervical cap. Chemical contraceptives are mostly hormonal based and may be taken orally, or in the form of injections, implanted under the skin or inserted vaginally. Oral contraceptives have emerged as a generally widely used method of contraception worldwide (Weeks, 2002). Oral Contraceptives act mainly by inhibiting ovulation. Progestagen-only pills (mini-pills) act mainly by altering cervical mucus to reduce sperm penetration and the endometrium to reduce implantation (Scott & Glasier, 2006). Depot injections of progestagen have a strongly inhibitory effect on ovulation. Noresterat is given every two months (Scott & Glasier, 2006). However, sub-dermal contraceptive implants deliver a continuous low dose of progestagen from polymer capsules or rods levonorgestrel implant prevents sperm transport through the female genital tract and etonogestrel causes anovulation (Scott & Glasier, 2006). The intrauterine contraceptive devices (IUCD) are placed within the uterine cavity; they may contain material such as copper as in copper T or hormones as in the fourth generation hormone-releasing devices, which were introduced in 1976. The hormone releasing IUCD is able to solve the menorrhagia problem, which is associated with previous IUCD's. Levonorgestrel acts on the endometrium to cause atrophy and it alters the characteristics of the cervical mucus (Scott & Glasier, 2006).

There are reports of adverse reactions to some contraceptive methods by some users. Mild and transitory disturbances are common in the first cycles of hormonal contraception and usually disappear after this period, without any problem (Moreau, Trussell, Gilbert Bajos & Bouyer, 2007). Some studies have also reported an association between oestrogen and breast cancer especially when given in the form hormone replacement therapy for postmenopausal women. A study has reported an increased risk of cervical cancer in HPV-DNA positive women if they use oral contraceptives for longer than 5 years (Moreno *et al.*, 2002). However, current knowledge suggests that oral contraceptive use is one of the weakest risk factors for breast cancer (Casey, Cerhan & Pruthi, 2008).

Despite these minor reactions, several other reasons and barriers are often been given for the non-use of contraceptives. Reasons for inconsistent contraceptive use are not easily characterized, as they are as diverse as they are complex (Davies, 2006). Some identified barriers to effective contraceptives use are lack of concern over the possibility of pregnancy, perceived invulnerability to pregnancy, and forgetfulness (Kaufman *et al.*, 2003). Low socioeconomic status has also been identified as a barrier to the use of contraceptives (Frost *et al.*, 2004). In another study institutional policy on contraceptives, socio-cultural norms, poor access regarding location were cited as barriers in contraception (Shoveller *et al.*, 2007). In Uganda for example, misconceptions about family planning and the effect of contraceptives on women's health, future fertility, and birth outcomes were cited as main reasons for nonuse (UBOS and ORC/Macro, 2001).

Contraceptive use in West Africa has traditionally been lower than expected, despite repeated efforts and attention from aid programmes and international conferences (Foley, 2007). It was projected in

2004 that Ghana will achieve a Contraceptive Prevalence Rate (CPR) of 28% by 2010 and 50 per cent by 2020. The attainment of these goals was recognized as integral to Ghana's national strategy of economic development as outlined in the Vision 2020 Plan of Action (MOH, 2004). However, records available indicate that the current contraceptive acceptance rate in Ghana is 23%, five percentage points below the expected projection for 2010. Several factors may be responsible for the inability of Ghana to achieve this target. Barriers in contraceptive use have often been cited as one of the reasons for Ghana's inability to achieve fertility regulations (Adongo *et al.*, 2013). Understanding the types of barriers to fertility regulation is important for providing programming guidance in relation to the provision of family planning services. This qualitative descriptive study was therefore designed to elicit from community members some of the misconceptions in southern and northern Ghana. Knowing the misconceptions in various parts of Ghana is important to design programme targeting this misconceptions.

### Methods

#### **Ethics Statement**

Ghana Health Service Ethics Committee approved the protocol for the study. Participants in the study gave either written or verbal consent as an indication of their willingness to participate in the study. Verbal consents were recorded digitally prior to the interview and they were made to recommend an independent person to serve as witness to the consenting process. Participants who gave written consent were made either to append their signature or thumbprint an informed consent form as an indication of their consent to take part in the study. As a measure of ensuring confidentiality and anonymity of participants, codes were used to identify research participants in both in-depth interviews and focus group discussions. In addition, the exact communities where participants were recruited have not been reported in this manuscript to further ensure anonymity.

#### **Study Areas**

The study was conducted in two districts each in northern and southern Ghana. Sefwi Bibiani-Ahwiaso Bekwai (SBAB) district in Western region and Komenda-Edina-Eguafo- Abrem (KEEA) Municipal area in the Central region of Ghana were the southern zone whereas in northern Ghana, the study was conducted in the Kassena Nankana East (KNE) and West (KNW) districts in the Upper East Region of Ghana. The 2010 Population and Housing Census reported that 123, 272 and 144, 705 as the populations for SBAB and KEEA respectively. The same report indicated that the populations for KNE and KNW as 109, 944 and 70,667 respectively (GSS, 2011). The Ghana Demographic and Health survey report that the contraceptive prevalence for modern methods among married women between the ages of 15-49 years as 14% for the Upper East Region, 17% for Central Region and 13% for Western Region (GSS/GHS/ ICF Macro, 2009). KNE and KNW were selected because of an ongoing community health family planning model, which is being piloted to determine the impact of this programme on fertility in northern Ghana. SBAB and KEEA were also selected because they were currently receiving support from a USAID grant through population council of Ghana to implement Community-based Health Planning and Services (CHPS). The CHPS strategy

among others aims to make reproductive health accessible to community members and family planning is a component of the CHPS strategy.

### Study design

This was a descriptive qualitative study using in-depth interviews, focus group discussions and expert opinions. This strategy was employed to elicit in-depth information on misconceptions regarding the use of contraceptives in the selected districts and the reasons for those misconceptions.

### **Data collection**

Semi-structured in-depth interview guide were designed by the researchers and used to collect the data. The semi-structured interview guides were designed in English and translated into Akan, Kasem and Nankana by language experts using back-to-back strategy. In back-to-back strategy, independent language experts first translated the primary instruments in English into the various local languages. Another group of language experts proficient in both English language and the local languages were made to retranslate the versions in the local language back to English. The two versions were then compared to ensure consistency. Where inconsistency emerged, they were resolve through a discussion by the language experts in addition to an independent person acting as a referee. Local research assistants were recruited, trained, and deplored to their linguistically competent communities. The training was a combination of classroom work and mock interview exercises.

Twenty two focus group discussions were held in both northern and southern Ghana with community members; Eleven FGDs for male groups and eleven with female homogenous community members. All participants were married and had children. Focus group discussants consisted of 6-8 people seated in a semi-circle with the moderator and note-taker sitting in front of the discussants. During FGDs, each participant was given the opportunity to give his or her contribution on a particular question posed by the moderator before proceeding to another question and in many instances, there were consensus in responses. The sampling of the respondents was carried in a way to ensure that both urban and rural residents were fairly represented in all the study areas. In addition, Community Health Officers, Volunteers and Health Managers were purposefully recruited and interviewed using a semi-structured interview guide. Both IDIs and FGD lasted for between 30-90 minutes and were conducted within communities.

## Data processing and analysis

Both FGDs and IDIs were audiotaped using a digital audio-recorder, and complemented with written interview notes on paper. The study coordinators crosschecked all the data received for completeness and accuracy on a daily basis. Content analysis was used to analyze the qualitative data based on emerging themes and sub-themes in line with the study objectives. The researchers designed an initial codebook, which was discussed and accepted by all researchers. Based on the codebook, coding of the data was carried out using QSR Nvivo  $10^{\circ}$ , a computer programme for analyzing qualitative data sets. Trend analysis of the FGDs and IDIs for each topic was used in identifying the major issues for each of the study themes and sub-themes. The trend analysis was also employed to

facilitate comparing and contrasting of the views of participants within and among the different study areas. Descriptive narratives supported by illustrative quotes are used in presenting the results.

### Results

### Contraceptive use and changes in weight

The majority of women who use contraceptives do not gain or lose weight, however this was a main misconception found in this study. Weight changes occur naturally as life circumstances change and as people age. Because these changes in weight are so common, many women misconstrue that and attribute these changes in weight to the use of contraceptives. It is however important to state that a few women experience sudden changes in weight when using pills. These changes reverse after they stop taking the pills. Both weight gain and loss were mentioned in northern and southern Ghana, however weight loss was more pronounced in southern Ghana than weight gain than weight loss.

"My little sister went to do the implant and she changed drastically, that is at first, she was fat but after doing the family planning she grew lean. Because of what happened, my mother advised her to stop the FP and as soon as she stopped using the FP, she regained her weight back"-(woman, FGD, southern Ghana).

"Many people say it brings a lot of problems to them especially when it is incompatible with their blood and body. Some also say that it makes them put on a lot of weight"-(woman, IDI, northern Ghana).

Both weight gain and loss were perceived as undesirable for women as it had the tendency of causing marital instability.

"They think that if you do family planning and grow very fat your husband will not like you again and will go out for another woman"-(CHO, IDI, northern Ghana).

### **Contraceptive use and cancers**

Associating contraceptive use and many forms of cancer in both males and females emerged as a well-entrenched theme. In both southern and northern Ghana, community members generally perceived that the use of contraceptives predispose women to cancers. In southern Ghana, the use of contraceptive was perceived to predispose women to uterine fibroids (myomas). This belief was deeply rooted in the perception that regular monthly menstrual flow could prevent a woman from getting uterine fibroid. Hence since the use of hormonal based contraceptives resulted in amenorrhoea (absence of menstrual flow), the blood, which should have been discharged monthly eventually crystallizes to form a uterine fibroid.

".... I know another lady who did it (FP) and stopped menstruating, later on it developed into fibroid and ended up in surgery"-(man, FGD, southern Ghana).

"Yes, they have misconceptions about family planning; when you do it (FP) blood will clot in your womb, so that it would turn into fibroid... they believe that a Jadelle that is implanted, can penetrate through your heart and go somewhere that can result in death. And the IUCD, some also think that when you insert it, IUCD would penetrate into your uterus and cause cancer"-(CHO, IDI, southern Ghana).

Apart from the perception that the use of contraceptives could predispose a woman to uterine fibroid in southern Ghana, in northern Ghana, the use of contraceptive was further perceived to be associated with other type of cancers such as cervical and breast cancers.

"The community members perceive that when a woman uses IUD with time it moves from the original place to another part of the body to cause cancers in various parts of your body such as the uterus and breast"-(CHO, IDI, northern Ghana).

Some respondents even attributed the high incidence of cancers in present times to the use of contraceptives. To respondents, their ancestors did not get cancers because they never used contraceptives. Though there is no scientific evidence to support the claim, respondents in northern Ghana general perceived that the incidence of various forms of cancers were high in southern Ghana than in northern Ghana as a result of high contraceptive prevalence in southern Ghana.

"Our ancestors were not getting cancers because they did not do family planning"-(man, IDI, northern Ghana).

"So you see when our women go to the south, because they do FP there, they end up getting cancers than the women here in the north"-(man, IDI, northern Ghana).

## **Traditional Values**

Traditional values still play a major role in contraceptive uptake and adherence especially in northern Ghana and this emerged as a well-entrenched theme in northern Ghana. Because community norms and practices need to be understood for project interventions to be successful, respondents were asked to describe the norms and practices that might affect the uptake of contraceptive services in the community. The traditional believe that contraceptive use was synonymous to abortion emerged as a drawback to contraceptive acceptance. These traditional myths are more pronounced in northern Ghana as compared to southern Ghana.

"It is believed that traditional people should not use contraceptives. You need to give birth to the number of children the gods have given to you"-(man, IDI, northern Ghana).

Another area of concern as a traditional barrier to the use of contraceptive was the desire to beget more children especially in northern Ghana. Generally, respondents in northern Ghana alluded to changing perception of high fertility rates as ideal and acceptable in the community however; this still emerged as a practice in northern Ghana. The belief that using contraceptive could offend the gods and ancestors is a misconception that prevents many couples from accepting contraceptives in northern Ghana.

"Some people hold the belief that when you use contraceptives you will offend the gods but this perception is gradually fading off"-(man, IDI, northern Ghana).

### Perception of contraceptive use, heartaches and illness

A number of participants in both southern and northern Ghana cited shifting or expulsion of Intrauterine Contraceptive Device (IUCD) or implants travelling to other parts of the body. Community members perceive that implants could dislodge and get missing in the body through the blood stream and move round the body to cause discomforts in various parts of the body.

"We have heard about people complaining that they are not feeling well or they frequently fall sick when using contraceptives"-(woman, FGD, southern Ghana)

"I personally did FP, I went for one month injection and I was continuously getting sick, I really suffered during that time so I stopped. I am not someone who usually gets sick but it was not so during the time I was using the FP method"-(woman, FGD, southern Ghana)

"Some people say that when they use the family planning, they feel dizzy"-(woman, FGD, southern Ghana)

"Like the way my sister is saying, for me what I heard is that when some people do it they bleed and feel dizzy. For me, I have not done some before but these are the kind of things that I hear"-(woman, FGD, southern Ghana).

"In the community people are speculating about the side effects of some of the FP products, some say they get excruciating pain, others say they suffer in their heart and also dizziness which could let you faint, others also say they often suffer from high blood pressure when they use contraceptives"-(CHO, IDI, northern Ghana).

Feeling of dizziness following the use of contraceptive could be a genuine complaint which will require further investigation and counseling. In the absence of professional guidance, these adverse effects may be amplified and over-generalized in the community as an effect all contraceptive users experience. Closely related to this, is the perception of vomiting after sex, which are attributable to the use of contraceptive among communities in northern Ghana.

"Others say that they get stomach related problems. Some say that when they practice FP and have sex with a man, they become nauseated and vomit"-(CHO, IDI, northern Ghana).

### Contraceptive use and infertility

There is no scientific evidence linking use of contraceptive to infertility. However, this is a widely held perception and emerged as a well-entrenched theme in both southern and northern Ghana. Communities in northern Ghana generally perceived that contraceptive use was inappropriate for people who have not given birth. It was generally perceived that the use of contraceptives by such people could lead to permanent childlessness, as the individual will lose her fecundity. Though associating contraceptive use to primary infertility did not emerged as well-entrenched theme in southern Ghana, associating contraceptive use to secondary infertility was mentioned in both southern and northern Ghana.

"Some also say if you do it (FP) for a long time you will not give birth but if you do it for a short period and you want to get pregnant you really suffer"-(woman, FGD, southern Ghana)

"Yes, they (misconceptions) are very common here because most of them have in mind that when you do it (FP), you will not give birth again. With depo, when you do it, you do not bleed (menstruate), because you do not bleed they think the blood accumulates in your womb and will give you problems in future making it impossible for you have child"-(man, IDI, northern Ghana)

"With the IUCD, you know that one passes through your vagina, some people think that it might shift to your womb and that way you will not be able to give birth again"-(CHO, IDI, northern Ghana).

With the perception of the association between contraceptive use and primary infertility in northern Ghana, contraceptives were therefore perceived as unsuitably for women who have never given birth if they were concerned about having children in future.

"...if you have not given birth before, you do not have to use contraceptive as you will not be able to give birth in future"-(CHO, IDI, northern Ghana).

*"FP is not good for people who have not given birth before as they may not be able to give birth in future"-(man, IDI, northern Ghana).* 

## Perception of the effects of contraceptives on physical and intellectual ability of children

Evidence shows that the use of contraceptives does not cause birth defects and will not otherwise harm the foetus if woman become pregnant while on contraceptives or accidentally start to take it when the woman is already pregnant. However, in northern Ghana the use of contraceptive was believed to be associated with birth defects. To community members, women who have used contraceptives are more likely to give birth to children with birth defects or children with intellectual impairments.

"Some people believe that if you use contraceptive, you will give birth to an abnormal child"-(man, IDI, northern Ghana).

"Apart from the bleeding, others are also saying that when you are on it (FP) for a long period, when you become pregnant the child will not be intelligent, the child will not be that good in school and the child will always fall sick"- (CHO, IDI, northern Ghana).

In this community, they believe that people that use contraceptive give birth to children that are intelligent"-(man, IDI, northern Ghana)

However, linking contraceptive use to birth effects was not common in southern Ghana as it was neither mentioned in IDIs nor FGDs.

## **Contraceptives use and promiscuity**

Associating the use of contraceptives to a promiscuous lifestyle emerged as a major theme, more predominantly in southern than in northern Ghana. The general belief in southern Ghana is that married women who want to engage in extramarital affairs employ the use of contraceptives as a strategy to prevent unplanned pregnancies.

"Women who want to cheat on their husbands (engage in extramarital affairs) are the people who use contraceptives, so that when their husband's are not around, they can be sleeping with other men after all they cannot become pregnant for the husband to detect any extramarital affairs"-(man, FGD, southern Ghana).

"....Family planning makes women to go out to have sex with other men, so they would not allow their wives to do it"-(CHO, IDI, northern Ghana).

With this perception, men will resist any attempt by their wife to use contraceptives as this may indicate an endorsement for your wife to engage in extramarital affairs in your absence.

## Perception of condom use and penile erection

The effect of condom use on penile erection is not evidenced in science yet respondents in northern Ghana believed that the use of condom prevent them from erecting and sustaining an erection. The use of condom, respondents believed could lead to impotency for men especially when used frequently during sex and over a long duration.

"They say that when they use the condom, their penis is not able to erect"-(CHO, IDI, northern Ghana).

"As for the use of condom, we do not have to talk about it, it is like eating a toffee with the wrapper...it is even difficult to sustain an erection when you are using condom"-(man, IDI, northern Ghana).

"Most of men in this community do not like using condom because they say it is always too tight on their penis making it difficult for them to erect"-(CHO, IDI, northern Ghana).

However, in southern Ghana, the use was believed to reduce sensation for the man thereby reducing the pleasure in sex.

"As for condom, let not talk about at all, you will not enjoy sex if you use condom"-(man, FGD, southern Ghana).

### Vasectomy, sexual and physical weakness

Vasectomy has no effect on both physical and the sexual ability of men. You can have sex the same as before and you will ejaculate normally. However, this emerged as a misconception in southern Ghana. To respondents in southern Ghana, vasectomy was capable of making a man both physical and sexually weak. The physical weakness respondents believed could make the man less productive therefore incapable of meeting the socio-economic needs of the family. This perception was firmly entrenched in the minds of both men and women in southern Ghana. Closely related to the perceived physical weakness associated with vasectomy is the perception of a reduction in the sexual ability of a man after vasectomy. This many respondents believed could lead to marital instability as it could make women to engage in extramarital affairs to the get the sexual gratification the man could no longer provide after vasectomy.

"Vasectomy will make the man weak and will not be able to perform very well his physical and sexual duties in the family"-(woman, FGD, southern Ghana).

"It is the women who do not allow their husbands to do it (vasectomy) because they believe that it (vasectomy) will make the man both physically and sexually weak"-(Health Manager, IDI, southern Ghana).

Knowledge level on vasectomy was generally low among respondents in northern Ghana and the procedure was perceived to be synonymous to castration in both southern and northern Ghana therefore inappropriate for a man.

### Discussion

This descriptive qualitative study was designed to explore the misconceptions associated with the use of contraceptives and to compare the similarities and differences in these misconceptions in northern and southern Ghana. From the study, it was clear that misconceptions associated with contraceptive use are still widespread among community members in both northern and southern Ghana. These misconceptions are therefore drawbacks to the advocacy to increase contraceptive prevalence in communities in Ghana. Contraception has been identified as an effective means of combating the problems of unwanted pregnancy and unsafe abortion (Adewole *et al.*, 2002). However, the study generally revealed the need for an innovative ways to dispel the misconceptions in the community. Majority of these misconceptions are spread by community members and are transferred to other geographical areas by people without in-depth knowledge on contraceptives. There is therefore the need for an increase in human resource with requisite knowledge on contraceptives.

prospective clients to switch to a different method when a particular method prove unsuitable, clients are compelled to rely on friends and family members for information, which in many cases may be shrouded with these misconceptions.

The fears and misconceptions in both northern and southern Ghana appear to be linked to undesirable outcomes in the use of contraceptives by some previous contraceptive users. One is related to the inability to fulfill the reproductive role such are begetting a child in the family or delays in return to fertility when contraceptives are stopped, which is problematic given the high value that is placed on children in the community. This is even more pronounced in northern Ghana where it is customary that a man's wealth is measured by the number of biological children he has. These entwined with severe social consequences of emotional strain in a relationship, fear of abandonment, and general community stigma fuel the misconceptions thereby making it difficult for prospective users. Early sexual and reproductive health education may be relevant to ensure that individual acquire knowledge early enough to be able to distil between misconceptions and adverse reactions for informed choices. Couple-based counseling is also highly recommended because of the role men play in the reproductive health decision-making process.

The perception of the association between contraceptive use and serious complications such as cancers or a birth defect would not only make it difficult for a woman to fulfill her reproductive role in a marriage, but also have perceived financial implications in terms of medical costs. In effect, women who cannot overcome fear of spousal abandonment or neglect in case of method complications may likely opt not to use contraception until their spouse agrees to it. A recent study in southern Ghana revealed that spousal consent was still very relevant in contraceptive uptake among women (Adongo *et al.*, 2013). Programs should therefore be designed to target men to discredit these misconceptions. A man who receives correct information on the use of contraceptives is more likely to positively influence his wife, and disabuse the myths.

If the use of the male condom is believed to prevent erection and subsequent impotence, it may as well be used as an opportunity to promote the use of female condoms. Previously launched female condom did not achieve the desired results because of low patronage (Naik & Brady, 2008) leading to the launch of the second-generation female condom. This myth has implications in the prevention and control of sexually transmitted infections (STIs) in Ghana. Condom use is one of the key strategies espoused by the National AIDS Control Programme (NACP) as a result of its dual protection against pregnancy and STIs. With this notion that condom use inhibits penile erection therefore poses a challenge to this strategy of preventing STIs. More education is required in this direction and reproductive health advocates should act upon this observation to strengthen campaigns in the use of the female condom as an alternative to male condom as it can also offer the dual protection against pregnancy and STIs. With correct and consistent use, the female condom is as effective as other barrier methods and has no known adverse effects or risk in health (WHO, 1997). A study in Tanzania also revealed that men indicated that the use of male condoms reduces

sexual sensations on the part of men (Ndenzako, 2001) and the finding was also observed in southern Ghana.

Oral contraceptives offer many non-contraceptive health benefits, including a decreased risk of bone loss, benign breast disease, pelvic inflammatory disease, ectopic pregnancy, and rheumatoid arthritis (Casey, Cerhan & Pruthi, 2008). However, these benefits are often overshadowed by the several myths that this study revealed. Though some studies have reported an association between oral contraceptive use and breast cancer where the use of oral contraceptive increases the risk of breast cancer, the relative risk has been reported to be very small (Casey, Cerhan & Pruthi, 2008). However, contraceptive use does not predispose women to uterine fibroid. The use of oral contraceptives has rather proved to be effective and prevent endometriosis, and cancers of ovaries and colorectal cancer (Casey, Cerhan & Pruthi, 2008).

Associating contraceptive use to promiscuous lifestyle especially for women poses another challenge to the crusade to increase contraceptive uptake. With this perception, many women who are willing to use contraceptive may desist from using contraceptive or may have to engage in concealed use. This calls for a restructuring of the contraceptive outlets. Institutionalized based delivery of contraceptive services may be inappropriate for communities who stigmatize the use of contraceptive. The findings of this study raises questions about continues use of contraceptives especially for women who husbands have travelled as there is the propensity to stigmatize a woman who is using contraceptives in the absence of husband as promiscuous. In previous studies, women have reported that their reasons for not using contraception are that their husband has travelled, or is away for work, and would be away for a long time. During this time, it would be considered socially unacceptable for a woman to use contraception (Gyapong *et al.*, 2003). This has implications on the reliability of data on continues use of contraceptives in Ghana as people who are using contraceptives may break in times when their partners are not available but may be captured as a continues user, however, further studies is required in this area.

### Methodological considerations

The authors used independent language experts to do the translations from the local languages to English and the translations were verified, however, it is still possible that some of the original words could have lost their meaning. To mitigate this weakness, in determining the themes, emphasis was placed on overarching themes present in the transcripts rather than specific words or phrases used by respondents. In northern Ghana, two districts from the Upper East Region of Ghana were selected, and it will therefore be necessary for future research to select districts in other regions of northern Ghana to give a fair representation of the cultural misconceptions present in the North.

### Conclusion

The study indicates that misconception were widespread in both northern and southern Ghana. This study highlights lack of accurate information sources as very pivotal in fueling the fears and misconceptions in both southern and northern Ghana. Communication aimed not only at providing accurate information but also designed to address misconceptions, fears, and side effects, is an important step toward dispelling these barriers.

### **Competing interests**

The authors declare that they have no competing interests

#### Acknowledgement

The authors will like to express their unconditional gratitude to USAID for providing funding for the implementation of CHPS in study areas in southern Ghana. We are also grateful to the participants and the research assistants who collected the data.

#### References

Adongo PB, Tapsoba P, Phillips JF, Tabong TNT, Stone A, kuffuor E...Akweongo P: The role community based health planning and services in involving males in the provision of family planning services: a qualitative study in southern Ghana. *Reproductive Health* 2013, **10**:36

Casey PM, Cerhan JR, Pruthi S: Oral contraceptive use and the risk of breast cancer. *Mayo Clin Proc* 2008, **83**(1):86-91.

Cleland J, Bernstein S, Ezeh A, Faundes A, Glasier A, Innis J: Family planning: the unfinished agenda, *Lancet* 2006, **368**: 1810-1827.

Davies SL, DiClemente RJ, Wingood GM, Person SD, Dix ES, Harrington K, Crosby RA: Predictors of Inconsistent Contraceptive Use among Adolescent Girls: Findings from a Prospective Study. *Journal of Adolescent Health* 2006, **39**: 43-49.

Foley EE: Overlaps and Disconnects in Reproductive Health Care: Global Policies, National Programs, and the Micropolitics of Reproduction in Northern Senegal. *Medical Anthropology* 2007, **26**(4):323 - 354.

Frost JJ, Singh B, Finer LB: Factors Associated with contraceptive use and nonuse, United States, 2004. *Perspectives on Sexual and Reproductive Health* 2007, **39**(2): 90-99.

Ghana Statistical Service (GSS), Ghana Health Service (GHS), ICF Macro: *Ghana Demographic and Health Survey 2008*. Calverton, Maryland, USA :Macro International Inc;2009.

GSS. Ghana population and housing report. 2010. Accra: Statistical Service; 2011

Gyapong J, Addico G, Osei I, et al. *An Assessment of Trends in the Use of the IUD in Ghana*. Accra, Ghana: Population Council and USAID; 2003.

Kaufman CE, de Wet T, Stadler J: Adolescent pregnancy and parenthood in South Africa. *Studies in Family Planning* 2003, **32**:147–160.

Lule E, Singh S, Chowdhury SA: *Fertility Regulation Behavior and Their Costs: Contraception and Unintended Pregnancies in Africa and Eastern Europe and Central Asia.* Washington, DC : World Bank;2007.

MOH: *Meeting the commodity challenges: The Ghana national contraceptive security strategy* 2004-2010. Accra: MOH;2004.

Moreau C, Trussell J, Gilbert F, Bajos N, Bouyer J. Oral contraceptive tolerance: does the type of pill matter? *Obstet Gynecol* 2007, **109**: 1277–85.

Moreno V, Bosch FX, Munoz N, et al. Effect of oral contraceptives on risk of cervical cancer in women with human papillomavirus infection: the IARC multicentric case-control study. *Lancet* 2002, **359:** 1085–92.

Naik R, Brady M: *The female condom in Ghana: exploring the current state of affairs and gauging potential for enhanced promotion*. Retrieved on 16/8/2013 from www. popcouncil.org/pdfs/FCinGhana\_CurrentState.pdf

Ndenzako FN: Male Contraceptives Prevalence and Factors Associated with Contraceptive Use among Men in Ngara Tanzania. Retrieved on 19/8/2013 from https://www.duo.uio.no/bitstream/handle/10852/30089/ndenzako.pdf?sequence=1

Sadana R: Definition and measurement of reproductive health, Bulletin World Health Organization 2002, **80**(5): 407–409.

Scott A, Glasier A: Evidence based contraceptive choices. *Best Practice & Research Clinical Obstetrics & Gynaecology* 2006, **20**: 665-680.

Shoveller J, Chabot C, Soon JA, Levine M: Identifying barriers to emergency contraception use among young women from various socio-cultural groups in British Columbia, Canada. *Perspectives on Sexual and Reproductive Health* 2007, *39*(1):13-20.

Uganda Bureau of Statistics and ORC/Macro: *Uganda Demographic and Health Survey 2000–2001*. Entebbe: Bureau of Statistics, and Calverton, Maryland: ORC/Macro; 2001.

UNDP: Population, Reproductive Health and the Millennium Development Goals: Messages from the UN Millennium Project Report 2005, Retrieved on 13/08/13 from http://www.unmillenniumproject.org/documents/SRHbooklet080105.pdf

UNFPA: Family Planning and Unmet Needs 2006. USA: UNFPA;2006.

Weeks JR: *Population: An Introduction to Concepts and Issues*. 8th Edition. USA: Wadsworth Thomson Learning; 2002.

WHO. The Female Condom: A Review. Geneva: WHO; 1997

WHO: Alma-Ata 2000 primary Health care. Geneva: WHO; 2000.

WHO: Integrating poverty and gender into health programmes: a sourcebook for health professionals. Module on sexual and reproductive health, WHO Regional Office for the Western Pacific; 2008.

WHO: *Update on family planning in Sub-Saharan Africa*. In repositioning family. Repositioning family planning: guide for advocacy. Geneva: WHO; 2010. pp 1-8.