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2nd Edition of the Numid Horizon

Message from the Registrar, N&MC

I bring you greetings from the Management and Staff of the Nursing and Midwifery Council, Ghana. On April 7, 2017, the Nursing and Midwifery Profession launched the 1st edition of the Numid Horizon: An International Journal of Nursing and Midwifery in a remarkable ceremony which saw the Honourable Health Minister, Mr. Kwaku Agyemang – Manu launching the Journal.

The maiden journal which had 10 articles highlighting various health issues of concern about the education, training and practice of nursing and midwifery in Ghana received a rousing patronage from the nursing and midwifery professionals in Ghana. The high patronage ignited the desire of the professionals to write and publish articles in the subsequent editions of the journal and this led to the organization of Writers workshop for interested professionals in September, 2017. The 2nd edition which has 8 articles on topics such as; Socio-economic impact of indwelling urethral catheter, Midwives emotional distress over maternal death; and Family belief systems and practices that influence exclusive breastfeeding, just to mention a few, promises to be educative.

To draw down the curtain, I express my profound gratitude to the Editorial Board, Reviewers and Authors, Sponsors and the Management Advisory Board for sustaining the vision of publishing the Numid Journal biannually. I take this opportunity to encourage other health practitioners to conduct credible research and contribute to the sustenance of the Numid Horizon Journal by publishing their findings in the subsequent editions.

Thank you.

Felix Nyante (*MPA, MA, FWACN, FGCNM, BEd, Dip, SRN*)
Registrar

Nurses and Midwives: Preventing and managing conditions to enhance lives and coping with challenges at work

Editorial

Nursing and Midwifery are two professions in the healthcare system that complementarily enhance the lives of people globally (World Health Organization, 2013). The critical role played by nurses and midwives is evident in both small and large communities. These two professionals account for the reduction in large proportions of diseases and discomforts the world is grappling with (Mitchell, 2015). Different reasons account for the discomforts and calamities in the lives of many people but most of them are prevented, treated or reduced, through expert health care that nurses and midwives contribute greatly in providing.

In this second edition of *Numid Horizon: An International Journal of Nursing and Midwifery*, we bring to the fore rich information that will serve as building blocks to enhance the contribution of nurses and midwives in addressing health challenges ranging from preventable to chronic illnesses and their socio-economic implications. This edition also brings to light some of the challenges nurses and midwives face in the line of duty, stressing on issues that leadership need to pay attention to in order to encourage the retention of nurses and midwives especially in low and middle income economies like ours.

In terms of preventive aspects in healthcare, many individuals and communities fall prey to several ill conditions because they lack or have limited knowledge on preventable measures they could have adopted to avoid those conditions (Moore, Smith & Reilly, 2013). Through health education and health promotion measures, nurses and midwives are able to forestall such conditions before they escalate into epidemics. For these preventive measures to be more effective however, an understanding of the beliefs, knowledge, attitudes and practices of the people concerning the conditions cannot be underestimated (Dixey, 2012). Four articles within this edition provide insight into such issues in terms of beliefs and practices regarding exclusive breastfeeding in a typical rural community in the northern sector of Ghana; the perspectives patients living with tuberculosis hold towards adherence to treatment regimen for their condition; factors affecting parent-adolescent communications; and awareness and knowledge of gestational diabetes mellitus among pregnant women.

Regarding management of conditions, an article on the socio-economic impact of indwelling catheter on patients and another on how cancer patients cope with depression through their religion are examples of some of the challenges patients go through in the course of their illness, that fall in the domain of patient care for nurses and midwives to address. These articles elaborate on issues

that patients worry about as they try to cope with acceptable management of their conditions and the findings give insight to what additional issues are to be addressed in the course of helping such patients in the management of their conditions.

Finally, in the course of helping patients, raising awareness on the promotion of healthy lifestyles and causing patients and clients to enjoy better lives through management of their conditions, little attention is paid to what the caregivers themselves go through and how they cope to be equipped enough to take care of others. The article on retention of midwives brings out some of the challenges, this important cadre of healthcare givers, go through and what motivates them to stay against all odds. The last article on midwives' emotional distress over maternal death also brings up the self-restraint midwives are compelled to keep to carry out their jobs by putting the past behind to save lives even in the midst of their grieving moments.

Nurses and midwives are preventing devastating diseases, managing the conditions of their patients and clients as well adopting strategies to cope with their individual and professional challenges. The articles in this edition cover all these areas; it is therefore, the wish of the Editorial Board of Numid Horizon and the contributors to this edition, that the articles will serve as beneficial information for health workers to do their work better.

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Original Article

Socio-cultural factors affecting parent-adolescent communication on sexuality in the Accra Metropolis, Ghana

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Abstract

Parents have the responsibility to teach their adolescent children how to deal with sexual problems confronting them by educating them on what they need to do to avoid risky sexual behaviours. This study explored the socio-cultural factors affecting parents' role in educating their young children on sex and sexuality. The study used an exploratory descriptive qualitative design and employed focus group discussions (FGD) and in-depth interviews to explore the socio-cultural factors that affect parents' presentation on sexuality to adolescents. Thirty-four parents made up of two mothers' groups, one fathers' group and a mixed group (mothers and fathers) took part in the FGDs. In-depth interviews were conducted with ten parents who were not part of the FGDs. The data was transcribed and analysed manually. The findings of this study indicated that parents blamed cultural taboos for preventing them from discussing sexuality with adolescents. Parents however supported school sex education for their children and indicated that it would benefit adolescents whose parents could not discuss sexual issues with them. Parents proposed that the school should involve them in school sexual education for them to be acquainted with what the children are taught in school in order to complement it at home. All the parents were worried about the negative influence that the media have on adolescents. In spite of obvious impediments to discussions on sexuality with adolescents, parents saw the need to discuss sexuality with adolescents because of the benefits of such education.

Keywords:

Taboos; Sexuality; Adolescents; Communication

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Introduction

Knowledge about sexuality is very important in the life of the adolescent. Such knowledge helps adolescents to learn about their bodies and society's expectation in terms of behaviour. Every society has a method for preparing and training adolescents for future life, including their sexuality. In many cultures, this knowledge is passed on through sex education. The aim of such education is to reduce the risky results of irresponsible sexual behaviour, such as unwanted or unplanned pregnancies and sexually transmitted infections (SIECUS, 2010). Sex education also contributes to young people's experiences of sexuality by improving the quality of their relationships and their ability to make knowledgeable decisions over their lifetime (SIECUS, 2010).

Ideally, parents must be the main sex educators of adolescents because traditionally they conduct their children's first stage of socialization. In a study in the United States involving 513 adolescents aged 12 to 17 years, parents were the primary educators (Albert, 2009). The study found that one-third of the adolescents mentioned parents as their most vital influencers when it comes to their decision about sexual choices. Parent-child closeness and parents' communication with adolescents have been associated with sexual abstinence, delay in early sexual activity, fewer sexual partners, reduced pregnancies, and increased contraceptive use (Mitchell, 2009). Many young people reported that they would like their parents to discuss various topics on sexuality with them to increase the normal biological and risk-focused discussions (Feldman & Rosenthal, 2010). Positive parent-adolescent discussions have been found to be helpful in building strong family relationships and discouraging risky adolescent sexual behaviour (Liu & Flay, 2009).

Thus, parents have the responsibility to teach adolescents how to deal with sexual problems confronting them by educating them on what they need to do to overcome sexual risk-taking

behaviours. Despite the need of adolescents to have information about their sexuality, socio-cultural factors have prevented parents from talking with their adolescents about their sexuality. A study in Kenya explored the reason why educated mothers did not educate their daughters on sex and found many

socio-cultural and religious barriers to sexuality discussions. For example, European Christianity is cited to affect the type of language used to discuss sexuality in Kenya; and the metaphors and other indirect approaches used in sexual discussions and the exact language are perceived as dirty (Mbugua, 2007).

Another study in Kenya showed that 38% of parents believed that conversation about sexuality encourages sex (Poulsen et al., 2010). They also believed that talking about sexuality with children would lead to early sexual involvement (Izugbara, 2008; Wamoyi, Fenwick, Urassa, Zaba, & Stones, 2010). In Nigeria, parents did not talk about condoms and contraceptives during sexuality education with adolescents because they felt that it would encourage adolescents to be sexually promiscuous (Izugbara, 2008).

In a focus group discussion in Ghana, adolescents were unwilling to talk about sexuality with their parents because they felt shy and preferred to discuss with their friends. Fear of physical punishment discouraged adolescents from telling parents that they were involved in unprotected sex (Kumi-Kyereme, Awusabo-Asare, Biddlecom, & Tanle, 2007). This study therefore, seeks to explore the socio-cultural factors affecting parent-adolescent discussions about sexual issues among parents in the Accra Metropolis, Ghana. This study is part of a wider doctoral study of the first author.

Design and Methods

The study used a descriptive exploratory qualitative design to explore the socio-cultural factors affecting parent-adolescent communication on sexuality in the Accra Metropolis, Ghana. The study utilised two qualitative data collection methods to gather information from the parents (in-depth interview and focus group discussion). The study settings were the Osu Klottey and Ablekuma South sub-metropolises in the Accra Metropolis comprising 11 sub-metropolises. The study was conducted at these sites because Osu Klottey is one of the oldest Ga communities in Accra and its inhabitants are mostly fishermen and fishmongers. Ablekuma South, on the other hand, is a newly created sub-metropolis that is cosmopolitan in nature.

Sampling Technique

The parents were recruited through their adolescents' children in school by simple random sampling.

A parent whose adolescent picked 'yes' from pieces of folded paper, was sent a letter inviting him or her to participate in the study. The parent was either the biological father or mother of an adolescent between 12 and 17 years who attended a public Junior High School and had been living in one of the two selected sub-metropolises for a year. Parents who specified their willingness to participate in the study signed an informed consent form and were enrolled. The in-depth- interviews were conducted with ten parents and thirty-four parents took part in the FGDs. Four FGDs were held comprising of two mothers' groups, one fathers' group and one mixed group (both mothers and fathers) with an average eight parents in each FGD.

Data Collection

The in-depth interviews (IDIs) were conducted with parents in the comfort of their homes. The FGDs were held in the classrooms of the schools in the study site.

A semi-structured interview guide was used to conduct the interviews and FGDs. Open ended questions were used to generate answers and these were probed until full understanding was achieved. The interviews and FGDs were conducted in English and Twi and audio-taped with a digital voice recorder with the consent of participants. The interviews and FGDs conducted in English were transcribed verbatim and those conducted in Twi were transcribed in English by the first author who understood the Twi language very well. The non-English transcripts were verified by the co-authors to further ensure the right content was reported. Each session lasted between 30 to 60 minutes.

Ethical Consideration

The study was approved by the Ethical Review Board of the Noguchi Memorial Institute for Medical Research, University of Ghana. Permissions were sought from the Metropolitan Director of Education, Accra Metropolis and head teachers of the selected Junior High Schools to use their students to select the parents for the study. Individual consent was also sought from participants before data collection. Confidentiality and privacy were assured and anonymity was maintained throughout the study. Participants were free to withdraw from the study at any point they felt they were no more interested in the study.

Data Management and Analysis

The manual analysis of data began with a search for similar ideas; thoughts, recurring words and differences within the data were done by two research assistants concurrently. Codes were created, based on the ideas, thoughts, recurring words and differences within the data. Similar and related codes were grouped to form themes and sub-themes. This process of data analysis is consistent with the principles of content analysis (Miles & Huberman, 1984). Having developed the themes, the report was written using verbatim quotes of participants expressing the views and vivid thoughts of all the participants. An expert in qualitative research also analysed the data and any disparity was discussed for a consensus. Participants were identified with identification codes such as: M1FGDOK (Mother1 in Focus Group Discussion, Osu Klottey), F1FGDAS (Father1 in Focus Group Discussion, Ablekuma South), M1IDI (Mother1 in In-depth Interview) and F1IDI (Father1, in In-depth Interview).

Rigour of the study

Trustworthiness of the study was achieved through prolonged engagement with participants to make sure that the correct data was collected during the interviews and FGDs. Probing was done to ensure robust and rich that the research findings. The process of member-checking was employed during the interviews to follow up on emerging themes. Participants' characteristics and context were well described to obtain transferability for any researcher who might wish to replicate the study. Dependability was achieved by employing an independent data analyst who analysed and confirmed the findings.

Results

Demographic characteristics

The study participants, made up of 16 fathers and 28 mothers, took part in both the FGDs and IDIs. The age of the participants ranged between 25 and 55 years. Forty- two participants were Christians and two were Muslims. Thirty-eight of the participants were married, four were single and two were divorced. All the participants were educated. Twenty had primary education and 14 had tertiary education. Twenty of the participants were traders, eight worked in the public sector, and six in the private sector and the rest were artisans.

Themes and sub-themes that came out of the study were religion, culture, school sex education, media and peers as factors that affected parents talking to their adolescents about sexuality.

Influence of parental religious beliefs on sexuality education of adolescents

A parent's religious belief has an influence on sexuality education of the adolescents. In the FGDs, it was realized that some parents' religious beliefs affected the education of their children on sexuality. A pastor in the men's FGDs indicated that in his church they did not talk about sexual issues with the youth. He attributed it to being 'holy' and that the members of the church believed that such issues should not be discussed in church. The church members believed that their children would not indulge in sex. Therefore, it was not necessary to educate them about their sexuality.

I am a charismatic and a pastor, we don't talk about sexual issues with the youth or the congregation in my church. I can't say whether we don't accept sexuality education or not. It is simply that we don't do it. It is holy, holy. I think it is their belief that such a thing should not be done in the church. They also believe that their children will not indulge in sex so it is not necessary to talk to them about sexuality. What I have observed is that they believe that once they are teaching their children about the word of God, they will lead good lives (F1FGDOK).

A participant in the women's FGDs indicated that although her religion allowed the discussion of sexuality with adolescents, it did not allow the teaching of modern contraceptives with the youth.

For us Catholics, the church does not prevent you talking about sexual issues, but when it comes to modern contraceptives for example, condom you are limited. You are not supposed to provide information about modern contraceptives. (M5FGDAS).

Many of the participants in the IDIs believed that religion should encourage sexuality education of the youth. They specified that most adolescents have no knowledge on sexual issues and that marriages were

breaking down in the churches because couples lack the knowledge on sexuality.

I think the church for instance, does not know how to go about educating the youth about sexual issues. Now, before weddings, the church has started talking about such things because they know that it is affecting young couples. Why are Christian marriages breaking down? It is because of some of these issues on sexuality. We are too 'holy'. If I am a virgin before marriage, at least I should have some knowledge about sexuality? (M3IDI).

Culture and sexuality education of adolescents

Parents were of the view that cultural taboos prevented education of adolescents on sexuality. Among the Akans, it is a taboo to talk about sexual issues with a child because it is believed that the child could be 'spoilt'. Even if the child wanted to find out certain things about sex, they would tell the child that he/she was not matured enough to know about such issues. There are some parts of the body that could not be mentioned because it is considered a taboo to do so. For that matter, they expressed such things using euphemisms. For example, they prefer to call the penis 'manhood'. Another participant in the women's FGDs indicated that some sexual discussions only took place after menarche.

'It is a taboo for you to talk about sexual issues among the Akans because they believe that if you talk about sex with a child, the child will spoil. Even if the child wants to find out certain things about sex, they will say 'you are not up to that stage yet and when you get there you will know'. There are certain parts of the body you can't mention, so they find a way of saying your 'manhood instead of penis. That is why we can't talk to the children' (M1FGDOK).

Some sexual discussions take place only when the girl starts menstruating. That is where the mother focuses on some sort of education that 'you are now a woman and if you have sex you will become pregnant' and that is generally what they say. It is like something sacred and they don't talk about it (M4FGDAS).

All the parents agreed that culturally, adolescents should be educated on sex-related issues. A participant was of the view that culture was dynamic and should include sexual education. He lamented that taboos of not talking about sexual issues with children had brought problems and poverty to parents. Talking about sexual issues would benefit the adolescents so that they could go to school to be responsible people in future.

Culture is dynamic so we should include sexuality education into it. Taboos of not talking about sexual issues with children have brought problems such as teenage pregnancy and poverty to us. We have to limit cultural taboos that prevent us from talking to our children about sexual issues. Talking to the children about sexual issues will prevent them from getting pregnant or impregnating someone so that they can go through school and become responsible adults in the future (F2FGDOK).

Some of the participants believed that, to promote sex education culturally, it should start with the custodians of tradition. They should be educated about the advantages of talking to adolescents about sexual issues and the consequences of not talking to them such as teenage pregnancy and contracting STIs.

We should start the education of the people from the custodians of tradition. We should talk to them on the benefits of talking to children about sexual issues. The consequences of not talking to children on sexuality can lead to teenage pregnancy and acquiring STIs including HIV (F2FGDAS).

School sex education and parents' sexuality education of adolescents

Many of the parents opined that school sex education of adolescents was good. They agreed that such education at least, would benefit adolescents whose parents could not educate them on sexual issues. Other parents were of the view that school authorities should involve parents in school sexual education programmes so that parents would know what the children were taught at school to complement the effort of the teachers at home.

School sex education for adolescents is very good. Children sometimes take what their teachers teach them more serious than what parents tell them. If the teacher teaches the child, he/she will take whatever the teacher told him/her seriously. Furthermore, parents who cannot discuss sexuality with their children, the school will at least educate them (M6FGDOK).

School authorities need to involve parents in school sex education by giving parents guidelines on what have been taught at school. This way parents know what the children have learnt so as to complement the effort of the teacher at home' (M2FGDOK).

School sex education should not prevent parents from educating their children about sexual issues. A participant was of the view that parents thought that once their children were in school, the teacher would educate them about sexual issues and stated, "It is because some parents think that when their children go to school, the teacher will teach the child; so, at home, sexuality is not talked about" (F3FGDOK). Therefore, parents did not talk about such issues again at home.

The notion that many parents shirked their responsibility to provide sex education to their adolescent children came up in the discussions. Some of the participants believed that it was the parents' responsibility to educate adolescents about sexuality.

Parents have the first responsibility to educate their children on sexuality but we are starting from an age where the parents themselves did not have any education on sexuality. So, it will be difficult to put the responsibility totally on parents now because they are not well-equipped to educate their children on sexuality (M3FGDOK).

Others parents however, were of the opinion that it was a collective responsibility of parents, teachers and health workers to educate adolescents about sexuality because most parents are ignorant about sexual issues.

It is a collective responsibility because most of the parents are ignorant about sexual issues. Subsequently if we leave everything for parents alone, the adolescents will be lacking somewhere and if we leave everything to teachers too, they may be missing something, so parents, teachers and health workers should come together and teach adolescents about sexuality because they all have different experiences to teach children (M2FGDAS).

The influence of the media on the sexual lives of adolescents

All the parents were worried about the negative influence that the mass media have on adolescents. Many of the parents were of the view that the media have a great influence on the adolescents because almost every home has a television and probably the internet. Some of the participants pointed out that, parents were too busy about their jobs and had no time to supervise children on what to watch on television and the internet. Parents also blamed the television stations for showing sex-related programmes without recourse to time of day, which permitted children to watch these programmes.

I think the media have a great influence on adolescents because almost every home has television and some probably the internet. Parents are so busy, they go to work early and come back late and don't have time for their children. When children come home from school, they find comfort in the TV and internet. Unfortunately, there is no control on the kind of things they watch on the TV and internet. The TV stations show romantic programs anytime of the day. When the children see these scenes on the TV, they learn about them. They will say 'oh! this is how it is and the next time I want to try it myself' and they start indulging in sexual activity (M2IDI).

Some of the participants were of the opinion that parents could not do much about the influence of the media on the lives of adolescents unless parents start educating adolescents at a younger age since when the children become adolescents the media influence might override parental advice.

There is not much we can do about media influence on adolescents unless we start educating them at a younger age that is when it can have an impression on them. But once they get into adolescence their ears are blocked. Whatever you say is not what they will do; so, we should start educating them at a younger age before they are influenced by the media. (M4IDI).

The parents suggested how the media could be used to educate adolescents on sexuality. A mother was of the opinion that adolescents were more attracted to the electronic media such as televisions compared to print media. The themes of soap operas shown on televisions, therefore, could be altered to stress on education geared towards adolescents' sexuality because most adolescents like watching such programmes.

Adolescents are more attracted to the electronic media such as TV compared to the print e.g. newspapers. A lot of Soap Opera that are shown on TV can be made more educative in a way for adolescents because most adolescents like watching these programmes (M4FGDOK).

The respondents also suggested that the media could reorganize the time allotted for children's programmes to meet the needs of adolescents' sex education as captured in the words of one father "The media should use some of the time they have for children's programmes to teach adolescents about sexuality". (F5FGDAS).

Parents' sentiments about peers as the source of sex education to adolescents

Peers have positive and negative influence on the lives of adolescents. Adolescents tend to adopt the negative influence their peers attached to sexual activities (Choukas-bradley, Giletta, Cohen, & Prinstein, 2015). This may be because adolescents do not share the close relationship they have among friends with their parents. Some of the parents were of the opinion that adolescents felt shy to talk to parents about sexuality but they found it more comfortable to discuss with their friends. The respondents also indicated that the adolescents thought that parents did not have the knowledge about sexual issues so preferred talking to their friends. A participant indicated

that some parents might think that adolescents were indulging in sex that was why they were asking questions about sex.

'Adolescents feel shy to talk to parents about sexual issues. They find peers more comfortable to discuss such issues with. Some adolescents think that parents don't have the knowledge about sexual issues so will prefer to seek information from their peers rather than their parents' (M1IDI).

'Adolescents will prefer to seek information on sexuality from peers because some parents will think that the adolescents are indulging in sex that is why they are asking such questions' (F1IDI).

Parents proposed ways of overcoming bad peer influence on adolescents. A participant observed that parents should give the right education to adolescents about sexuality at an early age. Whatever information adolescents had from friends later would be an additional information, which they could decide to comply with or not.

'Parents should give adolescents the right education about sexuality so whatever their peers say will be additional information they can decide to take or not. Thus, it is important to give adolescents the first information on sexuality at an early age before they get the secondary information from their peers' (M5FGDOK).

Discussion

Parents' religious beliefs are of great importance and they tend to influence education of adolescents about their sexuality. Some religious leaders discourage the education of adolescents on sexuality (Owusu, 2012). In Ghana, religion is very strict on sex education to adolescents.

Some churches insist on total abstinence until one is legally married (Owusu, 2012). While some parents' religion did not encourage sex education of adolescents, others opined that their religion encouraged it. During the FGDs, parents said some charismatic churches restricted discussions of sexual topics with adolescents. The participants noted that even though

the Catholic Church allowed the discussion of sexual topics with adolescents, it did not allow the discussion of modern contraceptives with the youth. This tendency by religious organizations may place adolescents from such religions at high risk of the negative effects of adolescent sexual promiscuity. This is why such vulnerable adolescents must be targeted for interventions to help prevent risky sexual behaviours among them.

Some cultures may be more tolerant than others regarding discussions of sexual topics with adolescents. In the present study, culture did not appear to be a hindrance to the discussion of sexual topics. While culture in itself was not a direct impediment to discussing sexual topics, some parents in the FGDs cited cultural taboos as impediments to open discussion of sexual issues with adolescents. The cultures maintained that talking to the child about sex would encourage the adolescent to indulge in sex. The FGDs, parents indicated that cultural taboos had made it difficult to talk about sex generally, which was why certain parts of the body were mentioned in euphemism as in the use of expressions like 'manhood' instead of penis. Evidence from Kenya also revealed that traditional taboos are the main obstacles to meaningful sex-education between mothers and their daughters which, had obviously prevented parents from talking about sex with their children (Mbugua, 2007). Ghanaian culture might consider sexuality as too sacred for discussion with children and adolescents. In Ghana, teaching about sex to children is generally perceived as introducing them to early sexual intercourse and subsequent pregnancies. The understanding and tolerance for sex education among Ghanaian parents is limited. Culture thus, accounts for this intolerance for sex education (Owusu, 2012).

Sex education for adolescents in Ghana is school-based and many parents play no role in educating their children. Parents indicated that they are in support of sex education of adolescents in schools because children are likely to take what is taught by their teachers more seriously than what parents teach them. A similar finding in support of school sex education programme was reported in the United States (Bleakly, Hennessy, & Fishbein 2010). The parents in the present study supported sex education programmes in schools, since many of the parents

could not educate their adolescents on sexuality. Respondents were, therefore, grateful that the school was doing it. Even though parents' support for schools' sex education is good, it is important to identify means through which parents are empowered to discuss sexual topics with their adolescents. The adolescents may take what the teacher teaches at school more seriously mainly because such courses are examinable.

While some parents expressed their support for school sex education programmes, other parents indicated that schools needed to involve parents by providing guidelines of what the schools teach. The call for parents to be involved in schools' sex education of their children has been expressed by Mitchell (2010). Schools involving parents in sex education programmes will allow the parents to be abreast of what their children are learning to complement what the school is teaching. In support of this, Akers, Holland, and Bost (2011) found that school sex education programmes prevent sex risk-taking among adolescents and promote healthy sexual lifestyles. Parents should be allowed to join school sex education programmes organised for students to contribute towards discussions on what is being taught in the schools.

The Media serves as an agent for sexual socialization to adolescents (L'Engle, Brown & Kenneavy, 2006). Adolescents acquire both positive and negative forms of sexual information from the media. In the in-depth interviews, parents were concerned about the negative effects that the media, especially television and the internet, have on the sexual lives of adolescents. Television stations were blamed for showing sex provoking movies during the day, which young people watched and copied. Results of a prior study in the United States found that adolescents acquired sexual messages and ideas about sex from the television, movies and the internet (Peter & Valkenburg, 2008). Wilson, Dalberth, and Koo (2010) also found from FGDs in the United States that parents blamed the television and the internet for the risky sexual behaviour of children. They expressed their frustration about children's easy access to pornography on the internet and cable TV, as well as the negative role models on television, open sexual content of music and video games and sexual overtones of advertising.

Although the mass media was blamed for its negative influence on adolescents, it was also highlighted as a means of promoting healthy lifestyles among adolescents. Parents in the FGDs suggested that the soap operas shown on television, for instance, could have stronger sex education components since adolescents enjoyed watching such programmes. This is in agreement with the findings of Grabe, Ward, and Hydes (2008) which promoted healthy sexual behaviour. Adolescents obtained information from media sources such as magazines, which have the potential of promoting healthy adolescent sexual awareness. Due to media proliferation and divergence of views, parents will need to help adolescents make choices regarding choice of programmes to view to prevent exposures to those that can provoke adverse sexual outcomes in adolescents.

Adolescents usually seek information on sexuality from peers, as they seem to understand each other better. Consistent with the finding of an earlier study, it was found out that adolescents prefer to seek information from their peers instead of from parents (Teitelman, Ratcliffe, & Cederbaum, 2008). The IDIs showed that lack of sexual communication between parents and their adolescents made adolescents turn to their peers for information on sexuality. This lack of communication may be primarily because they feel more comfortable discussing such issues with their peers than their parents. Alternatively, adolescents may be talking to peers rather than parents because some parents would not tolerate adolescents' questions about sex or have time to discuss such issues with their adolescents. This notion is also confirmed by a study undertaken by the Palo Alto Medical Foundation (2013) which observed that adolescents who had problems with or felt uncomfortable discussing issues with their parents turned to their peers for advice. This presents a challenge as adolescents may be exposed to wrong information from their 'seemingly knowledgeable' colleagues that might lead to avoidable negative sexual outcomes. It is necessary that parents seek expert advice on performing the task of educating their adolescents on sexual topics if they feel incapable to do so. Parents can also make use of available training materials and programmes that offer the necessary skills required for more open, comfortable and frequent parent-adolescent sexual communication that will yield positive sexual outcomes in adolescents. **Implication for Nursing Practice**

Nurses, especially those in reproductive health, should educate parents on how to discuss sexual issues with their children. Faith-based institutions, such as churches and mosques should be encouraged to organise programmes to educate parents on adolescent reproductive health issues so that they become adequately well-informed to facilitate discussions with their children on sexuality.

Conclusion

Even though socio-cultural factors, especially cultural taboos, have affected discussions between parents

and adolescents on sexual issues, parents have seen the need to educate their adolescents about sexuality to prevent issues like premarital sex, unwanted pregnancy and STIs including HIV/AIDS.

Conflict of Interest

The authors declare that there is no conflict of interest.

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Original Article

Tuberculosis treatment adherence in Ghana: Patients' perspectives of barriers and enablers to treatment

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Abstract

Tuberculosis (TB) treatment continues to be a daunting task in most low and middle-income countries due to cultural beliefs held by people and inadequate information about the importance of treatment adherence in the community. This study explored the patient-related factors influencing tuberculosis treatment adherence, with a focus on patient-related factors affecting such treatment adherence. Using a semi-structured interview guide, 10 participants (Five males, five females) were engaged in in-depth individual interviews. Miles and Huberman's (1994) content analysis approach was used to analyse data. Three main themes emerged from the synthesised data: Knowledge on TB and its treatment, challenges associated with TB treatment and motivating factors to adherence. Patients' belief about the cause of TB such as spiritual forces, poor knowledge about treatment duration and consequences of defaulting, and the side effect of drugs especially when taken with little or no food were found to be critical factors that negatively impacted treatment adherence. The desire to attain one's 'normal self', making up mind to complete treatment and recognition of symptom improvement following the commencement of treatment supported adherence to TB treatment. Continuous education on TB and counselling during treatment are vital interventions that need sustained integration in TB prevention and adherence programmes. Maintaining continuous multi-level support for clients living with TB is critical for TB prevention and control, and adherence to full treatment course.

Key words:

Barriers to treatment; enabling factors; TB treatment adherence; patients' perspectives

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Introduction

Tuberculosis is a preventable and curable infectious disease which continues to plague countries with low socio-economic status (World Health Organisation [WHO], 2014). In countries where TB is predominant, socio-cultural factors and barriers in healthcare service delivery impede treatment adherence particularly in low and middle-income countries (Sabawoon, Sato, & Kobayashi, 2012; Sagbakken, Frich, & Bjune, 2008). At the centre of TB treatment is the client who must adhere to the 6-month or 8-month long uninterrupted daily drug regimen to treat the disease (National TB Control Programme Ghana [NTP], 2013). The treatment regimen for TB usually consists of a combination of potent antibiotics administered based on weight values of the client. Treatment options include oral antibiotics for six months (Category I and III patients) or oral antibiotics concurrently with injections for the first two months followed by six months oral antibiotics (Category II patients). However, most patients interrupt their treatment which often leads to complications and treatment failure.

Over the past decade, various studies have established that TB treatment in health care facilities is a major issue (Borgdorff, Floyd, & Broekmans, 2002; Thiam et al., 2007). The WHO introduced the 'Stop TB strategy' and mapped up five specific policies under the Directly Observed Treatment short course (DOTs) strategy (WHO, 2014). The key elements of this policy are: Political commitment with increased and sustained financing, case detection through quality-assured bacteriology, standardised treatment, with supervision and patient support, effective drug supply and management system, and monitoring and evaluation system, and impact measurement (WHO, 2014). In Ghana, the management of TB (diagnosis and drugs) is free of charge and this treatment is delivered through Direct Observation Therapy (DOTs) by the National TB Control Programme of Ghana. In this strategic treatment approach, clients living with TB must be monitored by health care professionals on a daily basis to comply with their drug regimen to achieve optimal treatment outcomes. However, shortage of health personnel and the lack of logistics have impeded the successful implementation of the DOTs approach to treatment. In view of these challenges, patients are usually given their drugs to take home and only return to the facilities to refill their stock weekly or twice monthly. A nominated person,

usually, their family member, acts as the treatment support to ensure compliance to the drug regimen. In Ghana, a high number of reported cases related to noncompliance to TB treatment procedures were reported in some selected districts (NTP, 2013), whilst Sekyere South District recorded treatment success of less than 85% of the WHO acceptable limit. Various studies have established that health service-related factors and sociocultural influences contribute to non-adherence attention in Ghana (Dodor, 2012; Salifu, Eliason & Mensah, 2016). Personal characteristics of patients living with TB, such as self-perception and presence of underlying diseases, attitude of healthcare workers, and patients' knowledge about TB may influence client's decision about adherence to treatment (Hirsch-Moverman, Daftary, Franks, & Colson, 2008; Munro et al., 2007). The success in cure of TB depends on the client receiving full treatment in a supportive environment and making a personal decision to adhere to the treatment plan (van den Boogaard et al., 2012). This may suggest that the uniqueness of patients should be given priority if treatment adherence is to be successful and that "one-size-fits-all" method of treatment of tuberculosis is not likely to succeed in every situation (Ministry of Health [MOH], 2010).

This also presupposes that patients who do not feel that they have some control over their treatment are more likely to be non-adherent (Nabi et al., 2008; Orr, 2011). Several studies have shown that non-adherence to TB treatment and high occurrence of drug resistance are associated with lifestyle of the client such as tobacco smoking and substance dependency; under-nutrition (Belilovsky et al., 2010; Lönnroth et al., 2010; Storla, Yimer, & Bjune, 2008). The client may respond to the anti-TB drugs quite differently and this reduces treatment adherence rates since the side effects of the anti-TB drugs are more pronounced if the medications are taken without meals (Isaakidis et al., 2013; Zuñiga, 2012).

Non-adherence has been documented in migrant TB patients, and clients with HIV/AIDS coinfections or other co-morbidities such as diabetes due to the aggregated effects of the drugs or the increased number of pills to be taken (Baker et al., 2011; Gebremariam, Bjune, & Frich, 2010; Zhou et al., 2012). In spite of the widespread nature of TB in low and middle-income countries (LMICs), some individ-

uals still have misinformation about the cause of TB (Ayisi et al., 2011; Rundi, 2010). Since patients' intention to seek and adhere to treatment is based on their knowledge and beliefs about TB, this in turn influences their inherent motivation to be cured (van den Boogaard et al., 2012). In relation to the above discussion, this study examined the context-specific barriers and enablers for TB treatment adherence from the patients' own perspectives. This article was developed as part of a project that explored factors which affect TB treatment. Aspects of the project which pertained to the socio-cultural factors that impact TB treatment has already been published (Salifu et al., 2016). This current article provides detailed information on other contextual factors that influence patients' adherence to TB treatment. The aim of this study was to explore patients' perspectives on factors that influence Tuberculosis treatment adherence.

Design and Methods

This study used a qualitative research approach to explore the experiences of clients living with TB. This exploratory research allowed a deeper understanding of patients' perspectives about the factors that influenced adherence behaviour (Creswell, 2013; Mayan, 2016). An interpretive descriptive approach was used to explore, describe, and report experiences of the patients (Thorne, 2016). This design allowed the information to be contextualised whilst at the same time generating new insights in the area of clinical relevance. This design enabled the researchers to address the study questions in order to meet the purpose of the study.

Study Setting

The study was conducted at Sekyere South District, one of the 27 Districts in the Ashanti Region of Ghana with an estimated population of 94,009 (2010 Population and Housing Census). Sekyere South district has numerous farming communities with few and isolated number of six health centres. The district has three hospitals (two community-level Hospital and one district hospital). Most health facilities are relatively far from the villages but are accessible by road.

Description of the Sample

Ten participants, made up of five females and five males voluntarily participated in the study.

The age range of the participants was between 20

and 73 years with an average age of 36 years.

The study participants who volunteered to be part of the study were recruited through the Institutional TB coordinators if they met the inclusion criteria of being at least 18 years of age, with Pulmonary TB, who had taken 2 or 3 months of the anti-TB drugs from five sub-district health facilities in Sekyere South.

Patients diagnosed of extra-pulmonary patients were excluded from the study because their clinical manifestation is different from Pulmonary TB.

Ethical considerations

This research received two-levelled ethics approval from the Institutional Review Board (IRB) of Noguchi Memorial Institute for Medical Research (NMIMR), University of Ghana and Ethics Review Committee (ERC) of the Ghana Health Service (GHS). All data about participants were anonymised and stored in a password-protected folder on a computer. Numbers were used as participant identifiers to ensure confidentiality and anonymity of all participants.

Data Collection and Analysis

Data were collected through individual interviews with the use of an interview guide to explore the factors that influence TB treatment adherence (Mayan, 2016). All ten participants took part in in-depth individual interviews. All interviews were recorded with an audio-tape and later transcribed. The interviews took place either in an office at the District Health

Administration or participant's home based on their preference. Each interview lasted between 60 and 90 minutes. Data collection and analysis occurred concurrently.

Data were analysed using content analysis proposed by Miles and Huberman (1994) to develop ideas which needed to be explored during subsequent interviews. The analysis process was interactive, consisting of data reduction, data display, and verification and drawing of conclusions. After each interview and transcription, the data was coded and a general impression about the data written. Whilst engaged in reading the verbal transcripts, patterns in the data were noted and grouped together (data reduction). Transcripts were read through several times to be familiar with the data before coding and data codes

were assembled into categories where similar codes were grouped together. The data was then re-coded and areas of disparities between the coding were resolved. Data display took place when the data were subsequently grouped based on similarities and categories that explained the same issues were merged together and mind mapped on a sheet of paper. Finally, possible explanations of the data within and between the groups were considered and conclusions arrived. The emerging findings were then reviewed by a TB expert and Public Health specialist of deep experiential knowledge who further appraised the evidence on the findings meeting the requirement which, according to Thorne (2016), is an essential part of the interpretive descriptive design.

A pictorial explanation of how data collection and analysis were done is shown in Figure 1 below.

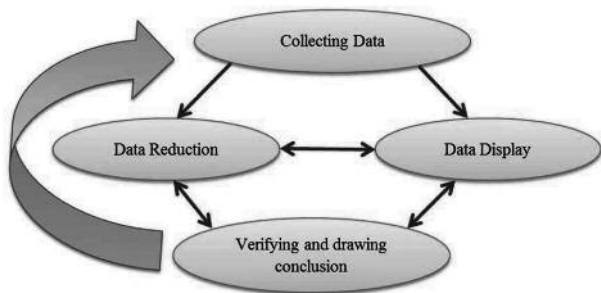


Figure 1: Data Collection and Analysis process - Miles & Huberman (1994)

The categories generated three main but interrelated themes; knowledge on TB and its treatment, treatment taking challenges, and intrinsic motivating factors for adherence.

Rigour

Rigour in qualitative research guarantees the robustness of the study and indicates the plausibility of the findings and the recommendations (Creswell, 2013; Miles & Huberman, 1994). In agreement with Lincoln & Guba, (1985), the worth of a qualitative research is determined by its credibility, dependability, confirmability, and transferability. Credibility of the study was ensured by conducting member checking with three participants to confirm that the developing themes reflected the issues they highlighted during the interview. Adequate procedural accounts of the conduct of the study were provided, and ethical principles followed.

Furthermore, a research journal was kept to track all the decisions made during the study and provide a transparent and clear audit trail. The procedures used for the data collection and analysis were documented clearly to facilitate the final review. This guaranteed the study's dependability. Appropriate quotes from the participants gave assurance of the study's confirmability. Furthermore, sufficient description about the study participants and the context were provided to determine to what extent the findings are applicable in their situation depicting transferability of findings.

Findings

This study generated three main themes and eight subthemes in all. The theme on knowledge on TB/Treatment had two sub-themes while that of the treatment taking challenges and the motivating factors for treatment adherence had three sub-themes each. These themes are presented below.

Knowledge on TB/ Treatment

Knowledge of participants on TB had implication on adherence. Adherence to anti-TB drugs was influenced by patients' knowledge on the cause of TB, treatment regime, and the consequences of defaulting.

The cause (s) of TB is one of the three sub-theme under the theme knowledge on TB/Treatment.

Seven out of the 10 participants attributed the cause of TB to spiritual forces and evil people. In addition, three participants attributed the cause to smoking, four participants blamed it on alcohol consumption, while one participant attributed the cause to eating pepper and using strong body perfumes. This data demonstrates knowledge gap in causes of TB. Participants' knowledge about the cause of TB influenced their decision to take the anti-TB drugs. Participant A01 attributed the cause of TB to 'exchange of a cough' during sex or a curse from others. She narrated her experience as follows:

When a man and a woman are having sex and the two 'cough on each other' it leads to TB. TB may be as a result of a curse from someone. I suspected my uncle who had a quarrel with me concerning my marriage. So when my condition was not improving, my father and I went to my hometown to really find the root cause of the TB and to perform some rituals.

However, other participants knew that TB was caused by germs and therefore, treatment at the health facility was the only way they could get well. Speaking about her knowledge on TB, Participant A02 had this to say:

Well, TB is caused by small germs. So I want to take the drugs continuously so that I can be cured. I don't think TB is a spiritual disease to be treated by a spiritualist so I do not intend to abandon my drugs and visit spiritualists, herbalist, and prayer camps.

The Treatment regime of drugs was captured as a sub-theme. Overall, participants had knowledge on the dosage of anti-TB drugs they were supposed to take but knowledge on the treatment duration varied. While six participants out of the 10 were knowledgeable about the duration of the treatment, the remaining four did not know how long the anti-TB drugs were to be taken, but all participants had accurate knowledge on the dosages. The quote below depicts

I take three tablets daily and I am supposed to take it for six months. So now that I have taken the drugs for 3 months, I have another 3 months more to complete the course
(A03)

Conversely, few participants did not know how long they were supposed to take the anti-TB drugs which was likely to lead to termination of treatment when the patient felt he or she was well.

Honestly, I do not know exactly how long I will be taking the anti-TB drugs. I believe when all my symptoms disappear, I will have to stop the drugs (A04).

The third and final sub-theme under this theme was the consequences of non-adherence. The knowledge about the consequences of defaulting also played a role in the patients' adherent behaviour. Six participants said non-adherence could cause serious health and social problems and so they were determined to complete their treatment. However, the remaining four participants did not have a clear understanding of the risks and effects of defaulting. Participants said they were adhering to their treatment to avoid the unwanted consequences that

might arise in case they stopped taking the drugs.

One participant recounted:

I know that if I do not take the drugs as instructed by the health workers, I will die.... ever since I started the drugs; I have noticed that there is hope. I know that the symptoms will get worse if I stop taking the drugs (A05).

One participant who is living with TB and HIV/AIDS co-infection saw the need to adhere to his drug regimen so that he could stay alive. He lamented as follows:

If I do not take the drugs as recommended, I will suffer the consequences. I had a bad experience when I stopped taking the drug during the previous treatment. So I will continue to take the drugs so that I will be cured..... Had it not been the drugs, by now I would not have been alive; I would have been dead already (A06).

Treatment taking challenges

Treatment taking challenges was the second theme that emerged after the analysis. Participants lamented on the challenges they experience while taking the anti-TB drugs. These challenges, as explained by the participants interfered with their treatment. Three sub-themes which emerged from this theme include the discomfort of taking the drug, condition not improving, the lack of food or fasting since the drug caused dizziness especially if taken without food. This theme has three sub-themes and it is presented below.

The discomfort of taking the drugs is the first sub-theme under the treatment taking challenges. Some challenges associated with taking the anti-TB drugs included weakness, feeling of choking when swallowing the drugs, side effect of drugs interfering with work, the big size and pungent odour of the drug. Again, drug load (volume of drug to be swallowed at a given time) was a major factor more especially if there were other concurrent chronic diseases such as diabetes or HIV/AIDS which also required long-term drug treatment. The following quotes from participants asserted the above information:

I am a labourer so I do tedious work like weeding, lifting of things, etc. I become weak and tired when I take my drugs and work at the

same time. This is a problem to me. So to reduce the weakness, this made me either reduce the dose of the TB and HIV drugs or skipped [sic] some of the TB treatment during my previous treatment (A06).

Another participant who had been taking the anti-TB drugs for the past three months also lamented about the uneasiness she felt while taking the drugs:

At times when I take the drugs, I feel like vomiting and I experience abdominal disturbances. The size of the drugs also makes swallowing it difficult leading to a feeling of choking sensation. Sometimes I feel I should just stop taking the drugs (A02).

'Condition not improving', was the second sub-theme under the main theme treatment taking challenges. Out of the ten participants, five complained of persistent symptoms of TB such as a cough, night sweats, and chest pains even several weeks after commencing the anti-TB treatment. Participant A01, who had ever completed a full treatment regime and now on retreatment shared her unpleasant experience:

I thought of stopping taking the drugs because a strong cough resurfaced after I had religiously followed all the instructions on the taking of the drugs. So I was like "what then is the use of the drugs when it cannot relieve the very problem why I am taking the drugs". I then lost hope with the taking of the drugs (A01).

The last sub-theme in this category was Lack of food/Fasting. Some participants explained that when the drug is taken on an empty stomach or with inadequate food, they feel uneasy. Those patients avoided taking the anti-TB drug when they did not have enough food to eat. Other participants experienced this because their pastors asked them to do fasting alongside prayers, as part of the measures to cure the TB. In all these cases, patients had unpleasant experiences of increased side effects of drugs such as weakness and dizziness. One participant's account was typical of the above sub-theme.

My pastor told me to do fasting alongside prayers. However, when I fast and take the drugs

I feel dizzy, and at times I skip the drugs during fasting for fear of becoming weaker (A07).

Again, another participant who had to take his anti-TB drugs during the Ramadan (annual month-long fasting performed by adult Moslems) interrupted his treatment because he becomes weak and dizzy. He was keen on participating in the fasting too knowing the benefit that accompanies the fasting (abundant blessing from Allah). This was what he had to share:

During our Ramadan, when I take the anti-TB drugs I usually feel dizzy during the day.

I didn't want to miss the Ramadan so I stopped the drugs and continued afterward (A08).

Although some participants were not fasting, they could not eat well enough because of affordability issues. The participants usually found it difficult to adhere to treatment because the anti-TB drugs caused dizziness and weakness. One participant narrated:

When I take the drugs without food then I feel dizzy. Without eating, taking the drugs becomes very difficult and it makes me also feel even weaker and I cannot work. Because of that, if I do not get enough food to eat, I do not take the drugs. And I am being honest here (A06).

Intrinsic motivating factors

Patients' motivating factor was the third theme and this had three sub-themes: making up the mind, becoming 'normal self', and improvement after initial treatment. In spite of challenges patients faced while on treatment, some were intrinsically motivated to get well. This factor was found to be supportive of treatment adherence. Four subthemes were identified under this theme. The three sub-themes are presented below.

The expression "I made up my mind" was key motivating factor for many participants and it therefore constituted a sub-theme. Making up the mind was helpful to most participants since it helped them to adhere to the drug regimen. Participants explained that making up their mind involved self-encouragement and self-determination in adhering to the treatment. Participant A05 narrated his story about what he does to ensure that he does not miss his drugs.

He reported:

I have determined not to miss a single day taking the drugs. So I have kept the drugs very close to my bedside toward the head. Immediately I wake up from the bed, the drug is the first thing that I see and because I have made up my mind to always take the drugs, I do not forget at all.

A participant emphasised that his personal determination to get cured helped him a lot because no family member was close by to supervise him to take the drugs. He remarked:

I am determined and made up my mind that no matter what, I must complete the drugs and be free from the TB... though it is tedious taking all those drugs, I have made up my mind to complete all the drugs once and for all (A09).

The second sub-theme under this theme was the desire to become 'normal self'. Some participants were still taking the drugs because of their determination to become their 'normal self' so they could perform their daily activities without relying on others. The reality was that patients with TB infection become dependent on others for food, money for transportation and needed expenses, and physical support from relatives. Therefore in order to be self-reliant, participants identified the need to adhere to their anti-TB drug regimen so that they could gain independence as early as possible. Participant A07 articulated her rationale for taking her drugs:

I am still taking the drugs so that I can become my 'normal self' and can walk without any difficulty; do my daily activities without any problem at all... my husband is usually very busy with his work and because of my condition he has to be with me most of the times. I want to become my normal self so that he can also do his work (A07).

The need to stay alive and become 'normal self' was also necessary because of what participants considered valuable to them such as their children and other activities they cherished. The following quote from a clearly articulated the need to become her normal self.

I decided to take the drugs because of one important thing. I do not have anybody from else-

where to care for me and my children, and my children are still too young in case I should die and leave them behind. So, I need to take the drugs to return to my normal self so that I can care for my children. If I die, my children may die of starvation and sorrow. [Participant having tears flowing from her eyes] (A10).

Improvement after initiating treatment was the third and final sub-theme under the third theme. In this study, participants witnessed improvement with their condition shortly after commencing the anti-TB treatment. Eight (8) participants verbalised that they had seen great improvement and they felt better now. Buttressing the point on improvement after taking the anti-TB drugs, participant A10 echoed:

The time that I was diagnosed with TB I looked like an old lady but shortly after taking the anti-TB drugs I saw an incredible improvement. Now I feel better; I, therefore, decided to take all the drugs (A10).

Participants associated the absence of TB-related symptoms with the improvement in the condition. This motivated the participants to continue taking their medication. For example, one participant recounted:

Soon after taking the drugs, I began to feel better than before. This inspired me because if 'the cough' had persisted after taking the drugs given to me initially, I would not have gone to the Hospital for the next doses of the drugs (A07).

Contrary to the views of others, participants A06 and A08, both on re-treatment following medication default during their previous treatment, specified that since the cardinal symptom of TB—coughing or chest pains—were absent, they considered themselves cured of the disease. Both patients had to restart the treatment altogether when the condition resurfaced some months later. Participant A08 narrated his story as below:

The main reason why I stopped the drugs was that I was quite ok; I didn't cough or have chest pain (A08).

On his part, participant A06, narrated:

I stopped taking the drugs on two occasions when I felt better. I did not see the need to continue taking the drugs when the symptoms subside (A06).

The findings of this study have been discussed under the three major themes.

DISCUSSION

Knowledge about TB and treatment

The experience of TB is socially constructed by persons living with TB and others who play significant roles in their lives. Some researchers have examined the role of the figurative connotation of some illness and its implications for treatment. For instance, cancer is seen as 'evil' and obesity as 'sinful' diseases (Conrad & Barker, 2010). Similarly, TB is described as 'ghost disease' (Salifu et al., 2016). It has been shown in these studies that these descriptions significantly affect persons living with such diseases. The decision to adhere to treatment is largely dependent on personal factors. Patient's knowledge and intention to adhere to treatment significantly relates to adherence behaviour and ability to deal with perceived difficulties with adherence (van den Boogaard et al., 2012). For participants to adhere to the anti-TB treatment, they needed to have the intention to do so and the required knowledge on the treatment regime.

Their intention was influenced by their beliefs and misconceptions which could be either helpful or unhelpful to the course of treatment (Abebe et al., 2010; Salifu et al., 2016; van den Boogaard et al., 2012). The knowledge of participants on the dosage of anti-TB drugs was high; however, knowledge on the cause of TB, mode of transmission, and duration of treatment was limited as evidenced by participant's verbalisation of TB causation by spiritual forces, curses and eating pepper.

As evident in the literature, most Africans tie biopsychosocial definition of diseases to chronic diseases such as tuberculosis (Dowrick, May, Richardson, & Bundred, 1996). As a result of this belief, most people living with TB regarded the disease as having a spiritual origin. As a result, the treatment of TB does not lie only in the physical but spiritual healing as well. This means that spirituality is deeply rooted in TB care for some patients. Therefore, the patients saw TB not only as a bio psychological condition but a spiritual one as well (Sulmasy, 2002). The findings of this study were similar to the work of Gerrish, Naisby, and Ismail (2013) who studied the knowledge of TB within the Somali community by engaging patients living with TB, community leaders and the community at large. The authors also discovered that specific knowledge on how TB is transmitted was poor among the TB patients, a view supported by (Finnie et al., 2011). The participants' knowledge about the cause of the

disease sometimes influenced their decision to take the anti-TB drugs and ultimately their adherence to the full course of treatment (Buregyeya et al., 2011). Since most participants attributed the cause of TB to spiritual forces and evil people, it interrupted treatment adherence. This finding corroborates other previous qualitative studies in Uganda, Nigeria and Ghana, which found that some beliefs such as perceived cause of TB (for example witchcraft) affect adherence to orthodox drugs used in treating TB (Buregyeya et al., 2011; Okeibunor, Onyeneho, Chukwu, & Post, 2007; Salifu et al., 2016). This implies that patients' intention to seek and adhere to treatment is based on knowledge and beliefs about TB (van den Boogaard et al., 2012).

The findings of this current study, relative to treatment non-adherence due to the lack of awareness about the significance of treatment and the consequences of defaulting, was consistent with the conclusions of a research by Kulkarni et al, 2013. This finding also corroborated another study in the United Kingdom by Gerrish et al 2013. It therefore appears obvious that increasing patients' knowledge and understanding of the full treatment regime might potentially empower patients and boost their confidence in treatment (Zhou et al., 2012). It is however unclear what the linkage is between knowledge and treatment of TB on one hand and non-adherence on the other hand since some patients knew the treatment regime but still defaulted along the course. The researchers considered the role of personal beliefs and the sensation of feeling well as possible explanatory factors.

It is noted that the biopsychosocial model of disease postulates that the environment, body, and mind, interacts to bring good health. However, health care providers are usually concerned with the biomedical aspect of health and this creates a gap in the treatment of patients with diseases such as TB which is psychosocially and spiritually constructed (Conrad & Barker, 2010; George & Engel, 1980; Sulmasy, 2002). Usually, care provided to patients does not fully incorporate these various aspects of health (Dowrick et al., 1996). Therefore health care professionals' efforts to increase adherence to TB drugs must address the individual's perceptions of health and the sociocultural factors that act as barriers to accessing health care. Again, health professionals offering treatment for TB should provide services that meet the physical, social, psychological as well as the spiritual needs of the patients living with TB to optimise their adherence to treatment in totality.

Treatment Taking Challenges

The difficulties which relate to taking the anti-TB drugs influence adherence negatively. Typically, discomfort and choking sensation associated with taking anti-TB drugs varied from one participant to the other and influenced adherence. Side effects of the drugs and adverse drug reactions interrupted treatment especially if the drugs were taken without meals. Munro et al. (2007) who developed a model on adherence in TB specified that the side effects which patients experienced were highly influential in their decision to continue taking the anti-TB drugs. Other studies confirm that discomfort is related to non-adherence (Castelnuovo, 2010; Neves, Canini, Reis, Santos, & Gir, 2012). The qualitative approach used in this current study afforded participants the opportunity to describe the lived experiences of the side effects of anti-TB drugs. The side effects described by this study's participants include nausea, vomiting, dizziness, a feeling of choking, and palpitation. These side effects were echoed in the findings of other studies (Isaakidis et al., 2013; Xu et al., 2009; Zuñiga, 2012) as factors that affect treatment adherence among patients living with TB. These anti-TB drug side effects worsen if taken on an empty stomach or when patients have not eaten.

It is of concern that the drug burden and elevated effect of the anti-TB drugs together with others such as anti-retroviral drugs lead to non-adherence among people living with TB and HIV/AIDS co-infections. These findings corroborate other studies which establish that the challenges associated with treating TB is even worsened if there are other underlying concurrent co-morbidities for example HIV/AIDS known to contribute to poor treatment adherence (Dodor, 2012; Gebremariam et al., 2010; Neves et al., 2012; Orr, 2011). Despite these challenges, some patients living with TB were self-motivated to take their anti-TB drugs.

Intrinsic motivating factors

The desire to get well and be cured of TB motivated patients to adhere to treatment. In this study, patients who 'made up their mind' to complete the treatment complied with the treatment plan in spite of challenges. Again, patients who realised the need to become their 'normal selves' were willing to adhere with the treatment instructions. Moreover, the improvement which patients experienced after commencing treatment contributed to treatment adherence. These findings established that curing TB was heavily dependent on the patient who was receiving the treat-

ment. Essentially, self-motivated patients are most likely to adhere to treatment. Other studies establish that individuals who generally feel reluctant to seek treatment for a disease will only do so if there are motivation and commitment (Soleymanian, Niknami, Hajizadeh, Shojaeizadeh, & Montazeri, 2014). Possibly, patients who have not made up their minds to adhere to full treatment plan might be lacking self-confidence especially when there are issues with their social relations.

Participants who realized that living with TB created inconveniences which they aimed to overcome by adhering to the treatment plan in order to become 'their normal selves' focused on compliance in order to gain independence as early as possible. In this struggle, participants found worth in both staying alive and living without TB. The self-worth and belief participants had in wanting to get cured motivated them to adhere to their anti-TB drugs. This self-worth and belief that TB is curable corroborated similar works done by Orr (2011) and Gerrish et al. (2013). Treatment adherence and non-adherence were dependent on the improvement patients saw few weeks after commencing the anti-TB drugs. This feeling of 'being well' influenced adherence, depending on the meaning the patients attached to it. Usually, patients on anti-TB drugs improve in their condition when cough and chest pain subsides, and weight gain is observed as appetite improves. This improvement in patients' condition encouraged the patients to adhere to treatment. Some participants explained that they would not have continued taking the drugs if their symptoms had persisted or if their conditions had 21

deteriorated weeks or months after initiating the anti-TB drugs. This evidence partially supported the findings of several studies (Ananthakrishnan, Jeyaraj, Palani, & Sathiyasekaran, 2012; Belilovsky et al., 2010) which establish that patients living with TB who were 'feeling better' were more likely to interrupt treatment because they felt they were cured of TB. Some participants in the current study who were on re-treatment had defaulted previously because they felt better, however when put on treatment again, these patients vowed to complete taking their drugs even if they started to feel better. The sense of feeling better euphoria was hence seen as a form of motivation among most previously defaulted patients. Feeling better is however subject to individual interpretation.

The challenges discussed above call for treatment regime that is comparatively shorter than the 6-month

or 8-month treatment duration currently in Ghana. These factors possibly explain patients preferred shorter duration of treatment as identified in Barcelona (Jimenez-Fuentes, de Souza-Galvao, Mila Auge, Solsona Peiro, & Altet-Gomez, 2013).

A major limitation of the study is the recruitment of participants who were currently taking their anti-TB drugs or who were on re-treatment. Patients who had completely defaulted on the treatment regimen could have provided essentially different viewpoints from the participants involved in this study. Consequently, the findings of this study might not be applicable to participants who have defaulted treatment. However, due to poor records and inaccurate house address of some patients, most patients who had defaulted could be hardly traced to be included in the study during the recruitment. In this study, family members played significant roles in treatment by providing socio-economic support for relations who were living with TB. However, key family members who supported their relatives' treatment at home were not included in the study. Interviewing both patients and their key family support persons could have illuminated the understanding about anti-TB treatment adherence. A study that seeks to concurrently examine the perspectives of patients living with TB and their caregivers might potentially provide a broader and deeper understanding of treatment adherence in the successful management of TB.

Conclusion

This study contributes to evidence generated on the experiences of patients living TB and offers deeper understanding of the contextual realities of living with TB. Elements which influenced non-adherence in this district-wide qualitative study within the Ghanaian context have been discussed. The emergent themes which enabled the researchers to provide rich narratives on patients' decisions to complete their treatment regime included patients' knowledge on TB treatment, challenges to treatment, and motivations that influence adherence to anti-TB treatment. This study emphasised the need for healthcare workers to integrate religious and personal beliefs into patient care since these affected factors compliance to treatment. Where family support was available and patients 'made-up' their minds, they were likely to complete treatment regardless of the social or cultural hurdles they might encounter. The lack of sup-

port and encouragement however negatively impact patients' treatment compliance especially when they start to feel better. This, therefore, requires community-based nursing care, mass education and practical supportive interventions that are culturally sensitive to address patients' non-adherence to anti-TB treatment.

Recommendations must target policy makers, key stakeholders, health care providers and professional regulatory bodies to improve treatment outcomes of patients living with TB.

Implications for Health Care

It is imperative that the nursing professional body in collaboration with key stakeholders reactivate the activities of the Public Health Nurses and the Community Health Nurses to provide sustainable support at the community level till treatment is completed. This specialised care will provide the needed support for complete treatment adherence.

In the Ghanaian context where patients living with TB are stigmatised and socially isolated (Dodor, 2012), it is important that the Ministry of Health intensifies integrative education efforts and socio-economic support for patients living with TB. The Ministry of Health must also engage community groups, religious bodies and other health-related agencies to educate, empower and support patients living with TB. Future research can be directed at exploring the relationship between patients living with TB and TB coordinators and the role of family members. Counselling services aimed at improving adherence for patients living with TB patients must ensure implementation of thorough pretreatment assessment to identify any potential barrier to full treatment regimen adherence.

Conflict of Interest: None declared

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Original Article

Family belief systems and practices that influence exclusive breastfeeding in Sagu, Ghana

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Abstract

Breast milk provides additional protection to children less than five years against infections. In the last few decades, exclusive breastfeeding has received a growing interest as the appropriate feeding method for infants all over the world. The aim of the study was to identify family belief systems and practices that influenced infant feeding during the first six months of life among rural women in Sagu, in the Upper West Region of Ghana. An exploratory, qualitative research design was employed to obtain in-depth information required to understand and interpret family belief systems and practices that influence exclusive breastfeeding among 27 participants. Data were collected between August and September, 2016. The study found family belief systems and practices such as gender, social role, culture and religious beliefs as factors influencing exclusive breastfeeding among women. Family heads were key in decision-making regarding infant feeding. The findings showed that mothers faced multifaceted cultural and religious beliefs, gender relations and socio-structural factors that influenced their decision making regarding breastfeeding. Grandfathers, grandmothers and fathers have an important role in infant feeding decisions in rural communities; however, they required prior knowledge to provide optimum support to breastfeeding mothers. Public health education on exclusive breastfeeding is required among significant others in the family. Further research is required to explore cultural beliefs and practices influencing exclusive breastfeeding and how they can be modified to promote public interventions particularly in matters relating to exclusive breastfeeding.

Keywords:

Cultural beliefs; exclusive breastfeeding; infants

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Introduction

In the last decade there has been a growing interest in exclusive breastfeeding as the appropriate feeding method for infants all over the world. Scientific evidence has shown that there are health benefits of exclusive breastfeeding (EBF) to the child. For example, exclusive breastfeeding reduces child morbidity and mortality (American Academy of Pediatrics, 2012; Committee on Health Care for Underserved Women, Committee on Obstetric Practice, 2007; Sokol, Aguayo & Clark, 2007). The health benefits of breastfeeding are not only limited to infants but also spread onto the mothers. Breastfeeding can help mothers reduce the risk of cardiovascular disease, breast and ovarian cancer, type 2 diabetes, postpartum depression and prolongs lactation amenorrhea (Kramer & Kakuma, 2004; Schwarz et al., 2009; Stuebe et al., 2009; Stuebe & RichEdwards, 2009). Globally, only 38% of infants aged zero to six months are exclusively breastfed (Black, et al., 2013). Recent analyses indicated that suboptimal breastfeeding practices, including non-exclusive breastfeeding, contribute to about 11.6% of mortality in children under 5 years of age (Black, 2013). In the 2012, World Health Assembly Resolution, 65.6% endorsed a comprehensive implementation plan on maternal, infant and young child nutrition (WHO, 2012), and one of their targets was to increase the rate of exclusive breastfeeding in the first six months of infants' life to at least 50% globally by 2025 (Global Nutrition Targets, 2025). However, several countries in the sub-Saharan region of Africa are still striving to meet this target. Countries with low exclusive breastfeeding practices include Chad (2%) Cote d'Ivoire (4%), Gabon (6%) and Sierra Leone (8%) (UNICEF, 2011). The Ghana Demographic and Health Survey (GDHS) in 2014 estimated that about 98% of children in Ghana are breastfed at some point in their life. The median duration of EBF is about four months and 73% of breastfed children are given complementary food by age 6 to 9 months (Ghana Statistical Service (GSS), Ghana Health Service (GHS), & ICF International., 2015). Despite the health benefits of EBF and efforts to promote exclusive breastfeeding around the world, the percentage of children who are exclusively breastfed have decreased in Ghana by 17% between 2008 and 2014 (Ghana Statistical Service (GSS), Ghana Health Service (GHS), & ICF International, 2015). Exclusive breastfeeding is not thoroughly carried out in Ghana due to several reasons including

the practice of giving complementary feeding. Breastfeeding practices in most rural communities are significantly influenced by cultural beliefs, socioeconomic status, ethnicity, education, urbanization, modernization, and local feeding practices (Ergenekon-Ozelci, Elmaci, Ertem & Saka, 2006). Gender roles, social support and attitudes of friends and relatives towards breastfeeding have also been shown to affect mothers' intended duration of breastfeeding (Paine & Dorea, 2001; Seidu, 2013). Cultural beliefs and local traditions are important in determining health behavior in most communities around the world. While some of these beliefs and traditions encourage breastfeeding, others discourage it (Osman, Zein & Wick, 2009). A good understanding of local beliefs, customs and traditions related to EBF can help healthcare providers and breastfeeding advocates to provide better support and more appropriate health education on EBF to key decision makers in the family concerning infant feeding.

Previous studies have focused on factors associated with exclusive breastfeeding, health outcomes of non-exclusive breastfeeding, fathers' experiences of supporting breastfeeding, and knowledge, attitude and practice of exclusive breastfeeding among mothers (Brown & Davies, 2014; Mithani & Premani, 2015; Mogre, Dery & Gaa, 2016; Mohamed, Amin, Okwahi & Elgorashi, 2015; Neji, Nkemdilim & Ferdinand, 2015). However, very little attention has been paid to family and cultural belief systems and practices that might influence exclusive breastfeeding, especially in the rural communities (Swigart et al., 2017). The social life in a traditional African setting, the interpersonal relations in families, schools, churches and workplaces are largely regulated by the dominance of males (Kabeer, 2014). Women, are mainly in a subordinate position with little or no control over sexual matters and the ability to negotiate important family health decisions including, breastfeeding (Farré, 2011). There is therefore the need to investigate cultural belief systems and practices that may be interfering with exclusive breastfeeding among women in the rural settings.

Design and Methods

An exploratory, qualitative research design was adopted in order to obtain in-depth information required to understand and interpret family belief systems and practices associated with EBF. Sampling procedure

Snowball sampling technique was used in the study to enable easy identification of families that had breastfeeding children less than 22 months of age. Due to the small size of the community, the snowball sampling technique was very effective as participants were familiar with each other. Twenty-seven participants were identified and invited to participate in the study. The participants included extended family members (fathers, grandfathers and grandmothers) of breastfeeding mothers, breastfeeding mothers and a traditional birth attendant (TBA). A convenient time and place was scheduled for each interview with participants and with the assistance of a nursing officer from the Regional Hospital and a volunteer community health nurse, the interviews were conducted in Dagaare, the language of the community, which some of the researchers as well as the research assistants speak fluently.

In accordance with the qualitative descriptive approach, the principle of saturation [whereby no new information emerges with the addition of new cases] (Guest, Bunce & Johnson, 2006) was used to determine the sample size of 27.

Data Collection

Participants were recruited between August and September, 2016. Individual interviews were conducted for each participant after they had met the inclusion criteria and consented to participate. Inclusion criteria were family members (fathers, grandfathers and grandmothers) with a breastfeeding mother of an infant less than 22 months of age in the family. The breastfeeding mothers in those families and a TBA in the community were all part of the inclusion criteria. Families that had no breastfeeding mother of infant less than 22 months were excluded from the study. Before data collection, the purpose, risk, and benefits of the study were explained to the participants in Dagaare. Participants who agreed to take part in the study voluntarily signed a written consent form and those who could neither read nor write thumb-printed to indicate that they agreed to participate in the study. The participants were also informed that their participation in the study was voluntary and that they could withdraw at any time. Face-to-face in-depth interviews were conducted for each participant, and open-ended questions were used for the interviews. All the interviews were audio recorded with the permission of participants. The open response format of the

questions, in the interview guide, allowed the participants to express themselves in their own words according to their understanding. The format also facilitated further probing for clarification of responses. During the interviews, there was a moderator and two assistant moderators. The moderator led the discussion, kept the conversation flowing throughout the interview, while one assistant moderator operated the tape recorder and responded to unexpected interactions, and the other assistant moderator took comprehensive notes, and kept track of time. Interviews were done in isolation from family members. This was intended to make participants feel free to answer questions and share their experiences. The interviews lasted for about 30 to 45 minutes.

Data analysis

A qualitative descriptive approach (Sandelowski, 2010) was employed with thematic analysis carried out for each interview. Data were translated, transcribed verbatim, manually coded and analysed thematically. Data analysis was guided using Morse and Richards (2002) frame work for thematic analysis and included the following steps: topic coding, creating categories and abstracting. Field notes taken during interviews were reflected upon, coded and analysed. Coding of the data was completed by the first and second author and reviewed by all the research members. The first and second authors led a detailed analysis of the data retrieved for each category, and the research team helped in refining the themes. The data analysis revealed participants' concepts of family belief systems of EBF, which were then categorized into themes and constantly interpreted throughout the course of the study.

Rigour

To enhance rigour, all transcripts were revisited frequently to ensure accurateness in the translation of context and spoken words from the local dialect (Dagaare) into English. Direct quotes and narratives from interviews were used to illustrate and support interpretations of the data.

Trustworthiness of data was ensured by meeting the criteria for credibility, transferability, dependability and confirmability. Credibility was ensured by letting a Ghanaian who was fluent in the local dialect (Dagaare) and English, to review a randomly-chosen

translated transcript for accuracy in translation; and the research team checking to make sure that data reflected the reality and was a representative of the participants. The study also ensured transferability of the findings to other sites through comprehensive methodological approach. The research team enabled dependability of the data by making sure that the study used the same interview guide, asked participants the same questions, audio recorded all the interviews and used the same method to analyse the data. Transcripts data coding, categorization and themes were regularly shared with the research team for crosschecking and questioning, and besides data were immediately transcribed to prevent misinterpretation and this ensured confirmability. Detailed field notes and reflective notes were kept and reviewed frequently for emerging ideas by the research team. Data triangulation (Richards & Morse, 2007) was employed by gathering multiple perspectives of participants' cultural beliefs and practices that influenced exclusive breastfeeding.

Ethical consideration

Ethical approval was sought from the Ethics Review Board of Valley View University Techiman Campus prior to the collection of data. The chief and opinion leaders in the community were informed about the study for their consent. The purpose, risk, and benefits of the study were all explained to the participants in Dagaare and their consent was sought. Confidentiality was also ensured and written consent was obtained from the participants before conducting the interview.

Results

Twenty-seven participants were interviewed for the study. The participants included family members (fathers, grandfathers and grandmothers) of breastfeeding mothers, breastfeeding mothers and a TBA. The breastfeeding mothers were 18 in number and had children aged four to 22 months. Four of the participants were first-time mothers while the others had on the average three children each. The ages of the breastfeeding mothers ranged from 20 to 37 years. The study participants also included four fathers, two grandmothers, two grandfathers, and a traditional birth attendant in the community. Twenty-one out of the twenty-seven participants did not have any formal education while six participants had vocational training. Farming was the main occupation of most participants except four breast-feeding mothers and a

TBA who were traders. Two main themes emerged with regard to the forms of family beliefs and practices that influence EBF; they were gender and social role with culture and religious beliefs. Gender and social role comprised the father, grandfather, grandmother, breastfeeding mother and a TBA while culture and religious beliefs were related to 'muoluu' (unexplained sickness of the newborn) and 'pogpaali kuong' (new woman water).

Gender and Social Role

The data revealed that issues concerning EBF and infant feeding in general are dependent on gender and social role. In traditional African settings, men are the main decision makers of the family and the community studied was no exception. Men decide what is appropriate in family matters including issues relating to reproductive health and breastfeeding. Men always have the final word in matters concerning their family welfare. One participant stated:

"I make decisions in my house, so I decide what is good for my children and my wife or anyone taking care of my child will do.....the role of the woman is just to give me a child and not to take decisions for me" (Father 1).

With regard to husbands' decision concerning infant feeding, most fathers expressed that, in their view, breast milk contains only water and will not be enough for the growth and developmental requirements of their children. Some fathers indicated that they were fed with 'porridge' and 'tuo zaafi' (T.Z) when they were infants and that contributed to their strength and muscular development and appearance. They further indicated that they would not allow their wives to starve their children with only breast milk:

"I always ask my wives to give my children enough breast milk but if the baby is still crying and refuses to sleep then I order them to give the child solid food regardless of the age" (Father 2).

Interviews with breastfeeding mothers to find out how family practices influenced exclusive breastfeeding revealed that fathers often instructed them on how they wanted their babies fed:

"...although I always want to exclusively breastfeed my babies, my husband and the children's grandfather as well as grandmother always tell me to feed them with 'kooko' aside the breast milk so that they can sleep and grow well" (BFM 4).

It is a belief and practice in the participants' communities that women should respect and follow their husbands' orders to the core and this includes infant feeding. The belief is that if a woman disobeys her husband their children will grow to be stubborn and wayward. This then compels women to follow their husbands' orders. Thus, children are breastfed in accordance with orders from husbands:

"When my second child was disrespectful to her teacher, my husband accused me that it was because I refused to follow his orders during breastfeeding. ...I gave birth through an operation and the doctors said I should give my baby only breast milk for the first six months. This made my husband very angry. In order to please my husband, I vowed not to do anything against his will including feeding his child" (BFM 8).

Another respondent (mother) expressed similar remarks. She indicated that a child can be physically weak and will not be able to defend himself or herself if the child is fed with only breast milk – which is against the socially acceptable way as well as against the will of the head of the family:

"In this our village all the strong children were brought up according to what the society defines as appropriate including their feeding (breastfeeding together with their staple food). We are always asked to give the babies' 'kooko' and soft 'tuo zaafi' to make them strong against what the doctors and nurses advise us to give them only breastmilk for the first six months of life" (TBA).

Cultural and religious family beliefs

Most breastfeeding mothers were prepared to practice EBF but the family beliefs and practices were interfering with this desire. If a woman dared disobey or go against the rules of the family head, she incurred the anger of the family.

The study revealed that in the study community grandmothers were the caretakers of the babies and they always fed, bathed and dressed up babies because of the belief that they have rich experiences in child upbringing. For example, when bathing the baby the grandmothers give some of the bathing water to the babies to drink. This is because they believe babies cannot say they are thirsty:

"I give my grandson some water to drink when bathing him or when he is crying in the absence of the mother" (GM 2).

The analyses identified other cultural belief systems that were associated with breastfeeding. The 'muoluu' and 'pogpaali kuong' for instance were identified. The 'muoluu' refers to general weakness or unexplained sickness that new-borns suffer. These are conditions that are believed cannot be cured by orthodox medicine. A ritual is usually done to shield new-borns against diseases and sicknesses believed to be caused by contact with individuals who do not take a bath after sexual intercourse. One respondent explained this ritual concoction as follows:

"In our community we usually protect our new-borns from bad people who will intentionally want your child to fall sick so that you will suffer; if a man or woman holds the baby after having sexual inter-course and without taking their bath the baby will fall sick and may not survive any medical treatment. So, we usually perform some ritual bath for the baby after delivery to protect the new born from such sickness" (GF 2).

Further interrogation to find out how and when such a concoction was administered to the babies, revealed that babies are bathed with it and are made to drink some; this was usually done immediately after delivery. He stated:

"The baby is bathed with some herbs and is made to drink some, if the baby is a boy, he is made to drink it for three days and if a girl, she is bathed and fed with the prepared concoction for four days" (GF 2).

The 'pogpaali kuong', which means 'new woman water', is a ritual bath usually performed to initiate women who have given birth for the first time into motherhood. It is

believed that the ritual bath enables the woman to be a responsible mother. However, this ritual is not limited to the mother but is extended to the new born as well. During this ritual, the mother is always separated from the new-born and during this separation period, concoctions are mixed with breast milk or 'koko' (porridge) to feed the baby. It is believed that, this makes the baby grow to be strong and helps to bring out any dirt that is in the stomach of the baby. A participant narrated:

"We still have this traditional rite we perform for our women who give birth for the first time, life is transitional and one need to be well initiated from being a girl to not only a woman but a mother as well. We always separate the baby from the mother as they both undergo the rituals" (father 4).

Another belief, stated by some participants, was that, human spermatozoa could make their way to the breast milk and cause babies who are fed with such milk to have diarrhoea and other unknown sicknesses. When a breastfeeding mother engages in sexual intercourse, therefore, she will have to suspend breastfeeding for two weeks. A respondent explicitly explained this:

"Sperms can travel to the breast so when the child drinks it he will run diarrhoea and will not sleep. So, if a woman who is breastfeeding has sexual intercourse she will have to stop breastfeeding" (BFM 15).

The participants also believed that when a mother gets pregnant during breastfeeding, there is the need for the mother to cease breastfeeding no matter the age of the infant. They believed that pregnancy brings about bad breast milk, which would prevent normal growth and development of the infant. Study participants expressed that modern infant feeds are available for young children but they were used to feeding the infants with natural cow milk after sudden cessation of breast milk. A mother stated:

"At my youthful age I witnessed my aunty cease breastfeeding due to pregnancy immediately after birth...she breastfed for almost five months, the child grew normal with the use of fresh cow milk and other staple food..." (BFM 13).

Discussion

The findings of this study highlight factors that influence EBF in rural communities in the Upper West Region of Ghana. The study showed that multifaceted cultural and religious beliefs, gender relations and socio-structural factors influence women's decision making regarding breastfeeding.

Gender and Social Role

The current study findings revealed a number of practices where gender and social role were associated with breastfeeding. It is often believed that women with adequate understanding about EBF and its health benefits will be motivated to practice EBF than women with little information and understanding (Bandura, 2004). However, in a typical African context, a woman's knowledge and understanding about EBF is not enough to enforce the practice of EBF (Sokol, Aguayo & Clark, 2007). This current study revealed that, although mothers had information about the importance and benefits of EBF they did not have the 'power' to make independent decision to practice EBF. The women needed permission from their husbands or family heads. The paternal grandmother, grandfather, and father were the key decision makers. Their influential role discovered by this present study is supported by an earlier study in the northern part of Malawi (Kerr & Kakuma, 2008).

The findings revealed that fathers did not support their wives in exclusive breast-feeding. They used their role as family heads or breadwinners to control feeding practices in the family. Most fathers believed that breast milk is mainly liquid and not heavy nor nutritious enough for the baby's optimal growth and development. The fathers believed that, addition of staple foods would enhance child development. Though fathers' support is not the only factor related to breastfeeding success (Flacking, Dykes & Ewald, 2010; Kinanee & Ezekiel-Hart, 2009) their support has been recognised as one of the strong predictors of exclusive and optimum breastfeeding (Mithani, Premani, Kurji & Rashid, 2015). Several studies have confirmed that fathers play a pivotal role in supporting mothers to initiate and maintain breastfeeding (Ekström, Widström & Nissen, 2003; Li, Darling, Maurice, Barker & Grummer-Strawn, 2005; MitchellBox & Braun, 2012; Scott, Landers, Hughes & Binns, 2001). Fathers' decisions in this study did not support EBF practices and because of their role in the family

and the community at large, their wives had to follow their orders. The decisions fathers make within the family context remain and everyone in the family must go along with it, including their wives. Fathers in this study, however, did not know that their decisions in the family influenced EBF, because they did not have adequate knowledge on the benefits of exclusive breastfeeding. As such some fathers in the study indicated that they will not let their children be starved with only breast milk which is just mere liquid.

Participants in this current study revealed that grandmothers also had much influence in caring for children. The participants further indicated that even though some grandmothers had knowledge about EBF, they insisted on giving water to babies during bathing; their reason being that breast milk solely would not be enough to sustain the babies due to the dry and harsh weather conditions. Although mothers were willing to exclusively breastfeed their babies they were however influenced by their mothers-in-law or biological mothers' decisions. This finding is in accordance with study findings of Osman, El Zein and Wick (2009), who reported that family members (particularly grandmothers) were influential sources of discouragement of breastfeeding. A recent study on exclusive breastfeeding, reported that family members (grandmothers) had an influence on exclusive breastfeeding practices among breastfeeding mothers in the Ayeyarwaddy region in Myanmar (Thet, et al., 2016). This suggests that health educational interventions on EBF are mostly tailored to target the breastfeeding mothers with very little or no focus on other significant family members.

Cultural and religious family beliefs

This study also found that cultural and religious practices associated with EBF shaped participants' views regarding breastfeeding. The study identified baby-feeding rituals called 'muoluu' and 'pogpaali kuong'. The study found out that these cultural and family belief practices interrupted and delayed breastfeeding in many ways, which later affected EBF. The study findings are in accordance with a study done in Bristol, UK that involved 'South Asian grandmothers' which concluded that breastfeeding was delayed because of strong cultural values and beliefs (Ingram, Johnson & Hamid, 2003). In contrast to the current study, religious and cultural beliefs were considered as one of the significant factors among both urban

and semiurban fathers in promoting breastfeeding in Karachi, Pakistan. All of the study participants agreed that they encouraged their wives to initiate and maintain breastfeeding and because their religion supported it; it played a motivational role (Mithani, Premani, Kurji & Rashid, 2015).

Also, observations noted in studies conducted in Pakistan, Nepal, and India (Laroya & Sharma, 2006; Moran & Giland, 2007) showed that religious beliefs had positive influence on EBF. But the current study revealed a harmful religious and cultural practice that defeats the purpose of EBF. These differences might be attributed to the different cultural and religious belief system practised in the different geographical locations. Moreover the current study revealed that significant others (grandmother, grandfather and father) in the family had little knowledge about the importance of EBF to the baby and the mother as well, but the studies from Pakistan, Nepal and India stated above showed that participants had adequate knowledge about the importance of EBF and also their religious practice supported breastfeeding.

Another important belief is the cessation of breastfeeding after the breastfeeding mother had sexual intercourse and or became pregnant. This practice, though not so dominant in the community where the study took place, was still practised by some families, which hampered the success of EBF. A study conducted by Awumbila (2003) also reported that pregnancy brought about early cessation of breastfeeding among Kusasi community in Ghana where the people of the community thought that pregnancy would make the breast milk warm and cause diarrhoea if the baby was breastfed with it. These beliefs in the communities are not to harm the babies but to protect them from taking what they believed was 'unsafe' breast milk that would cause them to become sick. These perceptions were due to lack of knowledge pertaining to exclusive breastfeeding and its associated benefits to both mother and child.

Implications for Health promotion and Policy

The findings from this study imply that cultural and family belief systems did not promote exclusive breastfeeding. The implications of these findings are that efforts to modify infant feeding practices must take into account the many cultural and family belief

influences on feeding practices, and will need to recognize and understand the broad complex of factors and dynamics operating at the household and community level which affect feeding behaviour. They also require that grandfathers, grandmothers, fathers and women's knowledge on infant feeding are recognized and valued, and that all stakeholders participate in decision making if sustained changes are to be ensured. Education especially, public health campaigns should target rural communities as a way of increasing families' awareness in relation to EBF practise. Educating significant others such as grandmothers, grandfathers, and fathers on the importance and benefits of EBF to the mother and child may help to improve the practice of EBF. It is also prudent that, availability of essential information pertaining to the benefits of breastfeeding and reproductive health as a whole would help in changing families' ideas of feeding practices that are deemed to be appropriate for their infants. Community based health promoters and leaders should encourage the formation of breastfeeding support groups in rural communities that would empower breastfeeding mothers with knowledge and logistics to be able to practise EBF. Policy makers should provide community based strategies to support exclusive breastfeeding, including implementation of communication campaigns tailored to the local context.

The study findings imply that furthermore, future research would be needed to examine the role cultural beliefs and practices play in influencing the adherence to exclusive breastfeeding among women and how such beliefs and practices can be changed to support the course of public interventions specifically in areas related to exclusive breastfeeding.

Conclusion

The study revealed that breastfeeding mothers' efforts to exclusively breastfeed their babies were regularly influenced by their cultural and families' beliefs and practices over which the breastfeeding mothers did not have the authority to control in their communities. Also, significant others in the family such as the grandfathers, grandmothers and fathers have an important role in infant feeding decisions in rural communities; however, they required prior knowledge to provide optimum support to breastfeeding mothers. The Global Strategy for Infant and Young Child Feeding emphasises on the need for those involved in pro-

moting breastfeeding should understand the benefits and importance of exclusive breastfeeding. Therefore, evidence presented in this study would be useful in design and implementation of behaviour change interventions targeting improved breastfeeding practices especially among rural communities in Ghana.

Conflict of Interest

The authors endorsed that this article content has no conflict of interest.

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Original Article

Awareness and knowledge of gestational diabetes mellitus among pregnant women at the Tema General Hospital, Ghana

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Abstract

Gestational diabetes mellitus (GDM) is a medical condition that occurs during pregnancy. This study sought specifically to determine the awareness of pregnant women on GDM. It also assessed the knowledge level of pregnant women on GDM and determined whether there was a correlation between educational level and knowledge of GDM. The study utilised the quantitative method. A cross-sectional design was used to investigate the awareness and knowledge of pregnant women on GDM. The research setting for the study was at the Tema General Hospital. The study population included all pregnant women who attended antenatal clinic at the hospital for routine maternal health services in February 2015. The average monthly antenatal attendance was 500 pregnant women and 250 respondents were chosen through simple random sampling.

Statistical Package for Social Sciences (SPSS) version 21 was used to analyse the data. The study revealed that majority of respondents was aware of GDM. The sources of awareness included television, radio, newspapers, friends and health personnel. The respondents had knowledge of the causes and risk factors that led to GDM.

Recommendations included the use of mass media as a tool to intensify and disseminate information about GDM and re-emphasis of causes and risk factors associated with GDM during health talks for early detection and early reporting for management.

Keywords:

Awareness; Diabetes mellitus; Gestational; Hyperglycemia; knowledge

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Introduction

Diabetes mellitus [DM] is a chronic metabolic disease caused by hereditary and/or acquired insufficiency in the production of insulin by the pancreas, or by the ineffectiveness of the insulin produced. It is characterised by elevated blood concentrations of glucose, which in turn injure many of the body's systems, especially the blood vessels and nerves. DM is usually classified into four groups – Type 1, Type 2, gestational diabetes mellitus and diabetes related with other conditions - and each group has distinctive causal and risk factors [(World Health Organization [WHO], 2016; Alberti, Zimmet and Shaw 2006)].

Internationally, approximately 422 million adults had diabetes in 2014, compared to 108 Million in 1980. The global incidence (age-standardised) of diabetes had almost doubled since 1980, growing from 4.7% to 8.5% in the adult population (WHO, 2016). In 2000, approximately 171 million people globally had some form of diabetes mellitus and a projected 361 million people will be affected by the condition by 2030 (Reece, Leguizamón and Wiznitzer, 2009). International Diabetes Federation [IDF] (2006) claimed that without concerted action to prevent DM, in less than 25 years, there will be 592 million people living with the disease.

Until about a decade ago, it was popularly believed that DM was rare in Africa. The incidence of diabetes has however increased in Africa due to improved personal incomes and changed lifestyles over poverty that was prevalent in the past. Although the prevalence of diabetes remains relatively low in Africa, people living with diabetes have increased from 4 million in 1980, to 25 million in 2014. Africa being among the world's youngest regions, that number is disturbing for several reasons (Quartz Africa, 2016).

Some epidemiologists predict that the economic impact of DM, as well as the consequent death toll, will surpass the ravages of HIV and AIDS in the near future (Whiting et al, 2013). Hall, Thomsen, Henriksen & Lohse (2011) mentioned that incidence (0-7% of the population) of DM was recorded in African countries such as Cameroon, Ghana, Guinea, Kenya, Nigeria, South Africa and Uganda while an incidence of more than 10% of the population was recorded in Zimbabwe.

In a study conducted by Biritwum, Gyapong and Mensah (2005) the prevalence of DM in Ghana was found to be 5.5% and higher among females 7.4% compared to males 2.8% (. The study also found that DM was more common among the married than unmarried and was highest among the formally employed compared to self-employed. It was evident in the study that DM was highest in Greater Accra at 16.1% and lowest in the Upper East and Upper West regions. By ethnicity, diabetes mellitus was highest among the Ga Adangbes, Ewes and Akans at 14.6%, 6.6% and 6.0% respectively. Another study in Ghana was conducted to establish and rank the maternal risk factors for GDM in the Ghanaian community. The study was strongly associated with women with history of stillbirth (OR=10.42, p=0.0004), relatives having diabetes (OR=8.08, p=0.004), history of more than two miscarriages (OR=3.15, p=0.0001), previous caesarean operations (OR=3.06, p=0.0004) and more than two parities (OR=3.03, p=0.0027) to the development of GDM. There was no significant difference recorded between the body mass index (BMI) of the GDMs and the control groups (p>0.05) (Asare-Anane, Bawah, Ofori & Amanquah, 2014).

During pregnancy, ineffectively managed diabetes increases the risk of maternal and foetal complications. The ninth leading cause of mortality among women globally is diabetes mellitus, which causes 2.1 million deaths per annum (International Diabetes Federation, 2017). Opong, Ntomy, Amoakoh-Coleman, Ogum-Alangea and Modey-Amoah, (2015) found from a study they conducted that GDM was prevalent in 10% of pregnant women in Accra and women who were obese by 20-24 weeks of pregnancy had a significantly increased risk of GDM). The study however did not find much information on the knowledge and awareness of GDM amongst pregnant women. To address the gap, the current study was conducted to assess the knowledge level of pregnant women on GDM and determine whether there is a correlation between educational level and knowledge of GDM.

Design and Methods

A quantitative methodology was adopted for this study using a research design of cross sectional descriptive survey. A group of 250 pregnant women were randomly selected from an average population of 500 pregnant women who visited the antenatal clinic at the Tema General Hospital in February,

2015. Approval was sought from the hospital and respondents before the study was conducted. The researchers briefed prospective respondents on the objectives of the study and semi-structured questionnaires were administered directly to the target population after receiving their consent. Pregnant women who had difficulty in reading or answering questions on their own were given the needed assistance. One month (1st February to 1st March 2015) was used for collection of all data.

The questionnaire was pretested among 20 pregnant women from LEKMA General Hospital, who were not

part of the main study. The questionnaire was reviewed by the research team based on challenges the pre-test group found in their attempt to answer the original questions. Furthermore, the instrument was reviewed to address face and content validity. Statistical Package for Social Science (SPSS) version 21 was used to analyse the data. The research findings were subsequently presented through frequency tables and percentages. Pearson's Correlation was used to analyse data between level of knowledge and variables including causes, risk factors and level of education.

Results

Table 1: Awareness of Respondents about Gestational Diabetes Mellitus (GDM)

Sources of Awareness	Number of Respondents	Percentage (%)
Television	10	5.8
Radio	65	37.8
News papers	13	7.6
Friends	7	4.1
Health personnel	77	44.8
Total	172	100.0

Source: Field Survey, 2015

Table 2 indicates that 77(44.8%) of the total number of respondents heard about GDM from health personnel. This was followed by 65(37.8%) respondents who heard of it from Radio Stations while 13(7.6%) respondents became aware of it through newspapers. Furthermore, 10(5.8%) and 7(4.1%) of the respondents stated that their source of awareness was Television (TV) and from friends respectively.

Table 3: Awareness on the Risk Factors of Gestational Diabetes Mellitus

Risk Factors	SA	A	U	D	SD
Family history of diabetes	65 (26.0%)	100 (40.0%)	48 (19.2%)	24 (9.6%)	13 (5.2%)
Maternal age over 30 years old	2 (0.8%)	20 (8.0%)	121 (48.9)	62 (24.8%)	45 (18.0%)
Having a history of previous GDM	9 (7.6%)	117 (46.8%)	34 (13.6%)	64 (25.6%)	16 (6.4%)
Having three or more children	-	-	72 (28.7%)	129 (51.6%)	49 (19.6%)

Source: Field Survey, 2015

This means that about 83% of the respondents heard about GDM from health personnel and on radio stations.

Key: **SA**- Strongly Agree, **A** - Agree, **U**- Undecided, **D**- Disagree, **SD** - Strongly Disagree

Table 3 indicates that majority of the respondents, 100(40%) agreed, 65 (26%) strongly agreed, 48(19.2%) remained undecided, 24(9.6%) disagreed and 13(5.2%) disagreed strongly with family history of DM being a risk factor that could lead to GDM.

This simply means that 62% of the respondents agreed that family history of DM is a risk factor that could lead to GDM.

Furthermore, almost half of the respondents, 121 (48.9%) were undecided about maternal age of more than 30 years old being a risk factor that could lead to GDM. However, 62(24%) disagreed, 45 (18.0%) strongly disagreed, 20 (8.0%) agreed and 2 (0.8%) strongly agreed with the notion.

This means that about 50% of the respondents were undecided about maternal age of more than 30 years old being a risk factor that could lead to GDM.

Similarly, majority of the respondents, 117 representing 46.8% agreed and 9, representing 7.6% strongly agreed with the statement that having a previous history of GDM is a risk factor for the development of GDM during pregnancy. Thirty-two percent (32%) of the respondents disagreed with the statement whiles the remaining proportion of respondents were undecided.

This means that about 54% of the respondents agreed with the statement that having a previous history of GDM is a risk factor for the development of GDM during pregnancy.

Finally, a greater percentage of respondents, 121 (51.6%) disagreed and 49(19.6%) remained undecided about having three or more children being a risk factor for GDM. However, none of the respondents either strongly agreed or agreed with the statement.

This simply means that about 52% of the respondents disagreed with the statement that having three or more children is a risk factor for GDM.

Table 4: Association between Level of Knowledge and Causes of GDM

		Level of Knowledge	Causes of Knowledge
Level of knowledge	Pearson Correlation	1.000	0.639
	p-value	-	0.000
Causes of GDM	Pearson Correlation	0.639	1.000
	p-value	0.000	-
Total		250	250

Source: Field Survey, 2015

Table 4 provides information on the association between level of knowledge and causes of GDM. The strength of association between the level of knowledge of respondents and causes of diabetes mellitus was moderate, that is, Pearson’s correlation coefficient of 0.639. The correlation coefficient was significantly different from zero ($p < 0.01$). That is, the p-value of the test, (0.000) is less than then the level of significance of 0.01.

Since the p-value of the test is less that the level of significance, ($0.000 < 0.01$), it mean that there is an association between the level of knowledge of respondents and causes of DM, but the association was positively moderate, as depicted by the Pearson’s correlation coefficient value of 0.639.

Table 5: Association between Level of Knowledge and Risk Factors of GDM

		Level of Knowledge	Risk factors
Level of Knowledge	Pearson Correlation	1.000	0.293
	p-value	-	0.000
Risk factors	Pearson Correlation	0.293	1.000
	p-value	0.000	-
Total		250	250

Study Survey, 2015

Table 5 shows that there was a weak statistically significant association between level of knowledge and risk factors of GDM with Pearson's coefficient value of 0.293. The correlation coefficient was significantly different from zero ($p < 0.01$). That is the p-value (0.000) is less than the level of significance (0.01).

Since the p-value of the test is less than the level of significance, ($0.000 < 0.01$), it mean that there is an association between the level of knowledge of respondents and risk factors of GDM, but the association was weak as depicted by the Pearson's correlation coefficient value of 0.293.

Table 6: Level of Knowledge on GDM and Parity

		Level of Knowledge	Parity
Level of Knowledge	Pearson Correlation	1.000	-0.524
	p-value	-	0.000
Parity	Pearson Correlation	-0.524	1.000
	p-value	0.000	-
Total		250	250

Study Survey, 2015

Table 6 provides information on the association between level of knowledge of respondents on GDM and parity. The association between the level of knowledge of respondents and parity was negative and moderate, that is, Pearson's correlation coefficient of (-0.524). The correlation coefficient was significantly different from zero ($p < 0.01$). That is, the p-value of the test, (0.000) is less than then the level of significance of 0.01.

Since the p-value of the test is less than the level of significance, ($0.000 < 0.01$), it mean that there is an association between the level of knowledge of respondents and parity, but the association was inversely moderate, as depicted by the Pearson's correlation coefficient value of -0.524.

Table 7 Level of Knowledge on GDM and Educational Level of Respondents

		Level of Knowledge	Educational Level
Level of Knowledge	Pearson Correlation	1.000	0.500
	p-value	-	0.000
Educational Level	Pearson Correlation	0.500	1.000
	p-value	0.000	-
Total		250	250

Study Survey, 2015

There was a modest positive association between level of knowledge of respondents on GDM and their educational level $r = (0.50)$. The correlation coefficient was significantly different from zero ($p < 0.01$). That is the p-value (0.000) is less than then the level of significance (0.01).

Table 7 shows that there was a moderate statistically significant association between level of knowledge and educational level of respondents with Pearson's coefficient value of 0.500. The correlation coefficient was significantly different from zero ($p < 0.01$). That is the p-value (0.000) of the test is less than the level of significance (0.01).

Since the p-value of the test is less than the level of significance, ($0.000 < 0.01$), it mean that there is an association between the level of knowledge and educational level of respondents, but the association was moderate, as depicted by the Pearson's correlation coefficient value of 0.0.500.

Discussions

Awareness of Pregnant Women on Gestational Diabetes Mellitus (GDM)

A greater number of respondents 172 (68.8%) had heard about GDM compared with 78 (31.2%) of the total respondents who had not heard of it. The study was congruent with a study conducted among antenatal women in the primary health centre in South India in which a greater proportion of the women were aware of Diabetes Mellitus (DM) and Gestational Diabetes Mellitus (GDM) (Shriraam, Anitha, Sathiyasekaran, and Mahadevan, 2013). It was revealed in the study that out of the 120 respondents, the majority (102) of pregnant women, representing 85%, were aware of diabetes mellitus and a greater portion of respondents 82 (68.3%) were also aware of the fact that DM could occur during pregnancy (GDM). However, in this study, the aspect of GDM of which the respondents were aware could not be identified. The study failed to reveal the area of awareness among the study population.

Sources of Awareness of Respondents on Gestational Diabetes Mellitus (GDM)

Majority of the respondents, 77(44.8%) of the total number of respondents heard about GDM from health personnel. This was followed by 65(37.8%) re-

spondents who heard of it from Radio Stations while 13(7.6%) respondents became aware of it through newspapers. Furthermore, 10(5.8%) and 7(4.1%) of the respondents stated that their source of awareness was Television (TV) and from friends respectively. These results are similar to a study conducted by Shriraam, Anitha, Sathiyasekaran, and Mahadevan (2013). They found that the major sources of awareness of GDM were reported to be television or radio, neighbours or friends, and family members. Awareness of Risk Factors of Gestational Diabetes Mellitus (GDM)

While 100 (40%) of the respondents agreed and another 65 (26%) strongly agreed that family history of DM was a risk factor that could lead to GDM, 48 (19.2%) of the respondents remained undecided, 24 (9.6%) disagreed and 13(5.2%) strongly disagreed with the concept. The results from the current study were congruent with a study conducted in Samoa on awareness of GDM and its risk factors among pregnant women. The Samoa study revealed that out of 141 participants, 60, representing 48% respondents identified family history of diabetes mellitus as a risk factor (Price, Lock, Archer & Ahmed, 2017).

Almost half of respondents, 121 (48.9%) were undecided about maternal age of more than 30 years old being a risk factor that could lead to GDM; however, 62(24%) disagreed, 45 (18.0%) strongly disagreed, 20 (8.0%) agreed and 2 (0.8%) strongly agreed with the notion. This implies that respondents were not aware of the fact that maternal age over 30years is a risk factor for the development of GDM. A study conducted in Louisiana, United States of America, revealed that GDM was common in women older than 35years.

Similarly, results of a study conducted at Baqai Medical University in Pakistan also agreed with the above mentioned studies that women aged greater than 35 years were more prone to GDM (Wang, Chen, Xiao, Horswell, Besse & Johnson, 2012; Naheed, Kammeruddin, Hashmi & Narijo, 2008; Bibi, Saleem & Mahsood, 2015).

Majority of the respondents, 121 (51.6%) disagreed and 49(19.6%) remained undecided about the possibility that having three or more children could be a risk factor for GDM. However, none of the respondents either

strongly agreed or disagreed with this. This was incongruent with a study conducted to determine the risk factors for gestational diabetes mellitus among Sudanese Pregnant women, which found a significant association between GDM and maternal age of 30 or more years. Pregnant women agreed to advanced maternal age being a risk factor for the development of GDM (Mardi & Lutfi, 2012).

Level of Knowledge of Pregnant Women on risk Factors, Complications, Signs and Symptoms of Gestational Diabetes Mellitus (GDM)

Knowledge and Risk Factors

Table 4 above shows that there is a statistical significant relationship between knowledge and risk factors with ($p = 0.000$, $r = 0.293$). This implies that the higher the level of knowledge on GDM, the higher the level of awareness on risk factors on GDM, hence proper management and better outcomes. This was incongruent with a study conducted in Samoa, assessing the awareness of gestational diabetes and its risk factors among 141 pregnant women attending Tupua Tamases Meaole Hospital in May 2015. This study found out that although, a majority of women (58%) were aware of GDM, only one woman was able to identify all four factors for GDM (Price, Lock, Archer & Ahmed, 2017).

Level of Knowledge on GDM and Parity of Respondents

The level of knowledge of respondents on GDM and parity had an inverse association, ($p = 0.000$, $r = -0.524$). This means that the higher the parity of the respondents, the lower their level of knowledge on GDM. This implies that multiparous women with many pregnancies and possibly, children had very little knowledge about GDM probably due to illiteracy and poverty. This was inconsistent with a study conducted in South India on the awareness of gestational diabetes mellitus among 120 antenatal women in a primary health centre. In the Indian study, parity was not found to be significantly associated with the level of knowledge of pregnant women about GDM (Shiraam, Rani, Sathyasekaran & Mahadevan, 2013).

Level of Knowledge on GDM and Educational Level of Respondents

There was a moderately positive association between level of knowledge of respondents on GDM

and their educational level ($r = 0.500$). This implies that the higher the level of education of the respondent the better their knowledge on GDM. This was inconsistent with a study conducted in India by Elamurugan & Arounassalame (2016) to determine what mothers knew about gestational diabetes in terms of knowledge and awareness among 200 antenatal mothers. Although majority, 61% of the respondents had undergone formal education, it was found out that the level of education did not show any a significant influence on level of knowledge of GDM.

Implications for the Study to Nursing Practice, Education, Policy and Research

The findings of the study imply that healthcare professionals need to intensify education of pregnant women on GDM. The positive effects of the mass media should be explored in making pregnant women more aware of the risk factors and management of GDM. The government and other stakeholders should empower women educationally to be able to search for information about their health including GDM. Further studies could be done to determine maternal and foetal outcomes associated with GDM.

Conclusion

The study revealed that most of the pregnant women were aware of gestational diabetes mellitus basically through health education given by healthcare professionals. They identified that some risk factors for the development of GDM included family history and a previous history of the condition; conversely many of them disagreed with having three or more children as a risk factor. Many of the respondents however, remained undecided about maternal age of more than 30 years being a risk factor. Pregnant women with higher level of education were more aware of the risk factors associated with GDM and possibly, its management and outcomes. However, pregnant women with higher parity had inadequate knowledge of GDM probably due to illiteracy and poverty. The study pointed out that pregnant woman who had higher levels of education had higher levels of knowledge on GDM.

Conflict of Interest

There was no conflict of interest during the conduct and reporting of this study.

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Original Article

Socio-economic impact of indwelling urethral Catheter: The experiences of patients discharged from the Volta Regional Hospital of Ghana

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Abstract

Although catheter-associated urinary tract infection is well researched, little is known about the socio-economic impact of the use of indwelling urethral catheters, including those in Ghana. Therefore, the aim of this study was to explore socio-economic experiences by men with indwelling urethral catheters in the Volta region of Ghana. The study utilized qualitative explorative descriptive design. Data was collected from 19 participants using a semi-structured interview guide. Purposive sampling was used in recruiting participants. Content analysis was carried out. Four thematic categories were identified: interruption in activity levels, financial dependence on family, sexual restriction, and social isolation. The findings indicated that the use of indwelling urethral catheters resulted in several socio-economic consequences for clients. The authors suggested that, in order to improve the quality of life of men with indwelling urethral catheters, the same level of attention paid to catheter-associated urinary tract infections must be extended to assessing the social impact of indwelling urethral catheter usage.

Keywords:

Ghana; indwelling catheter; patients; social impact; urethral catheterisation; urinary tract.

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Introduction

Urinary retention is a common urologic emergency in old age (Yenli, Aboah, Gyasi-Sarpong, Azorliade, & Arhin, 2015). A study by Ojewola and others (2017) in Nigeria found that the overall prevalence of benign prostatic enlargement (BPE) was 237 per 1,000 men (23.7%). The age-specific prevalence rates increase from 104 per 1000 men in their fifth decades to 429 per 1000 in men over 90 years (Ojewola et al., 2017). Though intermittent catheterization is the gold standard for the management of urinary problems in men, many men in Africa are managed on indwelling urethral catheters (Nnabugwu, Udeh, Enivwenae, Ugwumba, & Ozoemena, 2014). Many clients in Africa with benign prostatic hyperplasia (BPH) are unable to pay for prostatectomy (Nnabugwu et al., 2014). These clients are usually managed with indwelling urethral catheters until they can raise money for prostatectomy. Many men with indwelling urethral catheters experience problems of urinary tract infections, kidney stone formation, and painful bladder spasms which are related to the long-term use of urinary catheters (Nnabugwu et al., 2014).

Evidence available shows that indwelling urethral catheters are also responsible for several non-infectious complications such as loss of dignity, loss of job, absenteeism in school, erection problems, diminished sexual intercourse and loss of money through hospital bills (Okuerowo, 2007, Griffiths, 2007, Manalo et al, 2011). A qualitative research by Fowler, Godfrey, Fader, Timoney, & Long (2014) identified the theme of shame and embarrassment because the catheter was a constant reminder of chronic illness and vulnerability. Clients are usually embarrassed by a leaking urinary catheter which wets them in public (Fowler et al., 2014).

Though understanding of patient's experience in any area of health care is now recognized as being crucial to good practice, little is known about patients' experiences with indwelling urethral catheters (Chapple, Prinjha, & Mangnall, 2013). In Ghana, a previous study addressed issues of catheter associated urinary infections (Yenli et al., 2015). The majority of men who reported at Komfo Anokye Teaching Hospital in Ghana with urinary problems had benign prostate hyperplasia and were managed on in-

dwelling urethral catheters (Yenli et al., 2015).

There was only one urology clinic in the Volta Region of Ghana at the time of conducting this study. This clinic is located in the Volta Regional Hospital which served as referral centre for all urology cases of which most are problems of BPH. The clinic had only one urologist who doubled as the medical director of the hospital (Volta Regional Hospital, 2016). Urinary problems of most clients who reported at the regional hospital were managed with indwelling urethral catheters as a results of resource constraints on the part of both the health facility and clients. However, a review of available literature revealed a paucity of studies on the experiences of men who are managed with indwelling urethral catheters at the Volta Regional Hospital of Ghana. The purpose of this study was to explore experiences of socio-economic impact of the indwelling urethral catheters among men who were discharged from the Volta Regional Hospital.

Materials and Methods

Design

Qualitative exploratory descriptive design was used to explore the experiences of men with indwelling urethral catheters from January to February 2016. Qualitative exploratory descriptive design allows researchers to understand the experiences of clients with medical conditions (Polit & Beck, 2010). Qualitative explorative descriptive study design was utilized since there is paucity of research into socio-economic impact of indwelling urethral catheters on men in Ghana.

Setting

This study was conducted in the Volta Regional Hospital. Data was collected from men with indwelling urethral catheters who reported for review at the hospital. The Volta Regional Hospital was the only facility with a urology unit in the Volta Region and served as the referral centre for all clients with urology problems in the region. On the average 20 clients with problems of indwelling urethral catheters were reviewed every week at the Hospital (Volta Regional Hospital).

Population sampling and data collection

The study population consisted of men in the Volta region who, during the specified study period, reported to the Volta Regional Hospital with urinary problems and

were being managed on the indwelling urethral catheter for more than two months. Purposive sampling technique was used to recruit 19 men with indwelling urethral catheters. The sampling frame for the study was male patients accessing services at the urology clinic at the Volta Regional Hospital. Data saturation was reached with 19 participants. Patients who met inclusion criteria were recruited through the nurse manager of the urology ward of the Volta Regional Hospital. Inclusion criteria for study were men with indwelling urethral catheters for at least two months and could speak either English, Twi or Ewe and willing to participate in the study. These were the languages the first author who collected the data could speak fluently. Each interview lasted between 30 to 60 minutes. The venue and time for each interview was at the convenience of the participant.

Data analysis

Data were analysed manually by the research team. Holloway and Wheeler's data analysis pattern (Holloway & Wheeler, 2010) was used. The researchers employed the following activities: transcription, validation, cleaning and coding. Data was transcribed verbatim from audio recordings. Transcripts were read several times to identify codes. Similar codes were used to create themes and sub-themes.

Rigour

A semi-structured interview guide was pretested on three patients in a similar health facility. This was to ensure that the data collected answered the research questions. The research team also had prolonged interaction with the participants to ensure in-depth understanding of emerging findings. Peer checking of data transcriptions and coding ensured that the right experiences of the participants were reported. Member checking was done to validate data from the participants.

Ethical consideration

Ethical clearance was sought from the Kwame Nkrumah University of Science and Technology Ethical Review Board. Administrative approval was granted by the Authorities of the Volta Regional Hospital. Participants who agreed to take part in study were given consent forms to sign. Participants were told that participation in the study was voluntary and

that they could withdraw at any point. Identification codes instead of names were used to identify participants to ensure anonymity.

Results

A total of 19 participants on indwelling urethral catheters were recruited. Fifteen participants were within the ages of 60 and 90 years. Twelve participants were married whilst five were widowers. Only two participants were single. Eighteen participants had children. The majority of respondents were retired from their formal jobs.

Four themes were extracted from data analysis: interruption in activity levels, financial dependence on family, sexual restriction and social isolation.

Interruption in activity levels

All clients indicated that their activity levels were disrupted with the indwelling urethral catheter. Though many of the participants were retired from their formal jobs, they engaged in some informal jobs such as farming and helping their wives to sell in stores. Such informal economic activities were disrupted when they were placed on indwelling urethral catheters. The few who were still working also indicated that their activity levels at their formal jobs were affected negatively.

This rubber has actually reduced my activity level at home. I used to farm but I can't go the farm now. This is because I feel pain and carrying the bag in my pocket makes me very uncomfortable. It is really disturbing me and I can't work with it [P4].

It was confirmed that indwelling urethral catheter also had a negative impact on activity levels and work. A participant was restricted to the office rather than go to the field.

...a year ago I started experiencing urine problems. I could not urinate so I came to the hospital and this rubber was passed. It has not been easy for me since that time. It has limited my movement and everything I do. Even my work is affected negatively [P19].

I have had to manage with this rubber for the past 6 months. I go to work but I am not able to involve myself in activities. I am not able to go for barrier duties or patrol. I have had to do only office work now. This is hell [P17].

Financial dependence on family

Many clients on indwelling urethral catheters indicated that they experience economic hardship as a result of the catheter and had to depend on family for support. A considerable number of the participants were retired from their formal jobs but had engaged in other activities that could sustain them economically. Some decided to farm and some also decided to help their wives to sell but the presence of the indwelling urethral catheters made it impossible to engage in such activities. Clients felt more dependent on their partners, family members and their church.

I am on retirement but I was doing some farming. I can no longer farm. I depend on my daughter financially but she also has a family to take care of. She is only a petty trader. Sometimes the small money I have, I send it to the hospital because of problems with the device. Sometimes getting money to come to the hospital is a problem [P2].

Since this rubber was passed, I could no longer work but just sit in the house. I am a Pastor and worked for so many years. But I can't preach now, so I receive some support from my church and children. I have a lot of children and grandchildren. Some are not biological but because I looked after them they now extend their hands to me. At least I used to do some backyard farming but I can't do that now [P12].

It was reiterated that participants depended on their pension allowances, children and wives. Their contributions to the upkeep of their families had reduced.

Currently I am depending on my small pension and the support from my wife who sells in the big market and my children as well. I don't think I can work with the rubber on [P16].

I have a small farm that I cultivate some crops

to support the family. I go to the farm at times but do not work as I used to anymore because of the rubber. My wife does most of the work now. My contribution to money and food at home now is very minimal. I am more dependent on family now [P18].

Sexual restriction

Some participants stated that the indwelling urethral catheters resulted in restricted sexual life. The few younger men on the indwelling urethral catheters reported more sexual concerns than their older counterparts. Some older men also had younger wives and felt they had to perform their sexual responsibilities which were hindered by the urethral catheter.

My woman nearly left me. I could not have sex with my woman. I had a serious problem with her. First I was hiding it from her but later I had to let her know. We had serious quarrels over this. I feel for sex but can't do anything [P4].

As for erection, I do have from time to time even with the catheter on. But you know I can't do anything. Fortunately, my wife is old and not worried about those things [P6].

Some felt for sex and although they had erection, they could not have sex and their wives understood their situation.

I feel for sex but with this rubber in my penis, can I do something? Sometimes I see that I have erection even with the catheter on but I can't do anything. My wife understands. She knows that because of the rubber, I can't do anything. This thing started about one and a half years ago. She has been able to cope till now. I don't have any problem with her yet. I try to ignore when the urge comes [P17].

However, men with younger wives felt their wives were worried about their inability to engage in sex. In such situations, the men felt irresponsible.

I feel for sex but because of the catheter I can't touch my wife. It is sad. My wife is young and I could see how it worries her but God being

so good, we have been managing for the past one year. I feel irresponsible sometimes but she understands [P13].

I feel for sex but I can't do it. My wife is a bit younger than me and it is a worry for me but I can't do anything. If I remove this rubber for a day, I will end up at the hospital because I can't pass urine and that thing is painful. I can't go through it again. I thank God my wife feels for me and has been very supportive [P18].

In view of the inability to have sex, some men were worried that their wives would go after other men.

I feel for sex but can't touch my wife. I am even worried she will go out. A woman is a woman. I really feel sad for myself and her. You know am not performing my responsibilities, hope you understand [laughs]. It is very serious [P15].

Social Isolation

All respondents in this study stated that the indwelling urethral catheter reduced their socialization with friends and family because of the embarrassment the catheter caused when it leaked. They smelled of urine even when they were well dressed

I used to go out to visit my friends and some family members but now I can't. Sometimes the urine smells on me so I don't want people to know I have such a problem. It is not every gathering I go again in the community [P3].

I do go out sometimes but not as I used to do because it is not comfortable to go out to visit people with the catheter. It is difficult because sometimes the urine smells on me. I dress fine and look nice but I smell urine. It is embarrassing [P4].

Participants lamented that it was difficult to position the catheter or bag when they were leaving the house. They were afraid the catheter would fall and embarrass them. They preferred to stay at home.

How to position the bag itself before leaving the house is a problem. It has reduced my en-

agement in community activities. I don't really take part in many activities. When am at home, am a bit comfortable but outside I feel uncomfortable. I feel the rubber will fall, or someone will make people notice that I have a rubber there [P9].

I must say that it is very difficult for me to mingle with my friends or even engage in social activities. I don't feel like doing that. Sometimes how to handle the bag among your colleagues is a great worry. This prevents me from socializing with friends [P14].

The younger participants did not go out to visit any one. They were shy. A 33-year-old participant stated:

I am shy when I go out. A young man like me on catheter. It is some way. So I don't go out to visit anyone. I don't want to engage myself in any activities [17].

Discussion

Though studies of overall quality of life of men with indwelling urethral catheters are very few (Adejumo, & Ilesanmi, 2008), some evidence from literature suggests that problems of the indwelling urethral catheters interfere with daily life of clients (Okuerowo, 2007; Griffiths, 2007;

Manalo, 2011). The focus of most urologists has been on the relief of symptoms of acute urinary retention without paying attention to the socio-economic impact of the indwelling urethral catheters on clients (Mahadik, Vaddi, Godala, Reddy, & Sambar, 2013). The majority of men with indwelling urethral catheters in this study indicated that their activity levels were disrupted because of the management of their urinary problem with indwelling urethral catheters. This is consistent with a study conducted in Nigeria by Okuerowo (2007) which showed that the use of the indwelling urethral catheters led to reduced activities and loss of jobs.

The reduced activities could be the result of the negative physical consequences of the indwelling urethral catheters on the physical health of clients (Adejumo, & Ilesanmi, 2008). The importance of psy-

chological care has been emphasized as essential when providing care to clients with chronic illnesses (Eccleston, Fisher, Law, Bartlett, & Palermo, 2016). Patients are concerned about the effect of physical limitations of ill health and this usually leads to feelings of frustration and loss of dignity (Eccleston et al., 2016; Adejumo, & Ilesanmi, 2008). A number of things can be done to prevent non-infectious complications in men with the indwelling urethral catheters. Emphasis could be placed on good catheter management rather than the use of prophylaxis, to reduce the incidence of catheter associated urinary infections. Healthcare providers could take steps to prevent infections in clients with indwelling urethral catheters by regularly changing indwelling urethral catheters. Clients need to be counselled and educated on necessary coping skills they need in order to keep performing their jobs. Keeping jobs will maintain dignity of clients and prevent financial overdependence on family and friends.

Clients interviewed in this study said that the indwelling urethral catheter affected their sex lives negatively. Many of the clients interviewed were old but had younger wives and therefore felt they needed to perform their sexual marital responsibilities. The few younger men interviewed felt more sexually restricted than their older counterparts did. A study in Nigeria found that a common problem of prolonged catheterization in men was lack of sexual intercourse (Okuerowo, 2007). Similarly, in the Philippines, Prinjha, & Chapple (2014) found that health professionals did not discuss sex with clients or give them any information on sex when they reported for care at urology clinics (Prinjha, & Chapple, 2014). This phenomenon may also exist in Ghana where nurses in urology clinics do not have specialist education in urology nursing and where the number of urologist are very few.

Urology health professionals need to provide men with information on how to maintain sex life with the indwelling urethral catheters. Evidence available shows that meeting the same nurse or care provider could encourage clients to discuss their individual sexual problems with familiar health professionals (Prinjha, & Chapple, 2014). Though the usage of intermittent self-catheters (ISC) is widely utilised in de-

veloped countries, its utilisation in under-resourced countries has been lacking (Nnabugwu et al., 2014). However, a study in Nigeria by Nnabugwu and others (2014) found that 70% of men who were 60 years and below wanted to be taught intermittent catheterisation. In reviewing the success rate of ISC among 309 patients with a mean age of 62 years, Parsons, Narshi, and Drake (2012) recorded a success rate of 86% for patients younger than 65 years and 82% for those 65 years and older. Introduction of ISC in Ghana could help men feel less sexually restricted and allow them to enjoy sexual relationships with their partners (Prinjha, & Chapple, 2014).

Almost all clients with the indwelling urethral catheters stated that the catheters embarrassed them with leakages and bad smells from leaked urine. Many men with the indwelling urethral catheters indicated that they reduced their level of socialisation with community members and friends because of feeling embarrassed with the indwelling urethral catheters. Some men on indwelling

urethral catheters did not know how to handle these catheters outside the home. A systematic review by Hollingsworth and others (2012) identified leakage of catheter bags as a common non-infectious complication of indwelling urethral catheters. Evidence available suggests that non-infectious complication rates including socio-economic impacts associated with long-term catheterization are four times higher than infectious complication (Hollingsworth et al., 2012). Unfortunately, care providers give less attention to non-infectious complications (Hollingsworth et al., 2012). The same level of attention given to catheter associated urinary tract infections should be extended to socio-economic impact of catheter leakages, sexual restrictions and social isolations.

Clients need to be educated to report both infectious as well as non-infectious complication with their indwelling urethral catheters for appropriate education and counselling. Education on ways of handling urethral catheters to prevent leakages will prevent embarrassment and social isolation that clients with indwelling urethral catheters have to deal with daily. Nurses in urology clinics should themselves be updated on the kinds of counselling and education that

will help men improve their overall quality of life with the indwelling urethral catheters.

Implication for nursing practice

Nurse Managers should take steps to improve knowledge of nurses in urology units on prevention of negative social impacts of indwelling urethral catheters. Nurses in urology clinics should take courses in urology nursing to enable them improve the overall quality of care provided clients with indwelling urethral catheters. Clients need education and counselling on maintenance of sexuality, socialization and management of work with the indwelling urethral catheter. Nurses in Ghana should advocate introduction of intermittent urethral catheters, which is the gold standard for managing men with urinary problems.

Conclusion

The use of indwelling urethral catheters has socio-economic consequences for clients. Indwelling urethral catheters lead to reduced activity levels, dependence on family, sexual restrictions and social isolation. Though there have been many researches about catheter associated urinary tract infections, relatively less research has gone into the social impact of the use of indwelling urethral catheters in Ghana. The same level of attention paid to catheter associated urinary tract infection must be extended to the social impact of reduced activity, social isolation, and sexual restrictions in order to improve overall quality of life of clients on indwelling urethral catheters. Further quantitative research is suggested into interventions that prevent the negative social impact of the use of the indwelling urethra catheters.

Conflict of Interest

Authors declared no conflict of interest in the conduct of this study.

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Original Article

Depression and religious coping mechanisms among cancer patients in Ghana

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Abstract

Cancer is identified to be one of the leading causes of mortalities in most countries. However, some positive coping mechanisms have been discovered to help cancer patients cope with some psychological distress that accompany illness. The present study sought to examine the association between religious coping mechanisms and depression among cancer patients in Tema General Hospital. It was hypothesized that religious coping would relate negatively with depression and patients with self-directing coping strategy would be more depressed than patients with benevolent coping strategy. Data were collected from a purposively sampled 50 cancer patients at the Tema General Hospital. The findings of the study using Pearson r supported the hypotheses that the belief in religion is statistically and significantly associated with less depression among cancer patients. It is therefore recommended that physicians, clinicians and psychologists/counsellors adopt religious coping strategies with their patients in order to help manage and cope with their conditions.

Keywords:

Cancer; Depression; Ghana; Coping mechanism; Religion

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Introduction

In 2008, the International Agency for Research on Cancer (IARC) stated that cancer continues to be a leading and second cause of mortalities in developed and developing countries respectively (IARC, 2008). To some researchers, the cause of cancer-related mortalities may be attributed to the adaptation of “cancer-causing” lifestyle and behaviors such as smoking, physical inactivity and the uptake of junk and/or fast foods, which are high in fats, oils and salt (Calys-Tagoe, Yarney, Kenu, Amanhyia, Enchill & Obeng, 2014). Others also attribute the condition to an improvement in ways of diagnosing the illness as well as database that keeps records of the condition in most countries (Calys- Tagoe et. al., 2014). There are several types of cancer worldwide such as cancers of the lung, stomach, colon and rectum, liver, esophagus, breast, uterine cervix, prostate and non-Hodgkin lymphoma. However, in Ghana, the commonest forms of cancer among most males include, but not limited to, liver cancer, prostate cancer and non-Hodgkin lymphoma (GLOBOCAN, 2012). On the contrary, among females in Ghana, cervical cancer, breast cancer and liver cancer are identified as the commonest (GLOBOCAN, 2012). Similar findings have been disclosed in other African countries like the Gambia (Sighoko et al. 2011). Cancer often progresses very rapidly leading to complications and death of patients.

An associated consequence of cancer is depression which can increase the morbidity and mortality in non-treated cases (Karabulutlu Bilici, Cayir, Tekin, & Kantarci, 2010).

Cancer, regardless of the type or stage, is associated with stressful life, disruption of physical status and emotional and social well-being, and discomfort to patient and family (Burgess et al., 2005; Karabulutlu et. al., 2010; Caroline Victoria, Sharon, Jill, Michael & Amanda 2005; Ieraci, Bovero, Pennazio & Torta 2014). It has been reported by Brintzenhofe-Szoc Levin, Li, Kissane & Zabora (2009) that depression is one of the common psychiatric disorders among cancer patients. Untreated depression can result in physical disability and sometimes resistance to treatment as well as having an effect on the mental and physical performance of patient and family. In many ways, affected individuals often rely on external resource of support to enable them manage depres-

sion. This therefore requires cancer patients to adopt diverse strategies to help manage the depression and religious coping is one of such strategies that has been considered in recent years (Lavery & O’Hea, 2010).

Coping is a continuous improvement and life-preserving method for adjusting to incessant changes (Baqtayan, 2015). Coping performs two main functions: dealing with the problem that is causing the distress (problem-focused coping) and regulating stressful emotions (emotion-focused coping) (Baqtayan, 2015). Fetemah (2013) stated that coping strategies enable an individual to maintain health and avoid mental disorders; and its appropriate application leads to correct assessment of situations, to a feeling of safety, to have access to support, to grow and to achieve identity. Frequently, when individuals are faced with adversities, including serious and life-threatening conditions such as cancer, they turn towards a higher power or religion (belief in God) as a way of coping with associated stress (Oti-Boadi & Asante, 2017; Thune-Boyle et al., 2006). Religious coping is therefore the use of beliefs or practices to reduce distress and deal with problems in life. Thune-Boyle Stygall, Keshtgar & Newman, 2006) pointed out that religious coping is conceived as an emotion-focused way of coping (i.e., a way to deal with negative emotions). Recent evidence suggests that it has cognitive (e.g., appraising an illness as part of God’s plan) and behavioural (e.g., praying) components (Thune-Boyle et al., 2006). Studies have revealed a significant relationship between an individual’s religious belief system and measures of wellbeing (Zwingmann, Wirtz, Muller, Korber & Murken., 2006). Positive religious coping is thought to be associated with benefits in psychosocial adjustment whereas negative religious coping or spiritual struggle leads to poorer outcomes and is therefore considered maladaptive (Zwingmann et al., 2006).

Some religious coping strategies have been found to have negative consequences. For example, when an individual holds on to a religious belief, such that the individual continues to pray and hope for a miracle without adhering to medication, it tends to worsen the condition (Exline & Rose, 2013; Karekla, & Constantinou, 2010; Pargament Koenig & Perez, 1998). In line with this, Exline and Rose (2005) identified four main types of religious coping strategies that result

in negative psychological conditions including depression: (a) blaming evil forces for cause of illness (b) blaming God for cause of illness (c) blaming and not forgiving oneself for loss of virtue; and (d) feeling offended by religious community. These forms of religious coping strategies tend to worsen negative conditions of the individual (Exline & Rose, 2013; Karekla, & Constantinou, 2010).

Studies examining the relationship between coping strategies and common mental health conditions such as depression, stress and anxiety have yielded inconclusive results. While some studies are pointing to a positive relationship, others have revealed a negative or no relationship (Kaliampos & Roussi, 2015; Pearce & Singer, 2006). Within the context of Africa, and particularly Ghana, there is dearth of literature on depression and coping mechanisms among cancer patients. The literature has also done little to demonstrate how religion is used as a coping mechanism of depression among cancer patient cohorts. This study therefore seeks to examine the relationship between religious coping and depression among cancer patients in Ghana.

According to Wasteson et al. (2009) negative thoughts generated by dysfunctional beliefs are the primary causes of depressive symptoms. A direct relationship occurs between the amount and severity of someone's negative thoughts and the severity of their depressive symptoms. Beck (1967) asserted that there are three main dysfunctional belief themes that dominate the thinking of depressed people: I am defective or inadequate; all my experiences result in defeat or failures; and the future is hopeless. These themes are collectively called Negative Cognitive Triad. When these beliefs dominate the thoughts of a person, depression is most likely to occur. Beck (1967) further asserted that depressed people also exhibit faulty information processing, thus pay selective attention to aspects of their environment that confirm what they already know and their thoughts. Diagnosis of cancer can lead to feelings of panic, anxiety, depression, and hopelessness, and can challenge one's plans for the future as well as redefine one's sense of self (American Cancer Society, 2016). Mostly, cancer patients may be depressed because they may think they are defective and inadequate, they may see themselves as failures in terms of health and develop a sense of hopelessness be-

cause their disease is incurable (Abela & D'Allesandro, 2002; Prieto et al., 2005).

From sociological perspective, integration into a religious group is efficacious to reducing suicidal ideation and other perceived psychological crisis (Lester, 2000; Colucci & Martin, 2008). This is based on the assumption that religion lessens the burden of negative human experiences including death, unemployment, poor health and divorce among others (Colucci & Martin, 2008). Suffering can be more readily endured if eternal salvation and heavenly glory are offered as a future relief to those who suffer. Religion perpetuates the belief that the Supreme Being is aware and concerned about the suffering of humanity (Lester, 2000; Colucci & Martin, 2008). Therefore, a cancer patient who is more inclined to religion will likely hold onto the belief that God knows, cares and can shield him or her from depression.

The Ghanaian context is dominated by Christian religion which forms 73% of the population while Islam, Traditional religion and atheism constitute the remaining 27% (Ghana Statistical Service, 2014). Diverse research works demonstrate the role of religion in the lives of people in times of adverse circumstances (Constaine, Alleyne, Cadwell, McRae & Suzuki 2005). Religion permeates almost every aspect of the Ghanaian life and tends to be a major framework and interpretive grid for beliefs, perceptions and actions (Amoah, 2003; Faigin & Pargament, 2011). Too often, the individual Ghanaian turns to religion and the Supernatural in an attempt to finding solutions to ill-health (Amoah, 2003). Recourse to supernatural interventions is often much intense for patients with chronic and complicated conditions such as cancer (Constaine et. al., 2005).

Extant literatures have shown the association between religious coping and depression among cancer patients (Arndt & Götz, 2012; Fatemeh, 2013; Nematollah & Shahram, 2013; Tarakeshwar, et. al. 2006). These empirical studies all point to the direction that religious coping strategies lead to a significant reduction in depression levels among cancer patients. For example, Fatemeh (2013) examined the correlation between religious coping and depression and indicated that religious coping (relationship with God) had a high efficacy in reducing depression. A longitudinal study by Tarakeshwar, et al., (2006) which ex-

amined the association between religious coping and quality of life among advanced cancer patients indicated that religious coping was effective in dealing with depressive situations thereby resulting in better overall quality of life. Randy et al. (2009) also discovered that religious coping predicated general mental health and reduced depression.

Specific dimensions of religious coping have been identified to be more helpful in reducing depression than others. Individuals who resort to a supernatural being as a form of coping with cancer experience significant reduction in depression levels compared to individuals who do not (Arndt & Götz, 2012; Bussing, Fischer, Ostermann & Matthiessen 2008; Christopher John & Liz, 2005; Ramirez et al. 2012; Saevarsdottir, Fridriksdottir & Gunnarsdottir. 2010). A study by Thomas, Carpenter, Tyler Laney, and Mezulis, (2011) examined the association between religious coping, stress and depression symptoms and found that negative religious coping strategies are associated with more depression and stress whilst positive religious coping strategies are associated with reduced depressive symptoms and stress. Similarly, Tarakeshwar and others, (2006) and Randy Bozena, Richard, and Michael, (2009) discovered that the use of positive religious coping contributes to less depression than the use of negative religious coping.

On account of the theoretical and empirical literature this study set out to test the following hypothesis:

- *Religious-focus coping will negatively relate with depression.*
- *Benevolent coping will relate more with depression than self-directing coping.*

Design and Methods 3.1 Research design

The research design was a cross-sectional one in which questionnaires were administered to respondents at a point in time. The study also examined the relationship between the independent and dependent variables.

Population

The study involved 50 cancer patients above 18 years who had been diagnosed with cancer from the Tema General Hospital.

Sample and sampling technique

Purposive sampling technique was used to draw a sample of 50 respondents for the study. Since there is no specific department or unit for cancer patients at the Hospital, it was difficult to obtain records of cancer patients at the hospital. Cancer patients were seen at the out patients' department (OPD) before recommendations to referrals were made to higher hospitals. Because cancer is dehumanizing and highly stigmatized, it was difficult to find patients who were willing to participate in the study. Some patients did not want their illness status to be known. These reasons among others contributed to the small sample size.

Measures

The Pargament Religious Coping Questionnaire (RCOPE)

The RCOPE 20 items on a 5-point Likert scale was used to evaluate religious belief and practices including relationship with God (collaborative), avoidant relationship with God (self-directing), and an alternately fearful and hopeful relationship (benevolent). The final score for each category was obtained by summing the score of related items. Cronbach alpha reliability test of the RCOPE items was 0.98. Some items on the scale included "I saw my situation as part of Gods plan", "I prayed to get my mind off my problems" among others (Paragament, Koenig & Perez, 2000; Paragament, 2002a).

The Beck Depression Inventory (BDI)

The 21-item BDI questionnaire was administered to the respondents. The questionnaire was initiated in 1961 and revised in 1974 with a 4-point Likert scale rating (0 to 3) and the total scores can range from 0 to 63. The standard cut-offs for severity of the BDI questionnaire were as follows: 0–13 no depression, 14–19 mild depression, 20–28 moderate depression, and 29–63 severe depression (Beck, 1996). The questionnaire was a self-reporting one that reflected different symptoms of depression such as sadness, hopelessness, self-blame, guilt, fatigue, and loss of appetite. The time used to complete the BDI was approximately 10 minutes and subjects with at least a primary school educational level were eligible to fill the questionnaire.

Procedure of data collection

Questionnaires were administered to respondents

after their consents were sought. The purpose of the study was explained to all respondents and a verbal consent was obtained. Participation in the study was voluntary and the right to withdraw at any point in time of the study was assured. Respondents were provided the necessary assistance required to fill the questionnaire. They were also duly informed that all information provided would be treated with utmost confidentiality.

Demographic characteristics of respondents

Table 1 shows the summary of the descriptive statistics (frequencies and percentages) of the demographic characteristics of the respondents.

Table 1: A summary of the descriptive statistics of the demographic variables

Variables	Frequency	Percentage
Gender:		
Male	27	54
Female	23	46
Age:		
29-39 years	6	12
40-50 years	14	28
51 years and above	30	60
Religion:		
Christian	42	84
Muslims	8	16
Marital Status:		
Single	7	14
Married	33	66
Divorced	10	20

Hypotheses Testing

The major statistical tests used to analyse the hypotheses was the Pearson r test. The Pearson r test was used to test the relationship between the dimensions of religious coping and depression. A summary of the finding is presented in the Table 2.

Table 2: Inter-correlation matrix between the study variables

	1	2	3	4	5	6	7	8	9
1. Gender	1								
2. Age	-	1							
3. Religion	.52**		1						
4. Marital status	-.07	.01		1					
5. Collective coping	-.23*	.23*	-.14		1				
6. Self-directing coping	.56**	-	.17	-.13		1			
7. Benevolent coping	.36**	-.20	.14	-.18	.85**		1		
8. Religious-focus coping	.27*	-.05	.23*	-.08	.82**	.71*		1	
9. Depression	.38**	-.06	.26*	-	.83**	.82**	.80**		1
	.24*	.13	.07	.13	-.18	.09	-.26*	-.23*	

**=p<0.01, *=p<0.05

The correlation presented above indicated that benevolent coping and religious-focus coping (dimensions of religious coping) were the dimensions of religious coping that showed negative significant association with depression [$r=-.26$, $p<0.05$; $r=-.23$, $p<0.05$ respectively]; the other dimensions of religious coping including self-directing coping and collective coping reported no significant association with depression. The findings from the data analysis imply that hypotheses one and two which stated that “Religious-focus coping will negatively relate with depression” and “Benevolent coping will relate more with depression than self-directing coping” respectively were both supported.

Discussion

Chronic diseases including cancer come along with some psychological stress and depression experiences (Burgess et al., 2005; Karabulutlu et al., 2010). Ghanaians and Africans in general are noted to be religious and believe in God who is perceived to be all-powerful (Amoah, 2003; Faigin & Pargament, 2011). Individuals with chronic conditions such as cancer are reported to experience less depression because of the belief in God and religious coping (Oti-Boadi & Asante, 2017; Thune-Boyle et al., 2006). The current study examined the relationship between religious coping strategies and the experience of depression among cancer patients in a Ghanaian hospital.

In the first hypothesis, it was proposed that religious coping would negatively relate with depression among cancer patients and this hypothesis was supported by the study data.

The finding from the study suggests that religious coping makes patients think and feel they have a higher being who is able to manage their medical and life conditions better than they can imagine. Similarly, the use of religious coping makes patients to have support from religious groups who will join and pray with the individual to make him or her feel integrated and well cared for (Paragament, 2002a). The indulgent in religious activities as a form of religious coping takes the individual cancer patient’s mind off the challenges of living with cancer (Fatemeh, 2013; Tarakeshwar et al., 2006). This finding corroborates other related studies. For instance, a study conducted by Fatemeh (2013) to examine the correlation between religious coping and depression also indi-

cated that religious coping (relationship with God) had a high efficacy in reducing depression. Also, a longitudinal study conducted by Tarakeshwar et al., (2006) to examine association between religious coping and quality of life among advanced cancer patients indicated that religious coping was effective in dealing with depressive situations thereby resulting in better overall quality of life. Randy et al., (2009) also discovered that religious coping predicated general mental health and reduced depression. The current study finding also confirms Beck’s Cognitive Theory of Depression which emphasises that the interpretation and perception of situations confirm whether or not an individual’s experience is depression. According to the theory, if the individual perceives a challenging situation to be controllable, the experience of depression will be less. On the contrary, there is much experience of depression if the individual perceives the challenging situation to be out of his or her reach or ability to resolve the situation. Similarly, in line with the Religious Commitment Theory, high level of commitment to a few life-preserving religious beliefs, values and practices will lower depression and suicide levels. Ghanaians are noted to have a belief in a higher being (God) who is perceived to be in control and changes the impossible (Amoah, 2003; Oti-Boadi & Asante, 2017). The case is not different from cancer living patients. The finding of the current study suggests that cancer patients resort to more of religious coping in order to help them suppress the psychological crises that comes along with living with the condition. They may offer prayers, get actively involved in religious activities, read the Holy Book(s) often, join religious groups and among others with the aim of possibly turning their condition around. This in turn enables them experience less depression and other psychological crises that living with cancer may bring (Oti-Boadi & Asante, 2017; Thune-Boyle et al., 2006).

The second hypothesis postulated that patients with self-directing coping strategy would be more depressed than patients with benevolent coping strategy and this was supported in the study. Patients who use self-directing coping depend on their own strength without support from God (Paragament, Koenig & Perez, 2000; Paragament, 2002a). However, because cancer is incurable, depending on one’s strength is mostly unsuccessful (Arndt & Götz, 2012; Bussing, Fischer, Ostermann & Matthiessen

2008). The individual who relies on his or her own decisions at the neglect of a higher being encounters higher levels of psychological crises because the illness is degenerative (Arndt & Götz, 2012; Bussing, Fischer, Ostermann & Matthiessen 2008). On the contrary, patients who rely on benevolent religious coping tries to see how their situations could be beneficial. They, therefore, shift their thought and feeling to a higher being, believing things could turn around for the better. This makes them to experience less depression as compared to their counterparts who rely on self-directing coping (Oti-Boadi & Asante, 2017; Thune-Boyle et al., 2006). The current study finding is not out of the reach of empirical evidence. This finding is consistent with Thomas et al., (2011) who examined association between religious coping, stress and depression symptoms and identified that negative religious coping strategies results in more depressive and stress, whilst positive religious coping strategies are associated with reduced depressive symptoms and stress. Similarly, Randy et al., (2009) discovered that the use of positive religious coping (belief in God) contributes to less depression than the use of negative religious coping (less belief in God). In line with the Religious Commitment theory, individuals who have a relationship with God have a high efficacy in reducing depression.

The study had some limitations that must be acknowledged. Because a cross-sectional design was applied, findings should be viewed in correlates but not causality due to the presence of potential extraneous variables in correlational studies. Adopting a longitudinal research design might have provided a better indication of depression and coping among cancer patients and might have also highlighted strong causalities. The study was also limited by the small sample size.

Implication and Recommendations

The findings of the current study also have some theoretical and practical implications for improving the lives of cancer patients. As indicated earlier, the current study found a negative relationship between religious coping and depression of cancer patients. This suggests that religious coping results in less experience of depression. The current study also provided evidence to suggest that when patients direct their feelings and situation to themselves, other than a higher being and others, they experience higher

levels of depression. This again confirms the Religious Commitment Theory, implying that directing one's feelings and experience to a higher being lessens the individual's experience of depression. Similarly, patients with chronic conditions encounter psychological challenges which however, can be managed. The current study established that religious coping is an effective means of coping among cancer patients. Physicians, clinicians and psychologists or counsellors can adopt religious coping strategies with their patients in order to help manage and cope with their conditions. Similarly, caregivers of chronic patients can also use religious coping strategies to help manage the conditions of their patient better. Integration into a religious group can also help a patient cope with the psychological crisis of living with cancer.

A few recommendations based on this study can be made for future studies. First, future studies should consider expanding the sample size to observe possible changes of the findings. Second, since religious coping strategy is an important variable that strongly predicts depression, it is recommended that future research examines its association with other forms of psychological crises. Furthermore, for the purpose of gaining deeper understanding of the phenomena, it is recommended that future studies adopt both qualitative and quantitative methods. In addition, longitudinal studies can be conducted to provide better understanding of the variables.

Conclusion

This study examined the relationship between religious coping strategy and depression among cancer patients in Tema General Hospital. The research provided much evidence to support earlier researches that religious coping predicts depression among cancer patients. Similarly, the current study discovered that self-directing religious coping contributed to higher depression experience than benevolent coping, collective coping and religious-focus coping. Findings of the study explain the Religious Commitment Theory by Stack and the Cognitive Theory of Depression.

Conflict of Interest: None

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Original Article

Why are they staying? A phenomenological study on midwives working in Ghana

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Abstract

Low and middle-income countries face challenges with retention of healthcare personnel including midwives, primarily because of migration to other countries. Repercussions from the loss of healthcare workers have been grave and the impact on healthcare services for the inhabitants is consequently compromised. Since many such countries subsidize the education of healthcare workers, the monies spent do not provide the expected return on investment. While some studies review the cause of such migrations, limited research explore the views of healthcare workers who choose to stay and work in the countries that educated them and no such studies have explored the views of midwives in particular. The aim of this transcendental phenomenological study was to explore the views and motivations of Ghanaian-educated midwives who have chosen to remain and practice in Ghana. The study was conducted in 2015 among twelve purposively sampled Ghanaian educated midwives from a hospital in the Ashanti Region of Ghana, to explore their views about staying to work in the country, in view of what may have inspired their counterparts to leave. Data was analyzed using NVivo 10® (QSR, 2014).

The findings identified one key theme around their reasons for remaining in Ghana. Five additional themes amplified and extended the reasons and all themes provided guidance for addressing retention issues in Ghana. Context-specific recommendations were made with a focus on midwifery leadership, policy makers, stakeholders and the main professional regulatory body to address the exodus of midwives in Ghana and other LMICs.

Keywords:

Low and middle-income countries; midwifery; midwives; retention; Shortages

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Introduction

In most low and middle-income economies (LMICs), midwives serve as front-line workers to address maternal and newborn healthcare in remote areas but their numbers are never enough to meet the needs of such nations (Bryce & Foley, 2014). The State of the World's Midwifery Report of 2014 attributes the poor health indices in most LMICs to the shortage of skilled birth attendants especially midwives (United Nations Population Fund, [UNFPA], 2014). The report further highlights the contributions midwives make to save lives in the world's neediest countries (UNFPA, 2014). Unfortunately, midwives are prominent among the high numbers of healthcare workers who emigrate from low- and middle-income nations where they received their education. Between 1995 and 2005, over 50% of Ghanaian nurses including midwives migrated to high-income countries particularly the United Kingdom, United States of America, and Canada (Anonymous, 2005). According to Antwi, Ekey, Herbst, and Haddad (2013), though the trend of migration seemed to have started declining from 2006, Ghana to date still falls short of the World Health Organization's (WHO) benchmark of adequate nurses and midwives per its population. According to the World Health Statistics Report, births attended by skilled health personnel in Ghana from 2007 to 2014 was only 67% (WHO, 2015).

Despite the need for this cadre of health workers especially in LMICs, few measures are underway to retain midwives in these countries. While numerous studies focus on the reasons for the exit of health workers in general (Bloice & Hallinan, 2007; Campbell, 2006; Dovlo, 2007; Wong, Liu, Wang, Anderson, Seib, & Molasiotis, 2015; WHO, 2013) specific studies on midwives are limited. Moreover, conspicuously absent are studies on midwives who have chosen to stay and work in the countries that originally provided them their midwifery education.

The aim of this transcendental phenomenological study was to explore the lived experiences of Ghanaian midwives who have chosen to stay on and work with their skills, irrespective of factors that influenced their colleagues' decision to emigrate from Ghana - a lower middle-income country. The transcendental phenomenological research design was chosen because it involves a process of seeking for and gaining clarity of meaning into the unique experiences of in-

dividuals (Earle, 2010). By using the qualitative phenomenological approach, participants were enabled to articulate and describe the true reasons, thoughts, and feelings behind their behavior and decisions (Nuttall, Shankar, & Beverland, 2011). Research methods such as case studies and surveys do not often involve irrational, emotional, life-changing decisions that might not have been previously articulated and perhaps might not be completely acknowledged prior to interviewing participants. The groundwork and supportive theories of the study were based on Maslow's Hierarchy of Needs (Maslow, 1954; Upadhyaya, 2014) and the Vroom Expectancy Theory (Vroom, 1964). The research question that guided the investigation was "What are the lived experiences of Ghanaian-educated midwives who, after graduation, stay and work in their profession within Ghana?" Through in-depth interviews, critical unsullied data were gathered and common themes, which emerged, were used to produce rich narratives of midwives' experiences of staying and working in Ghana.

Design and Methods

The study was conducted using a qualitative research approach and a phenomenological design that support the notion of fundamental human truths being accessible only through subjective interpretations of individual experiences (Flood, 2010). Of the two popular approaches of phenomenology, which are Husserl's descriptive approach and Heidegger's interpretative approach, a descriptive or transcendental approach was adopted which describes the true experience of the phenomenon (Flood, 2010). In transcendental phenomenology, the phenomenon is regarded as reality, independent of the knowledge and prior biases of the researcher. Various other methods were considered for this study including descriptive case study and survey. Transcendental phenomenology was chosen because phenomenological inquiry excels at unearthing motivations and emotions often partially or completely outside the participants' conscious awareness (van Manen, 1990). In sharing experiences, a decision regarding whether to leave one's home country or to stay often evokes multiple complex thoughts and feelings and once such a decision has been made, these thoughts and feelings continue to pervade the being of the individual.

Setting, Population & Sampling

Participants were selected using purposive sampling and its related snowballing or referral technique. A sample of 15 participants were recruited from an available and known population of Ghanaian midwives with five to ten years working experience in the public service and still in active service. The study location was Kumasi the regional capital of the Ashanti Region, which is centrally located within Ghana. Kumasi is the second largest city after Accra, the capital of Ghana (Ghana Statistical Service, 2016). Kumasi was chosen over Accra, to rule out the possibility that participants may have been attracted to the benefits of the larger city. Ten midwives in the original sample willingly agreed to participate in the study and volunteered to make further recommendations on other potential participants. In total, fifteen participants received information on their rights within the study, the research and its processes. Three of the participants were unavailable for the interview at the scheduled time, and therefore 12 participants were interviewed.

Ethical considerations

Participants were given the opportunity to willingly agree to participate or decline in the study. Midwives who agreed to participate in the study confirmed by signing consent forms to that effect and were further assured of their right to withdraw from the study at any time. Confidentiality and anonymity were maintained by assuring participants of non-disclosure of their identity and by assigning each with a code in the form of participant identifier (S_RXX) for the study. Participants' privacy and protection were assured by removing all personal identifiers from the data; this essentially prevented disclosure of any private information provided during the study. Ethical approval was granted by the Research and Development Unit of the hospital in which the study was conducted.

Data collection

Data were collected through interviews on one-on-one basis and lasted between 45 and 90 minutes from August to October 2015. The whole exercise of data collection covered a period of six weeks. The personal interviews were focused on addressing the main research question "What are the lived experiences of Ghanaian educated midwives who, after graduation, stay and work in their profession within Ghana?"

Several measures, which were taken to reduce the possibility of researcher influence aimed at ensuring trustworthiness of the study results. In these processes, a panel of experts reviewed the set of semi-structured questions and made suggestions, which were incorporated. The researcher's observations of non-verbal expressions during the interview were noted and included in the data, and each participant was given the opportunity to review and verify the transcript of their respective interviews. All the interviews were audio-recorded, and data were verbally transcribed after each interview session. The participants were contacted post-interview to clarify specific comments made in the interview that needed clarification.

Data Analysis

A computer-assisted software program, NVivo 10®, was used to code the interview data. Using the Moustakas' modified van Kaam method of analysis (Moustakas, 1994) for phenomenological data, the data on participants' experiences were analyzed first individually followed by the application of a reduction process known as horizontalization (Moustakas, 1994). Invariant constituents were determined through reduction and elimination, still using the NVivo 10®. Vague and repetitive expressions that did not fit as invariant constituents were eliminated. After this procedure, the invariant constituents were clustered and thematised resulting in categories that served as core textural themes of midwives' experiences of staying and working in Ghana.

Results

The aim of this transcendental phenomenological study was to gain insight into the decision of midwives from LMICs to leave or to stay and work in their countries that educated them. The specific problem, which the study sought to explore, was the unarticulated thinking and emotions behind midwives' decisions to remain to practice their profession in Ghana, a typical lower middle-income economy.

In response to the main research question that guided the interviews:

"What are the lived experiences of Ghanaian-educated midwives who, after graduation, stay and work in their profession within Ghana?"

One main theme emerged, namely, 'motivation for the continuous practice as a midwife in Ghana'. Four sub-themes or supplemental issues emerged in relation to midwives' motivation to stay in Ghana to practice their profession. These supplemental issues were:

- (a) influences on choice of midwifery as a career,
- (b) experiences of being a midwife,
- (c) fulfillment of personal need in the job, and
- (d) experience with policy makers in the career

Study Findings

Motivation for the continuous practice as a midwife in Ghana

Participants expressed dissatisfaction at their work and working conditions but all participants chose to remain in their home country rather than leave to countries with better working conditions and career opportunities. The motivation for participants to stay and continue their professional practice in Ghana in spite of poor working conditions and fewer career opportunities were categorised into four key reasons: a) family ties, b) sense of security, c) encouragement from some supervisors to stay and d) desire to alleviate the suffering of clients.

Family Ties

Participant S_R06 expressed her motivation for staying by stating,

"I am here because my family too is around. I'm married with kids. I am staying on for my family members -extended family as well".

Participant S_R08 also said, "I love my family and would not want to leave them". Yet another, Participant S_R07, also said she was still working in the country in spite of several challenges because she could not leave her husband and children. Ten out of the 12 participants chose to stay in Ghana because of family ties.

Sense of Security

Feelings of security in their known environment and fear of the unknown in a foreign land also ranked high in the motivation for the stay of participants in Ghana. Of the 12 participants, nine expressed the sense of security as a motivation for their stay in Ghana and one participant articulated it well. For example, Participant S_R09 said:

I'm still in Ghana because it has never been my dream to travel. If you travel, you don't know what you may meet over there since you're not a national of the place ... Why not stay in my home where I'll be comfortable? Nobody will be harassing me here, asking for my green card and all that. ... here, nobody will chase you up and down with paper issues, saying, "You don't have a permit to work here, you're an alien". That is not done here. Because you're a citizen"

Encouragement from Supervisors

Five out of 12 participants believed they had their motivation for the practice as midwives in Ghana from words of encouragement from supervisors and Participant S_R03 indicated:

Sometimes we receive words of encouragement from our superiors. They don't come often enough but once in a while ... not regularly; but sometimes when they come and they see how you have worked they say "Ayekoo" or Thank You.

Participant S_R05 also expressed satisfaction at the encouragement she received from some supervisors:

"Not all supervisors motivate you to stay on the job. They are generally just all right; but once in a while you meet some who make you feel very good at what you are doing".

She recounted how two particular supervisors praised and encouraged her efforts in the midst of challenging conditions at different times. Beaming with smiles, she recounted one of her experiences with a supervisor:

When my supervisor came the next day and heard I had stayed beyond my shift for another two hours, she was so happy with me and congratulated me in front of everybody for my efforts. She made me feel so good; and although I no longer work under her, she still calls me every now and then to encourage me with words like 'our nation needs midwives like you.' People like her make me feel it's worth staying here.

Alleviation of sufferings of clients

Four out of the twelve participants felt they were not motivated by anything to stay. They however felt they opted to stay and practice midwifery to help alleviate the sufferings of their clients.

S_R04 had this to say:

“Nothing motivates me ... I foresee nothing ahead; I am however staying mainly because I cannot stand it when I see people suffering, so saving the lives of mothers keeps me on.”

Issues related to midwives’ motivation to remain in the country

The following five themes emerged from the interviews and provided additional insight into why these midwives chose to remain in the country rather than emigrate.

Motivation to practice

In addition to the motivations, which made the participants stay and practice their profession in Ghana, the midwives expressed that their inherent inclination to practice midwifery influenced their decision to stay on their jobs. Nine of the 12 participants felt motivated to stay out of love and passion for midwifery. Half of the participants (n=6) also indicated that their motivation to stay stemmed out of their faith in God.

Influences on choice of midwifery as a career

The wish to support people in need of help influenced the participants’ choice of midwifery as a career. Respondents expressed their interest in assisting pregnant women to deliver safely. The midwives expressed enthusiasm about the experiences of saving lives and helping to bring new lives into the world. Ten of the 12 participants attributed their choice and passion about midwifery to the ability to save lives and improve health outcomes. Nine of the 12 participants also expressed that the autonomy midwives enjoy in the practice of their profession influenced their choice of career. Unlike nurses who needed the approval of a doctor to address issues concerning their clients, midwives could take independent decisions and actions while attending to their clients.

Experiences of being a midwife

Participants expressed both negative and positive feelings about their experiences of being midwives. Eighty-three percent (n=10) described their experiences as useful and interesting. S_R04 indicated she enjoyed getting to know her clients, “pregnant women, women in labor, men after delivery of their wives, fetuses in utero and baby after baby,” in her community; she also loved educating them and even helping some of her relatives through her profession. Eleven participants found the experience of being a midwife to be an enjoyable one while all stated their deep satisfaction at having had positive exposure in the profession. Participants however also expressed concerns about poor facilities at work, coupled with painful and stressful experiences they went through while practicing their profession as midwives. As Participant S_R11 said:

“Personally I do not regret becoming a midwife but I don’t like the conditions due to lack of the necessary equipment you need for working”.

Almost in tears, Participant S_R07 gave a vivid description of a situation where she and some colleagues had a client with pre-eclampsia case on admission and could not obtain a spatula on the ward:

This woman came, had fits, and because of a common spatula to put the tongue in position, that we couldn’t get, she passed on and died. And up-to-date, we have been requesting for tongue spatula and we can’t get it.

Participant S_R06 also gave an account that regrettably happened due to lack of needed basic equipment:

I recall a day when in our ward, a patient came on admission; the woman was just talking to me and then suddenly I saw her going off . . . All I needed was a pulse oximeter to assess her oxygen concentration and take the appropriate action, but there was none in our ward. We had to rush to the theater to call the anesthetist. But then we didn’t get the equipment because they didn’t have some to spare. We eventually had to transport the patient down

with the bed and finally . . . she died. [Midwife paused to push back tears]. We lost her because we wasted precious time looking for a basic gadget that could have saved her life if it were available!

With these pathetic recollections from the participants, the midwives clearly expressed how they felt helpless to save situations due to lack of access to the basic working tools needed in their workplace. As recounted in these experiences, the midwives expressed emotions of sadness, helplessness, anger and frustration.

Fulfilment of personal need in the job

Eleven out of the 12 participants indicated that motivation in the form of monetary rewards, including good salary enhances job fulfilment. Ten out of 12 participants had very strong views about individual recognition for impressive work done. The midwives specified promotion and provision of incentives such as institutional award system and, opportunities for short courses internally and externally as strong motivational factors to stay and work in Ghana. Participant S_R01 stated:

“provision of financial incentives; awards; words of encouragement; prompt promotion of staff when they are due, building up the interest of the staff and allowing us to go for short courses to improve our knowledge and skills; all these serve as good motivators of job fulfilment”

Experience with policy makers in the career

Policy makers referred to in this study were the decision makers for day-to-day activities of midwives in their health facilities, including managers and those within the government system who influenced and effected decisions on midwifery within Ghana. Eight out of 12 respondents found communication with management or policy makers as either absent or poor. Participants felt they deserved a fair hearing by their supervisors when the latter received negative reports on the performance of the former. Eleven out of the 12 participants indicated their displeasure with individual career development related to decisions made by policy makers. Three out of the 12 participants also complained about the phenomena of preferential treatment by some policy makers for their favorites.

Additionally, the midwives specified that more nurses than midwives were in administrative and leadership positions, which led to fewer midwives engaging in policy-making as part of existing policy makers. Expressing her frustration, Participant S_R05 exclaimed, “No midwife is a director; all of the directors are general nurses and this does not help in pleading our cause nor does it motivate us.” The lack of hospital infrastructure and delays in the improvement of existing facilities and development of new ones were also issues of major concern that participants considered as critical for policy makers to address.

Discussion

The findings of this study project midwives' dissatisfaction with their work due to poor working conditions, which cause frustrations and helplessness in practice; however, these midwives had chosen to stay and practice in the country that educated them. In the exploration of their motivation for continuous practice in Ghana, 10 out of 12 participants admitted that family ties were a major reason for staying back. This was supportive of a study on the challenges and rewards of working in remote communities in Australia in which one of the motivators that kept the midwives and nurses going under the harsh and hostile conditions they faced was the support network that kept them connected to their families (Anderson, 2012). Nurses and other healthcare workers including midwives seem to be willing to tolerate unfavorable conditions so long as they can stay with or in touch with close family relations (Price, 2005; Taylor et al., 2015, Wakelin & Skinner, 2007). However, improvements in information technology and the internet may affect the inclination for employees in all professions to leave their home countries because they are now able to stay in touch with family and friends virtually (Taylor, 2015). Nine out of 12 participants attributed their stay to the sense of security they felt in living in a known environment. These findings from the participants confirm similar findings in research studies by Rouleau, Fournier, Philibert, Mbengue and Dumont (2012). Unexpectedly, 50% (n=6), despite complaints about supervisors, attributed their continuous stay and work to motivation from their supervisors. This form of motivation to stay which relates to supervisors' support confirms the findings of Duval and Andrew (2010), Bakuwa, Chasimpha, and Masamba (2013) who established that supervisors positively influence retention when they take interest in encouraging their

subordinates in their jobs. In this current study, the six midwives (50%) who had decided to stay in Ghana to practice did so because their supervisors provided immense support when they wanted to further their studies.

The midwives in this study however, refused to let their poor experiences with their managers affect their stay on their jobs as midwives. This finding does not support earlier research found in the literature review (Bakuwa et al., 2013; Hayes, Bonner & Pryor, 2010). Midwives' responses to the poor treatment from most of their supervisors do not support Vroom's Expectancy theory that was used as a theoretical framework to guide this study. In Vroom's theory, negative rewards (which include dissatisfaction) tend to de-motivate employees and could cause them to reject their jobs. In this current study, the midwives however, expressed willingness to stay on their jobs to fulfill the needs of their clients, which made the midwives earn the respect of their clients. This supports Maslow's theory on the Hierarchy of needs where recognition and respect from others place fourth on the five levels of needs.

Midwives in the study, who felt unmotivated by anything to stay and practice in Ghana, but continued to practice in the country anyway said they did so because they had no option than to stay and alleviate the sufferings of their clients. Such midwives formed one third of the participants. Similar to research evidence on midwives from Pakistan, the responses of these midwives in this current study reported feelings of helplessness and abandonment of support (Mohammad et al., 2015).

The reasons respondents gave for staying were primarily due to family, fear of the unknown, and love for the work. The respondents were willing to stay despite dissatisfaction with working conditions including, but not limited to how they are treated by their supervisor. However, a tipping point may be reached that could cause them to change their minds and seek employment outside the country.

Implications

This study establishes that the midwives are willing to stay and practice their profession in Ghana primarily because they want to remain close to their families despite the poor working conditions and lack of

opportunity to advance. Midwives' decisions to stay are also influenced by their managers' encouragement. While all participants indicated they had a strong desire to serve and care for people, they candidly expressed emotional upset, dissatisfaction and frustrations about the poor conditions associated with practicing midwifery.

Several recommendations could be gleaned from the study for management and leadership of midwifery in Ghana to take action to help address retention. It is important to put measures in place to ensure that midwives gain access to possible areas for advancement in their career after graduation as respondents in this study expressed their wish to do further studies, as one of the opportunities for advancement they wanted. Provision of sponsorship to advance their studies therefore could fulfill such opportunities. It will be helpful for the Nursing and Midwifery Council of Ghana in collaboration with the Ghana Registered Nurses and Midwives Associations to dialogue with the Ghana Health Services on such issues.

Managers and leadership of midwifery also need to hold discussions with the midwives to listen to their grievances and work together to address them and improve the working conditions of the midwives. Issues beyond local levels need to be addressed by higher policy makers including the Nursing and Midwifery Council of Ghana, which is the regulatory body for midwives. From the findings of the study, midwives' salary scales also need a review in comparison with other comparable professions, such as medical assistants, who like midwives in Ghana, also work autonomously in the Ghanaian medical system. There is also the need for concerted efforts towards recognition and affirmation of outstanding efforts of midwives because from the study, the participants placed high premium on positive affirmation from their supervisors, as an important motivator. Deliberate measures must also be put into place to make midwifery leaders assume higher positions on the policy making table to encourage midwives that issues on midwifery could find a place on the agenda for development.

As Taylor and others (2015) found in their studies, improvement in technology could be loosening the hold of family ties on participants because they can now stay in touch with their families if they relocate to an-

other country. Midwifery leaders therefore may be faced in the future with losing an even higher percentage of health care and midwifery practitioners. Specifically, policy makers must be urged to improve communication with practitioners of midwifery, and to provide more incentives in the form of ongoing professional development opportunities, better salaries, and recognition for jobs well done. The findings from this study should therefore serve as a clarion call for the midwifery leadership in Ghana to consider how to meet the needs of midwives in Ghana, and in the process motivate those who may be considering leaving, to stay.

Given the narrow scope of this qualitative phenomenological study, additional research will help to validate the key themes and invariant constituents that emerged through interviews with the 12 Ghanaian-educated, practicing midwives. This study can be replicated in different regions in Ghana and extended to other LMICs in Africa to confirm or disconfirm these findings

Future research to replicate the study within other LMICs need to consider contextually relevant issues to make their results more generalizable. Further research also needs to integrate the role of midwifery leadership to provide additional insight. Existing knowledge on retention of midwives will be enhanced if further research is extended to include midwife managers to provide better understanding of the phenomenon of staying to work or immigrating to high-income countries. Additionally, comparative studies between midwives who chose to leave, with existing studies of those who chose to stay, would provide useful information to address retention of midwives.

Conclusion

This study was conducted to garner understanding of the lived experiences of Ghanaian educated midwives who chose to stay and work within the country after graduation. Through phenomenological analysis, one major theme with four sub-themes and five other themes that materialized as supplemental issues emerged that highlighted the importance of personal attributes and the gains made based on motivation from policy makers through their interactions with the midwives. The themes and supplemental issues provide a framework for improving the retention of midwives in LMICs. Furthermore, the

study findings establish the need for the midwifery leadership and stakeholders of maternal and child health in Ghana to use the themes and the emerging issues as framework for improving the retention of midwives within Ghana.

The midwives in this study expressed their dissatisfaction with remuneration, incentives, relationship with their supervisors and lack of requisite equipment for work. In spite of all these grievances, participants indicated that the reasons for staying and working in Ghana were mainly due to family ties. However, with the global surge in social media communication, relating with families and friends virtually is nearly like face-to-face meetings. This calls for re-envisioning the strong bond of family ties, which may soon lose its capacity to make midwives stay. The midwifery leadership in Ghana must therefore engage in sustainable strategies, which ensure that midwives educated in Ghana are supported to engage in optimal practice.

Conflict of Interest

The authors declare that there is no conflict of interest.

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Original Article

Midwives' emotional distress over maternal death: The case of Ashanti Region

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Abstract

Emotional distress associated with the death of human beings cannot be underestimated. Much as it affects the immediate family members, midwives who witness death of pregnant patients are not spared the emotional distress. Emotional distress affects the general health, behaviour, productivity and job satisfaction of nurses and midwives. However, there is inadequate literature on how midwives in the Ashanti Region of Ghana become emotionally distressed after they experience maternal death. This study sought to explore and describe lived experiences of midwives' emotional distress over maternal death at work using a qualitative approach. The study consisted of 57 participants (18 supervisors and 39 ward midwives) selected using the purposive sampling technique. Data collection was done through focus group discussions using semi-structured interviews. The responses collected were managed by qualitative computer data analysis package (Atlas.ti version 7.1.7) and the Thematic Content Analysis was used for analyzing the data. Four major themes emerged from this study: feeling sad or bad, traumatised, disorganised, and death seen as unpleasant, painful and inhumane. Main recommendation embodied institution of support programmes in hospitals without them, to help workers cope with such distress, help lessen the distress that midwives go through, improve quality of services provided, as well as provide job satisfaction.

Keywords:

Emotional distress; midwives; maternal deaths; job satisfaction

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Introduction

Globally, there are occupational distresses in every organization, and different jobs produce different occupational distresses. A healthy distress-free healthcare environment is important for the quality of healthcare services received by patients as well as for job satisfaction of the care provider. However, unexpected deaths of pregnant women are not only occupationally stressful but also emotionally stressful experiences for midwives. Such experiences intensify the already dire situation contributing to 'job distress' (Dagget, Molla, & Belachew, 2016). According to Khan Aqeel, and Riaz (2014), emotional distress, resulting from job distress is believed to have a direct impact on job performance and job satisfaction. Distress, from the perspective of Bickham (2009) is any response to an event, which overpowers one's coping skills. Similarly, distress is seen as the psychological strain resulting from experiencing unusual or demanding situations, known as stressors (Finney, Stergiopoulos, Hensel, Bonato & Dewa, 2013). Emotional distress can therefore, be defined as a situation that causes an individual to respond to sudden and painful psychological experience. The overwhelming characteristics manifest as anger, guilt, nightmares, suffering, resentment, sorrow, helplessness, powerlessness and loss of self-worth (Zuzelo, 2007).

Moreover, emotional distress leads to emotional burnout and frustration, which can cause an imbalance between occupational and household roles. In a similar situation, emotional job distress is perceived as the unpleasant condition or position at the workplace, with a negative impact on an individual's overall well-being and performance (Khan, et al, 2014). Emotional distress also causes fear, depression, exhaustion and isolation (Bickham, 2009). The initial reactions of healthcare professionals to a patient's death have an obvious impact on them and these impacts are grouped into emotional, physical, cognitive, social and moral distress (The American Association of Colleges of Nursing (AACN), 2008).

Similarly, when emotional distress occurs repeatedly within the working environment of midwives, it can lead to withdrawal and a flight response (De Villers, 2010; Austin, Kelecevic, Goble & Mekechuk, 2009). Edo-Gual, Tomás-Sábado, Bardallo-Porras and Monforte-Royo (2014) reported that nurses and midwives frequently rated dealing with 'death and dying' as one

of the major emotionally stressful events, and the impact on them included burnout, health complaints and decreased quality of patient care. Bickham (2009), therefore, concluded that if the distresses experienced in stressful healthcare environments are not dealt with, they might lead to mental symptoms such as depression, anxiety, depersonalisation and dissociation. Bickham (2009), however, did not deny the fact that nurses and midwives are expected to cope with emotional and other stressful circumstances, such as patient deaths, though such situations appeared to be difficult for some nurses and midwives, notwithstanding that the two professions are fundamentally demanding enough.

Core characteristics expected of midwives include respect, compassion, empathy and accountability (Lewis, 2014). Therefore, any midwife who is unable to justify the cause of a maternal death would be stigmatised, and blamed for the death. Lewis (2014) recalls instances where incidences of maternal death have been reported to the police for criminal investigations, resulting in the placing of a health staff in custody until proven innocent. Such experiences eventually create gaps in job satisfaction and negatively affect midwives who face such situations making them not enjoy doing their job any longer (Dagget, Molla, & Belachew, 2016). Khan et al., (2014) posited that job satisfaction is "a stable and balanced arrangement of environmental, psychological and physiological situations at workplace" (p. 270). Alnems Aboads, Alyousef, AL-Yateem, and Abotabar (2005) further argued that job dissatisfaction of midwives may occur due to emotional distress and is found in non-supportive work environments. It is evident that emotional job distress and job dissatisfaction are the most significant causes of job turnover among nurses and midwives (Zuzelo, 2007). Job dissatisfaction of employees can lead to high turnover, less work commitment, physical withdrawal, and emotional or mental retreat from the organisation (Pathak, 2012). Midwives who witness maternal death initially experience a sense of emotional distress and disbelief. The situation is becoming a serious problem in midwifery practice; moreover, people with serious emotional distress carry the remnants of the experience for many years, if not for a lifetime (De Villers, 2010). However, what is not clear is how emotionally distressed midwives in Ashanti Region of Ghana get when they experience maternal deaths at

their workplaces. This paper therefore seeks to explore and describe the midwives' emotional distress over maternal death in the Ashanti Region of Ghana.

Research Design and Methods

A qualitative approach with exploratory and descriptive research design was employed in the study. An exploratory research design has the advantage of uncovering many aspects of the phenomenon under investigation and aims at examining the full nature of comparatively unfamiliar phenomenon (Polit & Beck, 2008). Furthermore, Polit and Beck (2012), define descriptive research design as a study of the main objectives of describing an accurate representation of the characteristics of persons or situations. With regard to the current study, the descriptive research design brought out the meaning of the problem under investigation through a detailed description of the lived experiences of midwives at their workplaces. The research setting for the study was within the Ashanti Region of Ghana, where maternal death has been very high (usually above 100 per 1000 live births) since 2009 (Ghana Health Service Annual Report, 2014). The study was conducted in nine health facilities including one teaching hospital, one regional referral hospital, four district referral hospitals and three health centres. The region has a high number of healthcare facilities as well as high number of health workers, yet a low number of supervised deliveries in the country (Ghana Health Service Annual Report, 2014). Purposive sampling was used to select participants who met the inclusion criteria: having worked continuously as midwives for at least two years before the date of data collection, who have experienced maternal death, and have gone through the maternal death review process. Participants were recruited through the principal midwifery officers in charge of the wards. Data saturation was attained after 18 semi-structured interviews and 8 focus group discussions, where no new information was coming from the participants. A total of 57 ward midwives and ward supervisors took part in the study. Interview guides were used. All focus group discussions and the semi-structured interviews lasted between 40-60 minutes each. The ethical clearance for the study was obtained from the Senate Research Committee of the University of Western Cape, South Africa, where the lead researcher was studying, and the Ministry of Health/Ghana Health Service.

Data Management and Analysis

Data analysis was done after audio recordings were transcribed. The data analysis followed Holloway & Wheeler's (2013) stages of Thematic Content Approach in analysing data. Through validation of data, data transcribing, and data cleaning. Coding was done to categorise and group similar information into families and later into themes (Polit & Beck, 2012). The analysis was assisted by the use of computer software called Atlas.ti version 7.1.7. Participants were identified with alphabets and numbers: M2 (midwife manager number 2) and FG2M5 (focus group 2 midwife 5).

Rigour

Qualitative trustworthiness was accomplished through credibility, confirmability, transferability and dependability. Trustworthiness of the current research was based on Lincoln and Guba's (1985) position, which states that rigour in qualitative research should not suffer information loss. Therefore, there was no sacrifice of relevant information in the study. Credibility was ensured by peer debriefing, triangulating the different methods of data collected, prolonged engagement with participants as well as member checking while using official data analysis methods. Research audit was one of the processes of confirmability used under this study. Transferability was achieved through the provision of detailed descriptions of the participants' characteristics for any researcher who wishes to do so. Dependability puts emphasis on the need for the researcher to describe any changing context within which the research occurs and that which the researcher observed. Dependability was also achieved through external audits. Participants' confidentiality and privacy were preserved throughout the study by using a number of measures, such as the signing of focus group binding forms and individual consent forms.

Results Background of Participants

All participants were females since there were no male midwives at the time of data collection. Participants ranked from the lowest rank (Staff midwife) to the highest rank (Director of Midwifery). There were more junior ranked officers (52.6 %). Participants' ages ranged between 22 and 61 years with the majority (56.1%) under the age of 46 years, implying that there are younger midwives who are likely to be exposed to

maternal death in their work life without proper support in the form of Employee Assistance Programme (EAP). The participants had post qualification work experience ranging from three (3) to more than 25 years. About 58% of the participants had more than 10 years of experience as midwives, which meant more than half of the participants had appreciable working experience. Most of the participants had repeated exposure to maternal death and the processes that follows.

Findings

The findings of the study revealed that midwives are emotionally distressed whenever they witness maternal death cases at the healthcare facilities, and this influences their wellbeing and ability to function efficiently in the performance of their responsibilities to other patients. Four themes emerged from the study: feeling bad or sad, traumatised, disorganised, and seeing maternal death as unpleasant and inhuman.

Feeling Sad or Bad

Feeling sad or bad meant midwives were unhappy about the death of patients they cared for. While some participants used the phrase "feeling sad" to describe their experience with maternal death, other participants simply put it as "feeling bad". Feeling sad or bad was an emotional feeling of loss and helplessness. The expression "feeling sad" and "feeling bad" was used by the majority of the participants in expressing their experience with maternal death. This is illustrated by the following quotes;

"I always feel very sad when I hear that a patient died on the ward. I feel so sad. You know one cannot revive a dead person. It is so sad when we record maternal death because we are all trying to support maternal health, not to encourage maternal death". FG1M3

"It is so bad to hear that someone expecting a baby is dead. I think I have experienced it three times. It is very sad because nobody expects it but it happens, and when it happens like that, one feels bad as a caregiver". FG1M4

"If a mother dies during my care, I feel very bad, what I pray for is to always deliver mothers safely. It is a bad experience". FG4M4

"It affected me badly and it made me think that maybe I didn't do my work well". M13

Traumatised

Some participants reported that they were traumatised anytime they experienced maternal death. To be traumatised entails experiencing a disturbing event. Participant FG1M3 expressed the experience quite well stating,

"When there is maternal death the midwife herself is in shock, traumatised so I think the hospital chaplain can help break the news and console the relatives....."

FG1M2 also presented with the same position

"... if the patient expires, you the midwife you are traumatised, there is the possibility of even forgetting to document though it was done."

Disorganised

When an individual is traumatised, the individual is likely to be disorganised, not knowing what to do or say. This was experienced by some participants and Participant M3 said

"I feel very sad and disorganised when I experience or hear of a maternal death. It is not a good thing. It feels very sad and am disorganised anytime it happens"

while Participant FG1M3 stated

"When I hear or experience of maternal death, I feel disorganised for some time...."

Participant M13 also expressed the sense of disorganisation this way:

"I was so disturbed that night. Psychologically I was disturbed. Human being dying in our hands is not easy, not good."

while Participant FG1M4 also said

"I put myself in the deceased's shoes for that moment and you cannot even do things right because it affects one emotionally."

Unpleasant and Inhumane

In another instant, some participants expressed their experience with maternal death as unpleasant, painful, and inhuman. Participants are of the view that maternal death is neither a good nor a pleasant experience for human beings.

"It's... unpleasant and is very painful to experience maternal death. Why because a woman is pregnant, expecting to deliver in a healthy and beautiful way and all of a sudden something will come up concerning the situation then she dies, so it's not something good." M5

"Sometimes [it] is very inhumane to experience maternal death. Oooh we are human beings and a human being's life taken away is not good, who is going to look after the baby, and all these things go into consideration when you experience Maternal Death." FG6M5

Some participants reported that maternal death distresses everybody. The participants in this study largely shared the view that maternal death is everybody's business. This was expressed quite well in the following quotes:

"Maternal death is something that affects everybody. Looking at the baby and the other people that the woman left behind, automatically affect you." M16

"When maternal death happens, it does not matter if you are a relative or not, male or female healthcare provider. As far as it's our client, we build a relationship, establish rapport, so you will be able to manage and communicate with the client well." M6

Furthermore, the findings present a situation where the midwives as a team feel helpless in their distress when unable to save a woman's life.

"...Maternal Death is something I think we all need to address because emotionally we (midwives) all don't seem fit when we lose a client"

and confirmed by FG4M3 saying 10

"Death is something nobody wishes to happen, not even to the enemy because it's an emotional

thing. So when it happens to a pregnant woman it is very sad especially since there might be two or three lives involved at the same time. It is something you do not wish for your own self. It affects midwives psychologically. The mention of death everybody becomes emotionally distressed. This is the same thing that happens to us all in the ward. We also feel about it very much. So why the pregnant woman should die as a result of delivery it is not something we wish for." M8

Similarly, individual midwives acknowledged that though they are not related to the clients, they still feel pain and are emotionally distressed. Participant FG1M4 explained that though patients who die might not be related to her, emotional distress is experienced:

"The fact that the deceased person is not my relative does not mean I don't feel the pain that the relatives go through or I don't care about how the relatives feel. It affects me emotionally".

While M5 said the same thing in a different way

"Hmmmmm, when we (midwives) record maternal death, emotionally I am disturbed. Although I am able to do some work, I am emotionally unstable."

Emotional distress was also observed in some participants by their colleagues. According to these participants, colleagues who experience maternal death whilst on duty are mostly seen to be in deep distress. The distressed midwives are mostly seen to be by themselves, asking themselves what actually happened for the woman to die as reported by M14:

"Yes, the midwives are normally affected emotionally: particularly when we are marking their reports. They say maternal death occurred and it affects everybody's emotional feelings and we become emotionally distressed. The midwives come out and say, 'aah somebody died this morning or at this particular time, in fact it is pathetic.

We wished it has [sic] not happened but it has happened and women are suffering but what else can we do?' we just have to support them. Most of the time, their expressions show that

they are emotionally affected but they have to work by bringing the emotions down."

FG1M also remembered what happened to one close colleague,

"It actually affects us (midwives) emotionally because I do remember a colleague had gone through that situation (emotional distress) where a mother died while she was on duty and it was tough for her. She was repeatedly and sadly questioning herself why such an incident (maternal death) happened to her and I had to support her psychologically."

On other hand, few participants (particularly supervisors) were of the view that emotional distress should not be entertained too long or it would disrupt the work. These participants said that they were able to work, despite the distress, to prevent further reoccurrence of maternal deaths. These participants felt responsible as ward supervisors on whom the care of other patients rested and some expressed their views on the need to continue working as in the case of M11;

"I shouldn't say this woman is dead so I won't attend to others."

Meanwhile, M4 was of the opinion that life needed to go on in spite of any sad occurrence

"Life must go on and the work; you cannot leave the work like that, you cannot stay at home because of that situation."

Discussion

The analysed data indicated that midwives were emotionally distressed when they experienced maternal death at their workplaces. Participants described different ways in which they expressed the emotional distress they went through because of the death of their clients. They alluded to the fact that all midwives in the wards became unfit emotionally when they experienced maternal death. Nickerson, Liddell, Maccallum, Steel, Silove and Bryant (2014) are of the view that there is always emotional distress whenever people experience the death of others no matter the relationship. Emotional distress was experienced by all participants, notwithstanding age, position or number of years of experience on the job

as a midwife or the type of health facility they worked in. One participant put it as *"none of us (midwives) seem fit"* whenever maternal death occurred at the workplace. Emotional distress affects behaviour, productivity and performance as well as job satisfaction (Center for Prevention and Health Services, 2008). Participants in this study alluded to the fact that they experienced sadness whenever maternal death occurred. They felt the goal of assisting a patient to a safe delivery and going home happily after delivery was forever missed. According to Cain and Ter-Bagdasarian (2003), midwives who experience maternal death go through gloom and psychological distress. The distress in the hospital setting threatens the physical and mental well-being of health workers and goes beyond the existing stage into the future. Peters and others (2013) also stated that it compromises patient care and safety (Peters, et al., 2013). Some participants in the current study indicated that they became disorganised when they experienced maternal death. This is in line with the literature, where Bozarth (2013) mentioned that, people who experience grief tend to forget what to say or do, making such people have personal problems such as low self-esteem. Such state of disorganisation is not helpful in healthcare and especially in midwifery, because concentration is paramount in order to observe and give the best care to the clients as in the case of midwifery, two or more people might be involved at any other time (Sjöblom, Idvall, & Lindgren, 2014).

Furthermore, other participants expressed experiencing maternal death as unpleasant and painful. To these midwives, it was a nightmare when they experienced maternal death in the hospital. From the point of view of Hugenschmitt, Souquet, Lefort, Bagur, and Gueugniaud (2015), death experience faced by some health staff, especially nurses and midwives, does not appear to protect them from trauma, pain or other unpleasant feelings resulting from grief; they still struggle to deal with new death cases that they encounter (Kellogg, Barker & McCune, 2014; Wilson, 2014). As a result, Sliter, Sinclair, Yuan and Mohr (2014), suggest that midwives' working environment should be conducive and stimulating enough to discourage any compromise on the quality of healthcare and to help improve wellness being of such workers. In contrast to the fact that most participants were sad or felt bad, traumatised and disorganised, few participants overlooked the perceived negative effects of

maternal death. Their emotional experiences made them work harder and they became more careful attending to other clients in order to prevent a possible recurrence of the situation. Midwives do not want to experience maternal death for the second time since it is a painful experience to them (Wilson and Kirshbaum, 2011). A study by Tan, O'Connor, Howard, Workman and O'Connor (2013) confirms that some nurses and midwives who deal with death most often have diminished levels of emotional distress and death anxiety. Midwives therefore, use the bad situation as a learning event to make necessary corrections or amendments to prevent future occurrences. In addition, Lange, Thom and Kline (2008) have observed that midwives with a number of years of work experience exhibit positive attitude towards death and dying patients than those just beginning. In 2004, the World Health Organisation (WHO) prescribed for all healthcare providers of pregnant women the use of Maternal Death Review (MDR) which entails an "in-depth investigation into the causes and circumstances surrounding maternal death" (FIGO-LOGIC, 2013, p, 13). According to WHO (2004), MDR should be done for all maternal deaths so that mistakes by the healthcare providers can be used as a learning process to avoid similar situations in the future.

The results from the current study indicate that participants were emotionally distressed collectively as a group (of midwives), ward members or a team on duty. This depicts the esprit de corps amongst nurses and midwives, which can be turned into a useful opportunity to address maternal mortality. For example, normally during emergencies in the maternity wards or units, all experts (midwives and others with midwifery skills) are called on board to assist (Flohr-Rincon, & Tucker, 2012; Wrammert, Sapkota, Baral, Ashish, Målqvist, & Larsson, 2017). Such display of teamwork can positively affect the Sustainable Development Goal 3, which seeks to reduce the global maternal mortality ratio to less than 70 per 100,000 live births by 2030. From the findings of the study, emotional distress varies with the individual midwives. Individual midwives directly involved in nursing the patient before death are usually drenched in emotional distress as identified by colleagues at work. A survey conducted by May (2009), confirms that nurses who were unable to deal with their reactions to death, might have compromised their professional position in a way. This, according to Peters,

and others (2013), is a professional reaction, which leaves the midwives under no control over the situation, but rather vulnerable and distracted in their environment. Some participants indicated that they had observed colleagues in deep emotional distress, where they always tried to find answers to the reasons for their clients' death and why it happened during the time, they were on duty. These colleagues according to participants were seen always very sad and in bad mood, mostly by themselves and quite often absent-minded. According to Bickham (2009), midwives get emotionally distressed on the death of their clients, since caring for pregnant mothers to the safe delivery of their babies is their ultimate goal and as such, maternal death is considered as a kind of failure of the entire healthcare system.

Implication for midwifery practice and policy

The study has brought to light the emotional distress, affecting midwives as a result of maternal death, which may negatively affect the quality of health care services rendered to other patients. The study also unearthed a positive practice – teamwork – among midwives amidst the sad experience they go through that can be fallen on as an opportunity to address maternal deaths.

Conclusion

In conclusion, the study established that institutional maternal deaths bring about emotional distress among midwives. The research was conducted in only one region and therefore might not be representative of the full opinion of all midwives in Ghana. Further research on how emotional distress can be dealt with and the effects associated with maternal deaths is recommended. More research is also recommended on how to harness the esprit de corps expressed by midwives in their emotional distress to encourage more teamwork to address maternal deaths as aimed in the SDG 3.

Conflict of Interest

The authors of the manuscript declare that no conflict of interest exists.

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