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Original Research Article

Family and community support systems for expectant mothers on birth preparedness in Northern Ghana

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ABSTRACT

Background: While maternal mortality ratio in under-developed countries has declined significantly since 1990, much work still needs to be done in addressing inequities to accessing maternal health services by poor, vulnerable and marginalized women. In an effort to improve maternal and newborn health (MNH) services, Community Support System (CmSS) is an approach for community involvement and ownership. The objective of the study includes, this study specifically examined support systems on birth preparedness among expectant mothers attending antenatal clinic at Tamale Teaching Hospital.
Methods: A facility-based cross-sectional study was conducted from February, 2016 to April, 2016 among mothers who attended antenatal care at Tamale Teaching Hospital, Ghana. A systematic random sampling technique was used to select pregnant women for the study. Using structured questionnaires, the women were assessed on the availability of community support systems during pregnancy and childbirth. Data quality was ensured via crosschecks and double entry into the Statistical Package for Social Sciences (SPSS) software version 20.01 for analysis. Data were summarized and described using frequency tables. At the 95% confidence interval, a p-value less than 0.05 was statistically significant.
Results: About 74.2% of respondents lacked husbands` company to antenatal clinic and 88.4% received no support from community leadership.
Conclusions: Based on these findings, it is recommended that an emergency response system at the community level to provide emergency funds, transport, and blood donors be put in place and made known to the public.

Keywords: Birth preparedness, Emergency, Obstetric care, Support

INTRODUCTION

Pregnancy, birth and the postnatal period is a time of major psychological and social change for women as they negotiate their roles as mothers. Supporting mothers' emotional wellbeing during the perinatal period is now recognized to be as important as the traditional focus on the physical health of the mother and child.[1] Increasing evidence about early brain development and the way in which infants develop emotional and behavioural wellbeing within the context of their early relationships, has highlighted the particular importance of building a bond with the unborn baby, and sensitive early care giving. Family support can serve as the foundation of security and growth for an expectant mother and baby. Expert suggests that family support has a positive impact on the attitude of pregnant women; including women with an unwanted pregnancy.[2]

Family support can help lower the anxieties associated with pregnancy and provide a feeling of security for mothers. Today obstetricians encourage the family's participation during the entire course of pregnancy. Ideally one or two members must accompany a pregnant woman during every prenatal visit to her doctor. This will even help the family members connect with baby and

also lend a helping hand to the mother. Simple gestures of family support and attachment are of importance during and after pregnancy. The transition to parenthood focuses explicitly on the emotional and social changes that take place during pregnancy and the immediate postnatal period and recognizes that this is a stressful time that involves both men and women making significant psychological changes and adapting to new roles.[3] Special efforts should be made to emphasize men's shared responsibility and promote their active involvement in maternity care. In spite of this, pregnancy and childbirth continue to be regarded as exclusively women's affairs in most African countries. Men generally do not accompany their wives for antenatal care and are not expected to be in the labour room during delivery.[4] However, men are socially and economically dominant especially in Ghana; they exert a strong influence over their wives, determining the timing and conditions of sexual relations, family size, and access to health care. This situation makes men critical partners for the improvement of maternal health and reduction of maternal mortality. Strategies for involving men include raising their awareness about emergency obstetric conditions, and engaging them in birth preparedness and complication readiness.[4] This is based on the premise that increased awareness of men will enable their support for early spousal utilization of emergency obstetric services. Similarly, preparing for birth and being ready for complications could reduce all three phases of delay and thereby positively impact birth outcomes. Studies on the participation of men in maternal care have been reported mostly from southern part of Nigeria.

Odimegwu and colleagues reported a high level of awareness and participation of men in maternity care in Osun state. Likewise, Morhason-Bello and others reported that 86% of antenatal clients in University College Hospital, Ibadan, preferred their husbands as companions during labour while only 7% and 5% favoured their mothers and siblings respectively.[5] However, little such research has been conducted in northern Ghana-a culturally distinct region contributing disproportionately to the country's high maternal mortality ratio.

The community support system (CmSS) is a mechanism for establishing a community-led structure which tracks all pregnant women, and provides need-based support for making their pregnancy safer, including timely use of life- saving emergency obstetric care services.[5] CmSS consists of a process where the causes of maternal mortality and morbidity are identified through a death and disability review in the community. Then, this information is shared with the community through village meetings led by local volunteers. The community then identifies their role in preventing avoidable maternal death and promotes a zero tolerance to maternal deaths and violence against women.[1]

Lastly, the community forms a committee known as Community Support Group (CSG) which establishes linkages with the health system and local government. The community becomes a 'watch dog' in order to prevent harmful practices.

The CmSS process has also identified and addressed the issue of early marriage and violence against women, which have made an impact on maternal health outcomes in communities.[7] It is a two-way coordination accountability mechanism between communities (at the village level) and health care providers and policy makers (at the sub-district level) established through regular meetings. The result: a greater voice for women and other community members with regard to the governance of local health systems, and greater accountability of service providers and local government to community members for ensuring quality care. This study therefore sought to determine whether effective community support systems exist for emergency obstetric care in the Tamale Metropolis of Ghana. In particular, the study recruited pregnant women attending antenatal clinic at the Tamale Teaching Hospital from February, 2016 to April, 2016.

METHODS

This institution based cross-sectional study was conducted at Tamale Teaching Hospital from February 16, 2016 to April 16, 2016. The Tamale Teaching Hospital serves as a referral centre for cases from regional hospitals, districts hospitals, private hospitals, and several health centres within and outside the Northern Region of Ghana. An ethical clearance certificate with reference number UCC/IRB/3/40 was obtained from the University of Cape Coast's Institutional Review Board. Formal written permission to conduct the study was also obtained from the Northern Regional Health Directorate as well as the Research and Development Division of the Tamale Teaching Hospital. For the purposes of the study, all pregnant women and mothers who were in the period of exclusive breast feeding (within 6 months after delivery) qualified to take part in the study. In contrast, pregnant women who migrated into the metropolis during the period of data collection were excluded from the study.

Data were collected using a self-administered pre-tested and structured questionnaire which was double entered into excel, validated for data entry errors and exported onto the Statistical Package for Social Sciences (SPSS) software version 20.01 for windows and analysed. Data were summarized using frequency distribution tables and displayed as frequencies and percentages. At the 95% confidence interval, a p-value less than 0.05 was considered to be statistically significant.

RESULTS

Table 1 show that majority of the expectant mothers (54.5%) were aged 20-29 years. Dogombas and Muslims

constitute the dominant groups. Most of them 69.1% and 70.4% had at least 9years of formal education and belong to the low-income group respectively.

Table 1: Demographic and general information.

Variable	Frequency	Percentage (%)
Age		
11-20	68	19.7
21-30	188	54.5
31-40	77	22.3
41-50	12	3.5
Total	345	100
Ethnicity		
Dagomba	180	52.2
Gonja	45	13.0
Ewe	16	4.6
Akan	19	5.5
Konkomba	11	3.2
Bimoba	10	2.9
Gruni	14	4.1
Dagaaba	22	6.4
Others	28	8.1
Total	345	100
Muslim	235	68.1
Christian	100	29.0
Traditionalist	10	2.9
Total	345	100
Single	73	21.2
Married	250	72.5
Widowed	8	2.3
Divorced	14	4.1
Total	345	100
Educational status		
No formal education	110	31.9
JHS	75	21.7
SHS	56	16.2
Tertiary	104	30.1
Total	345	100
Occupation		
Unemployed/ housewife	62	18.0
Trader	86	24.9
Student	22	6.4
Skilled worker	70	20.3
Farmer	20	5.8
Public/civil service	85	24.6
Total	345	100
Income Status		
Low Income	243	70.4
Middle Income	90	26.1
High Income	12	3.5
Total	345	100

Table 2 shows family members are supportive of their pregnant relatives. Majority of the expectant mothers (76.6%) had support from their fathers and mothers in law. Husbands who accompanied their spouse to antennal clinic are rare in the study area.

Table 3 shows the majority of the expectant mothers agreed family support provides stronger bonding between family and mother and, baby. More than ninety-five per cent (95.1%) also agreed that support from family enhance the mental state of the mother as well as early recognition of birth problems as agreed by 95% of the respondents.

Table 4 shows absence or minimal community support for expectant mothers. Opinion leaders do not play active role in the support of expectant mothers. Communal funds and transport for the mothers in the study population is abysmal. Community debars to educate expectant mothers on birth preparedness is also lacking.

Table 2: Family support for pregnant women.

	Strongly disagreed n (%)	Disagreed n (%)	Agreed n (%)	Strongly agree n (%)
Support persons during pregnancy				
Mother, mother-in-law and father-in-law	12 (3.5)	68 (19.7)	217 (62.9)	47 (13.9)
Husband accompanies wife to ANC	164 (47.5)	92 (26.7)	62 (18.0)	27 (7.8)

DISCUSSION

The findings showed that 54.5% of the respondents were within 21-30 years of age. This was predictable because most women marry at this age and would like to have babies during this period in life to continue their generation. This notwithstanding the study also revealed 19.7% were below the age of 20. Despite the fact that risk of maternal death for mothers within 11-20 years in low- and middle-income countries doubles that of older females 21-40, nevertheless, this group of very young adolescents is often beyond the reach of national health, education and maternal health services.[7] Older women were more likely to seek maternal healthcare than younger women. Similarly, in Nigeria, women in the middle child bearing ages were more likely to use maternal health services than women in early and late child bearing. And so being of older age at marriage is positively associated with the use of healthcare services.[8] One study in rural India also reported that utilization of antenatal care was higher among women married at 19 or older compared to those married at less than 19 years.[9] Early marriage or child marriage is practiced more often in Africa and Southern Asia. The western world is no exception where teenagers marry and/or just live together against the parents' wishes. However laws have been passed against older men having sex with underage girls.[6]

Under such circumstance these girls may be restricted from seeking healthcare services because of fear or need for permission from a spouse or in-laws.

Women who had at least primary education were more likely to be prepared for birth and its complications compared to those who did not. These findings have also been observed in the study conducted in Mpwapwa district Tanzania, rural Uganda, North Ethiopia and Indore City India.[10] This might be due to the fact that educated women know the importance of planning for birth, adhere to counseling provided at ANC, and also have the capability of making decisions on issues related to their health. Hence, the findings indicated, as educational level of these expectant mothers increased there was a corresponding increase in the likelihood of facility delivery.

Table 3: Benefits of family support to the pregnant woman.

	Strongly disagreed n (%)	Disagreed n (%)	Agreed n (%)	Strongly agree n (%)
Adequate support for pregnant women promotes:				
Bonding with mother and baby	7 (2.0)	10 (2.9)	259 (75.1)	69 (20.0)
Good mental state of mother after birth	5 (1.4)	4 (1.4)	249 (72.2)	87 (25.2)
Early recognition of birth problems	4 (1.2)	13 (3.8)	255 (73.9)	72 (20.9)

Table 4: Community support system during emergency delivery.

	Strongly disagreed n (%)	Disagreed n (%)	Agreed n (%)	Strongly agreed n (%)
Community leaders who actively support expectant mothers in times of need				
The chief, Queen mother and the assembly-man	210 (60.9)	95 (27.5)	32 (9.3)	8 (2.3)
Available support in community for pregnant women:				
Community support fund for obstetric emergency	219 (63.5)	95 (27.5)	26 (7.5)	5 (1.4)
Organized community transportation system	217 (62.9)	94 (27.2)	29 (8.1)	5 (1.4)
Annual durbars	217 (62.9)	89 (25.8)	28 (8.1)	11 (3.2)

The study further revealed that respondents who were poorly prepared for birth were those with no formal education and the well prepared ones were respondents with high education. Education was found in this study to be integral and directly proportional to birth preparedness, therefore there was an association between expectant mothers' education and preparedness for birth. Another study showed that women with formal primary education and above were two times more likely to be prepared for birth and complications compared to those who lacked formal education.[12]

The high level of birth preparedness of the educated women might be related to the fact that women who are educated are more likely to be financially sound and also have better negotiating power and are able to make their own decisions in matters concerning their health than women who are uneducated. Another reason why better educated women were more prepared for birth is their ability to better understand health messages and search for more information regarding health issues. Similar studies conducted in Tanzania and in Ethiopia have shown separately clear relationship between high education and awareness of danger signs of pregnancy.[12]

Hence, better educated women are more aware of health problems, know more about the availability of health care services and use this information more effectively to maintain or achieve good health status. It is also reported that women's education is a key determinant of maternal healthcare utilization.[13] Similarly, Indian women with high school education and above were found to be 11 times more likely to use antenatal care compared to illiterate women.[12] Education of women is therefore likely to enhanced autonomy so that women could develop confidence and capabilities to make decisions regarding their own health.

In terms of religion, the study revealed that more Christian women were likely to deliver in a health facility than traditional and Islamic women. This could be as a result of certain beliefs and practices by Muslims and Traditionalists that encourage home delivery. Many communities in the north, it is customary for a woman with her first pregnancy to deliver at home and undergo some rituals deemed necessary for survival of both mother and her new born. Religion also played a key role in this study concerning birth preparedness. In a study conducted in Nigeria, the level of preparedness for birth was significantly higher among the Igbos (in the south)

and the minority tribe compared to the Hausas (in the north).[4]

The Islamic religion may have had a strong influence on the cultural beliefs and traditions on child birth in the north. Also, some women in this study chose to turn to their deities when it comes to having babies similar to Ancient Egyptian women who incorporated rituals and ceremonies as an integral part of the pregnancy and birth experience by tuning to Meskhenet, a Goddess associated with the place of birth, and respect for her was essential for a normal birth.[13]

The new brand of Pentecostalism also interferes with timely health care utilization as women see pastors, prophets and general overseers for special anointing when it comes to pregnancy and birth. For Catholics, believe in the Virgin Mary cannot be overemphasized. Women who had a salaried job were more likely to be prepared for birth and its complications compared to women who were not employed at the time of the survey. This finding was comparable with the studies conducted in Southern Ethiopia and Uganda.[12] This might be due to the fact that paid employment meant a greater likelihood of having cash that can be used to prepare for birth and its complications.

Supporting mothers' emotional wellbeing during the perinatal period is now recognized to be as important as the traditional focus on the physical health of the mother and child. A study that focused on the key features of the transition to parenthood found that significant numbers of low risk parents experience psychological stress during this time, and that their concerns were much broader than the issues addressed by traditional ante-natal classes.[1] Respondents identified their mothers, husbands and sisters as people to depend on and listen to for good advice, help and loved. The findings of this study showed majority of respondents had support from husbands, mothers, mothers-in-law and fathers-in-law. Couples who were strongly united and romantic in their relationship before the pregnancy found it harder to adapt to parenthood than those whose relationships were already faltering.[1,2]

Unfortunately for some couples, their relationship does not always recover as around 14% of couples split up before the baby was born. Preparing parents for parenthood by addressing the emotional changes that take place during this period, and helping parents to address the problems that occur is therefore paramount. Even though most husband avail their support to these vulnerable wives during pregnancy few of them followed their partners for ANC services. This was ascertained in this study as majority of the women affirmed their husbands never followed them to antenatal clinic. In a study carried out in Uganda, 42.9% of expectant mothers reported that they were accompanied by their spouses to the ANC, 35% had their spouses help them with household chores during the antenatal period.[15]

Men generally do not accompany their wives for antenatal care and are not expected to be in the labour room during delivery. Pregnancy and childbirth continue to be regarded as exclusively women's affairs in most African countries. However, men are socially and economically dominant especially in northern Ghana. They exert a strong influence over their wives, determining the timing and conditions of sexual relations, family size, and access to health care. This situation makes men critical partners for the improvement of maternal health and reduction of maternal mortality. Special efforts should be made to emphasize men's shared responsibility and promote their active involvement in maternity care. Strategies for involving men include raising their awareness about emergency obstetric conditions, and engaging them in birth preparedness and complication readiness. This is based on the premise that increased awareness of men will enable their support for early spousal utilization of emergency obstetric services. Similarly, preparing for birth and being ready for its complications could reduce all three phases of delay and thereby positively impact birth outcomes. Studies on the participation of men in maternal care have been reported mostly from southern part of Nigeria Odimegwu and colleagues reported a high level of awareness and participation of men in maternity care in Osun state.[3] Likewise, Morhason-Bello and others reported that 86% of antenatal clients in University College Hospital, Ibadan, preferred their husbands as companions during labour while only 7% and 5% favoured their mothers and siblings respectively.

Community Support System consists of a process where the causes of maternal mortality and morbidity are identified through a death and disability review in the community. Then, this information is shared with the community through village meetings led by local volunteers. The community then identifies their role in preventing avoidable maternal death and promotes a zero tolerance to maternal deaths and violence against women. Lastly, the community forms a committee known as Community Support Group (CSG) which establishes linkages with the health system and local government.[5] This study identified a big gap between support persons in the community and pregnant women as 88.4% of the respondents affirmed that they received virtually no support from the Chief, Queen-mother and even the Assembly persons. With respect to community support fund for obstetric emergency, 91% of participants vehemently agreed there was no such thing in their communities for them to rely on in times of need. However, only 8.9% of the study populace indicated the availability of support fund in their localities. With regard to annual durbars to educate community members on obstetric risk factors through role play, 88.7% of the participants noted the unavailability of this medium of education in their communities whereas 11.3% agreed such durbars existed in their settings. This notwithstanding, an evaluation of community durbars in rural Uttar Pradesh and India found that role-play and

demonstration enhanced retention of knowledge and skills for recognition and intervention for maternal bleeding and new-born sepsis.[15] The program in the Oromia region of Ethiopia found that learning was retained and after three years 54% of women giving birth were exposed to the training.[16]

Another well evaluated example of a birth preparedness intervention is the Home Based Life Savings Skills (HBLSS) training program devised by the American College of Nurses and Midwives to increase access to basic life saving measures within the home and community and by decreasing delays in reaching referral facilities where life-threatening problems can be managed.[17] HBLSS takes into account the social context of childbirth, focusing on the pregnant woman, her family caregivers, and the home birth attendant as a team. The model has also been implemented in India, Ethiopia, Haiti and Liberia with numerous successes.

CONCLUSION

Supporting mothers' emotional wellbeing during the perinatal period is crucial however, most of the respondents affirmed that their husbands never followed them to antenatal clinic. Pregnancy and childbirth continue to be regarded as exclusively women's affairs in the Tamale Metropolis. However, men are socially and economically dominant especially in northern Ghana and exert a strong influence over their wives, determining the timing and conditions of sexual relations, family size and access to health care. This study also identified a big gap between support persons in the community and pregnant women as 88.4% of the respondents affirmed that they received virtually no emergency support from the community leaders such as Chief, Queen-mother and even the Assembly persons. Based on these findings, it is recommended that (i) Birth preparedness and complication readiness should be made an integral part of maternal and child health services in the state, to enable women to recognize danger signs and access a skilled caregiver in pregnancy; (ii) An emergency response system at the community level to provide emergency funds, transport, and blood donors must be put in place and made known to the public. It is believed that with the removal of delays in decision to seek care and timely access to skilled attendance, the prevailing high maternal/infant morbidity and mortality at Tamale can be reduced to acceptable limits.

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