

**ASSESSMNET OF IEC ACTIVITIES IN THE PREVENTION AND MANAGEMENT
OF OBSTETRIC FISTULA IN THE SAVELUGU-NANTON DISTRICT.**

BY

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DECLARATION

I declare that this dissertation is my original work, written under the supervision of Professor (Mrs) E.A Addy of the Department of Community Health, School of Medical Sciences, Kwame Nkrumah University of Science and Technology (KNUST). It has never been presented in part or whole to any other institution for any purpose.

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Praise be to Allah for bringing me this far. My sincere thanks go to Professor (Mrs.) E. A. Addy for spending her precious time to supervise this work.

I also wish to acknowledge the support my husband, Ibrahim Gariba, gave me during this work.



DEDICATION

I dedicate this work to my daughter, Latifatu Awentika Gariba, my beloved husband, Ibrahim Gariba and my parents, Alhaji Bashiru Futa and Hajia Amina Norga Futa

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Abstract

Obstetric fistula is a hole that is created between the vagina and bladder or between the vagina and rectum or both, caused by several days of obstructed labour. As a result, the victim is unable to control her flow of urine or faeces. The World Health Organization has estimated that at least 50,000 to 100,000 cases of obstetric fistula occur every year and that more than two million women with obstetric fistula remained untreated in developing countries.

In 2005, a project dubbed 'Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana' was launched as part of the global campaign to prevent and manage Obstetric Fistula. The project areas were the Northern, Upper East and Upper West Regions, where the condition is said to prevail.

One of the strategies of the campaign involved using IEC activities to create awareness and change behaviour of the communities with the aim of promoting good maternal health practices as a way of preventing the condition. But between the periods of January 2005 when the project was launched and in December 2007, the Tamale Teaching Hospital, which was the major referral point in the Northern region, had registered about 53 women with obstetric fistula. The Savelugu-Nanton district was the only district that had not reported any case.

This study was to help identify how the Information Education and Communication (IEC) activities were carried out in the Savelugu-Nanton district under the project and also to determine the prevalence of obstetric fistula in the district. A total of 250 respondents were interviewed in the district. The respondents were in three categories and their aggregate responses helped to arrive at the findings. They included (i) Community members; to ascertain their level of knowledge and attitude about maternal health in general and obstetric fistula in particular.

The second category of respondents were the Traditional Birth Attendants- (TBAs); to assess the type/s of IEC activities they use in maternal health in general and obstetric fistula in particular. TBAs play various roles in maternal health delivery in the district. The third category were the

formally trained health personnel who provided maternal and child health services in health institutions in the district. Their role was to help determine, among others, the availability of IEC activities in the prevention of obstetric fistula in the health facilities.

The study revealed that there were cases of obstetric fistula in the district but knowledge about obstetric fistula was low. Only 61 (29%) of the 210 community members interviewed said they had heard of obstetric fistula. The study attributed that to the absence of effective IEC activities in the prevention and management of obstetric fistula in the district. This was buttressed by the revelation that there were no IEC materials on obstetric fistula in all the five health facilities in the district. The TBAs, according to the study also lacked adequate skill on promoting maternal health education and fistula in particular.

The study further revealed that health service providers were the most trusted source of health information and the mass media, particularly; radio was the appropriate channel of information for the community members. The study therefore concluded that health service providers should be given adequate support to use the mass media (Radio, Television and Newspapers) to undertake IEC activities on maternal health and obstetric fistula in particular in the district. The study also identified group communication (community durbars, workshops, neighborhood meetings) as another convenient channel that could be explored to support the campaign on obstetric fistula in the district.

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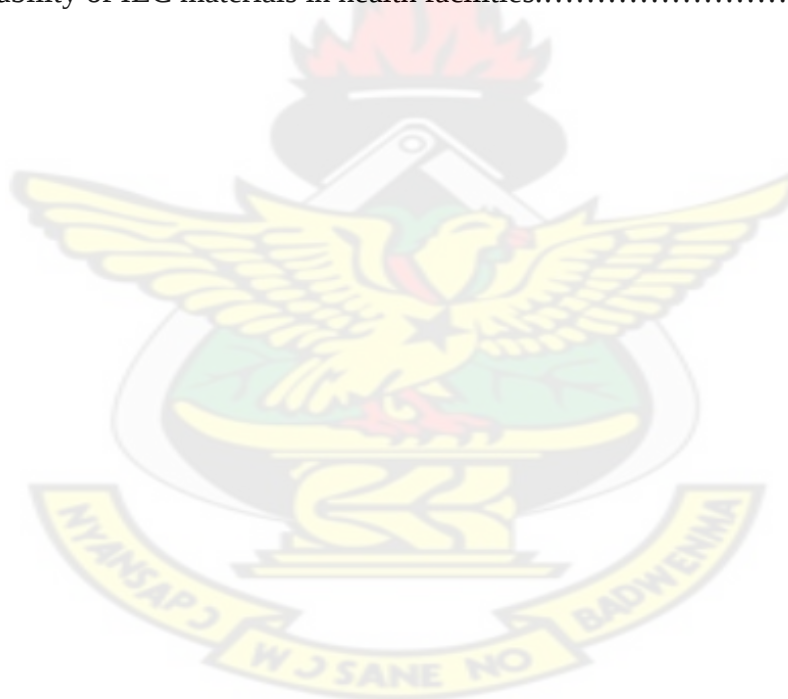
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CHAPTER ONE

INTRODUCTION

1.0. Background

Obstetric fistula is an injury that occurs during prolonged or obstructed labour, causing tissue damage to organs around the pelvis and resulting in incontinence of urine, faeces or both. The dead tissue eventually falls away, creating one or more holes that leak urine and/or faeces uncontrollably, (Iyengar & Iyengar, 2004, UNFPA, 2006b, cited in PPFA, 2006).

There are two types of obstetric fistula; Vesicovaginal fistula (VVF) which involves the damage of the tissue between the bladder and vagina and Rectovaginal fistula (RVF), which refers to damage between the rectum and vagina. Often, if the rectum sustains a fistula the bladder will also have been damaged and a woman will leak both urine and faeces, (UNFPA, 2004)

1.1 Causes and Contributory Factors of obstetric fistula

Obstetric fistula is caused by a number of factors but the vast majority of obstetric fistula cases are caused by obstructed labour (Arrowsmith et al 1996). According to Thaddeus and Maine (1994) obstetric fistula is caused by “obstructed labour and obstructed transportation”. They further articulated the ‘three concept of delay’ in the development of fistula: (i) Delay to seek health care, (ii) Delay in arriving at the health facility (iii) Delay in receiving health care once the woman arrives at the health facility. They also referred to these stages of delay as the “road to maternal death”

Howard W J et al (2005) have indicated that in event of delay, obstructed labor could result to obstetric fistula when the following occurs:

- When the fetus will not fit through the mother's pelvis (cephalo-pelvic disproportion)
- When the fetus is not positioned correctly for delivery (malpresentation)
- When uterine contractions are ineffective in delivery (Cephalo – pelvic disproportion)
- Abnormal lie and/or presentation of foetus, for example, face presentation.

Unattended obstructed labour could last for several days, up to six or seven days, although the foetus usually dies after two or three days. If the mother survives, prolonged obstructed labor usually ends with the death of the fetus, followed by fetal decomposition to the point that it can slide out. During the prolonged labour, the unrelenting pressure of the entrapped fetal head against the mother's pelvis could cut off the flow of blood to the soft tissues. The soft tissues of the pelvis are compressed between the descending baby's head and the mother's pelvic bone. This impedes blood supply to the tissues of organs surrounding the vagina, such as the bladder, vagina, and rectum. The lack of blood flow causes the tissues to die. The mother's injured pelvic tissue soon sloughs away, creating a hole between the mother's vagina and bladder (known as a vesicovaginal fistula), or between the vagina and rectum (causing a rectovaginal fistula) or both. The result is leaking of urine or faeces or both. (Latzko 1942); (Everett And Mattingly 1956); (Langkilde et al 1999)

Even though prolonged labour has been identified as the major cause of obstetric fistula, other factors account for the development of the condition. Thaddeus and Maine (1994) have revealed that the road to obstetric fistula begins when young girls grow up in nutritionally marginalized circumstances, are married around the age of menarche, become pregnant while adolescent and labour at home either alone or under the care of untrained traditional birth attendants for prolonged time and without adequate access to emergency obstetrical care.

There are also resulted cases of obstetric fistula due to injuries sustained during complicated gynecologic surgery performed under difficult circumstances. These are mostly women who arrive at the hospital already at the death door. (Yip and Lueng1998; Jozwik and Jozwik 2000; BillMeyer, Nygaard et al 2001)

In some parts of the world, harmful traditional practices are also responsible for obstetric fistula formation. For example, in northern Nigeria, a harmful traditional practice called *gishri-cutting* is responsible for obstetric fistula formation in 2-13% of the cases (Tahzib, 1983; Tahzib, 1985; Wall 1988; Ampofo, Otu et al 1990; Wall, Karshima et al 2004). *Gishri* in Hausa language is salt. And it is believed that an imbalance of salty or sweet foodstuff can cause a 'film' to grow over the woman's vagina, causing a variety of gynecological complaints, and when such diagnosis is considered, surgical treatment is made by a local midwife or a barber with a sharp knife or razor inserted into the vagina and series of random cuts are made to ease the postulated obstruction and open the way for the baby to come out. Series of infection, life threatening hemorrhage and obstetric fistula frequently results from this practice. (Wall, 1988)

Another traditional practice that has been reported to produce obstetric fistula is the insertion of caustic substances into the vagina either as part of traditional herbal remedy for gynecologic condition or as part of traditional puerperal practices to help the vagina return to its nulliparous state. (Lawson, 1969.)

Poor women are mostly the victims of obstetric fistula and the poorer the woman the more likelihood she would die or suffer catastrophic complications of fistula. This is because poor women do not have access to adequate, prompt access to emergency obstetric care (UNFPA, 2005). Unfortunately, the vast majority of obstetric fistula victims are young girls who developed

their obstetric fistula at first pregnancy. In a series of over 9000 obstetric fistula victims in Ethiopia, the average patient age was 19 years (Arrowsmith, Hamlin et al 1996)

1.2. Social Consequences of obstetric fistula

Accessible information revealed that most obstetric fistula victims were often abandoned or ignored by their husbands and families, and were usually ostracized by their communities because of their inability to control the flow of urine or faeces thus, pushing them into hiding. Fatmata from Sierra Leone testified that;

Everyone deserted me - my husband deserted me, my friends deserted me. I know I will never have a husband, I will never have a boyfriend, I will never have a baby. So I just live by myself. (Robert P, 2004)

Mustafa Lawal, one of the trainee surgeons at the “Fistula Fortnight”, a pilot project in Nigeria, also remarked that “If you see (the patients) when they arrive, they feel like outcasts. There is no hope...” (WHO, 2005).

Because of the nature of their injury, obstetric fistula victims cannot maintain normal hygiene, no matter how hard they try and this has an enormous impact on all aspects of their lives. The social consequences of obstetric fistula victims due to their condition are very terrible. The offensive odour that accompanies total urinary and /or fecal incontinence usually curtails even the minimum social interaction.

Howard W J et al (2005) cited a personal testimony of Professor Abbo Hassan Abbo, Professor of Obstetric and Gynecology at the University Of Khartoum, of how a group of Somali women suffering from fistula, who in despair chained themselves together and jumped off the dock in

Mogadishu in a mass suicide because they could not face the exclusion and frustration brought unto them by their relatives and the society at large.

1.3. Prevalence of Obstetric Fistula World wide

Arrowsmith et al (1996) have indicated that scientific data on the prevalence of obstetric fistula is limited due to historical circumstance. Prior to the 19th century, obstetric fistula was generally regarded as an incurable sickness. It was only after the work of Marion Smith, an American surgeon, and his colleagues that surgical cure for the condition could be undertaken (Wall, 2002) and, by the second half of the 20th century obstetric fistula began to develop into a more medical specialty resulting in a decline of the condition and eventually disappeared from the clinical and social experience of Western Europe. Due to this historical circumstance, there has never been a comprehensive world wide survey designed to determine precisely where obstetric fistulas occur. As a result, questions regarding the incidence and prevalence of obstetric fistula have never been included on the standardized Demographic Health Surveys (DHS) that were carried out to evaluate population characteristics and overall health status in developing countries. (Arrowsmith et al 2005).

Secondly, no population based surveys have been carried out in countries where there appears to be high incidence and high prevalence of obstetric fistula. This has been compounded because the urinary and fecal incontinence that accompanies obstetric fistula makes the women social outcasts, pushing them to the margins of society where they are ignored and further obscuring the true extent of the problem. (Arrowsmith et al 2005).

A needs assessment of nine African countries, Ghana inclusive, carried out by EndengerHealth, a non for profit organisation, for The United Nation's Population Fund (UNFPA) as part of the

global Campaign to End Fistula, also using anecdotal evidence, suggested that the obstetric fistula problem is widespread in the Sub Sahara Africa (UNFPA, 2003).

The World Health Organization, also using anecdotal evidence and case studies, estimated that more than two million women remained untreated in developing countries and that at least 50,000 to 100,000 new cases occurred each year. (Arrowsmith, 2005).

1.4. Prevalence of Obstetric Fistula in Ghana

Data on obstetric fistula in Ghana is scattered and virtually unavailable. Except a study done by Danso et al (1996) that indicated that 150 out of 157,449 deliveries resulted in fistulae due to Obstetric complications. Out of that figure, 73.8 % occurred because of prolonged obstructed labour.

A scan through valuable documents such as the Ghana Demographic and Health Surveys (GDHS) of 1998 to 2003, have no information on obstetric fistula in the country and the annual report and report format of the Reproductive and Child Health unit of the Ghana Health Service, until 2006, also indicated no information on obstetric fistula nor was obstetric fistula an indicator of maternal health. The state of data and other activities on obstetric fistula in the Northern region and the area of study, the Savelugu Nanton District, are not different from the above.

However, Ghana was part of the nine African countries that Engender Health conducted the obstetric fistula Needs Assessment, which revealed that there was high incidence of obstetric fistula in the country, but the exact prevalence rate was not certain. According to the study, obstetric fistula cases could be found in any part of the country but the majority of cases were found in the three northern regions; Upper East, Upper West and The Northern Regions.

The obstetric fistula Needs Assessment by Engender Health also raised certain issues and challenges in relation to obstetric fistula. They included, among others, the following;

That cultural beliefs and traditional practices prevalent in Ghana kept women from seeking care at a facility. Some also believed that if labour was prolonged, it meant the woman in distress had committed adultery and must confess before her baby is delivered. The assessment also revealed that delays in seeking care also prevented many women from receiving services in a timely manner. In most rural communities, a woman must be granted permission by her husband or close relatives of the husband before going to a hospital, potentially postponing the decision even further. Some clients also felt the need to consult a soothsayer to determine the cause of prolonged delivery, which further puts off the decision to seek care. In addition, herbs sometimes used to hasten delivery were uterotonic and led to uterine rupture.

Again, the assessment found out that the difficulties of transportation complicated the desire to seek help at a facility. In most rural areas of the country, the rainy season posed significant transportation barriers, making it necessary for women to be carried on a bicycle or in a canoe in order to get to a hospital. In some cases, a messenger rode a bicycle to the hospital to ask for the services of an ambulance.

The obstetric fistula needs assessment again, revealed that there was a general lack of awareness of the condition among the Ghanaian public and that not much mention had been made of obstetric fistula because it was not a reportable condition. Proof of this fact is that the annual report and report format of the Reproductive and Child Health unit of the Ghana Health Service

until 2006 indicated no information on obstetric fistula nor was obstetric fistula an indicator of maternal health.

Finally, the assessment also noted that, Health Education talks given by the Ghana Health Service, did not mention obstetric fistula as a major possible complication of delivery. The state of data and other activities on obstetric fistula in the Northern region and the area of study, the Savelugu Nanton District are not different from the above.

1.5. Global Campaign to End Fistula

To highlight the enormity of the disease, the UNFPA in 2003, launched a global campaign to end Obstetric fistula. The campaign covered some 30 countries in Sub – Saharan Africa (SSA) (Ghana inclusive), Asia and the Arab regions to be implemented in partnership with governments, NGOs, Foundations, Corporations and Individuals. The aim of the campaign was to make obstetric fistula as rare in the developing world as it was in the industrialised world. Prevention, Treatment and Reintegration of repaired women into their communities were the strategic intervention points of the campaign. (UNFPA, 2004).

As part of the commitment of African countries to the global campaign, a meeting was held in Johannesburg from 23-26 October 2005 under the theme; ‘Making Motherhood Safer by Addressing Obstetric Fistula’. The meeting brought together over 100 senior governments officials from ministries of health, women’s affairs, education, finance, international agencies and Non-Governmental Organizations (NGOs) to urgently address obstetric fistula and maternal health.

The Meeting made some recommendations for urgent and specific actions to be taken by Governments together with civil society and partners. Notable among the recommendations was the call for advocacy for increased resource allocation for reproductive health, awareness creation and community mobilization (UNFPA, 2004)

1.6. Campaign to End Fistula in Ghana

In Ghana, Pathfinder International, a non – governmental organisation that works in the area of reproductive health implemented the campaign dubbed ‘Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana’ with funding from the UNFPA, and the areas of focus were the Northern, Upper East and Upper West Regions. As part of efforts to increase awareness and solicit the support of the various stakeholders in the intervention communities, campaigns on obstetric fistula, using various mediums and strategies, were carried out in the three northern regions. Activities undertaken included the following:

- (i). Community durbars on fistula prevention and management.
- (ii). Sensitisation programmes with a number of religious organisations.
- (iii). Education of Civil Society Organisations on obstetric fistula.
- (vi). Radio Programmes on fistula in major languages in the three northern regions.
- (vii). Workshop for health personnel in all the districts.
- (viii) Seminar for journalists to improve on their knowledge and reportage of the condition.

All these confirmed that Information, Education and Communication (IE&C) is an essential tool for a successful campaign.

1.7. Definition of Information Communication and Education (IEC)

IEC is a general acronym for the word Information Education and Communication. The concept of IEC in health education and promotion is based on the premise that effective dissemination of information is crucial in the promotion of health in all dimensions.

IEC is basically a process of working with individuals, communities and societies to develop communication strategies to promote positive behaviors, which are appropriate to their settings. (UNESCO Bangkok, 2005)

The concept of Information Communication and Education (IEC) basically seeks to effect behaviour change or reinforcement as well as empower people vis-à-vis their health actions, and to garner social and other relevant support for those actions. IEC initiatives ultimately targets prevention of diseases and the promotion of health. Its approach is grounded in the use of theories and other fields of study as has been clearly indicated in the following definitions.

‘IEC can be defined as an approach which attempts to change or reinforce a set of behaviours in a “target audience” regarding a specific problem in a predefined period of time. It is multidisciplinary and client-centred in its approach, drawing from the fields of diffusion theory, social marketing, behaviour analysis, anthropology, and instructive design. IEC strategies involve planning, implementation, monitoring and evaluation.

When carefully carried out, health communication strategies help to foster positive health practices individually and institutionally, and can contribute to sustainable change toward healthy behaviour’. (WHO, 2001).

In another vein, IEC has been described as a general term for communication activities to promote a variety of issues including health, sanitation and child rights. It is an approach based on the need to make all concerned to become more effective communicators. The promotion of effective IEC involves the identification of a mix of channels of communication such as the mass media, print media and traditional forms of entertainment. (UNICEF 2002)

Again, Rogers and Storey (1987) characterised IEC as a set of organized communication activities designed and implemented to achieve specific objectives among an intended audience within a specific, limited period of time. Comprehensive campaigns generally use multiple channels to diffuse the message(s) in an effort to reach one or more definable sub-groups of the population. However, in some cases the IEC "program" may consist of a single activity using only one channel, although this approach is increasingly rare in view of the recognized effectiveness of multi-media intervention. They further indicated that, a substantial portion of IEC for family planning and reproductive health is aimed at promoting behavioral change among clients and at the population level (e.g., increased contraceptive use, increased prevalence of breastfeeding).

Bertrand, Janet and Kincaid, Lawrence (1996) have grouped IEC activities under the following;

MASS MEDIA; Radio/TV Newspaper/Magazine, Cinema/Video, Billboards/Posters, Pamphlets/Books Flip Charts and Folk

GROUP; network, workshops, colloquium, seminars, community durbars,

INDIVIDUAL: counseling, peer education

1.8. Problem Statement.

In 2005, Ghana launched its response to the Global campaign to end the problem of obstetric fistula under a Project titled ‘Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana’. The campaign focused on the Upper East, Upper West and the Northern regions where the prevalence of the condition is believed to be quite high. The project adopted awareness creation as one of the three main approaches towards addressing the problem. Since the campaign officially began in the three northern regions, several cases (53) have been reported from the 17 out of the 18 districts in the northern region till January 2007. The only district that had not reported any case was the Savelugu/Nanton district (VVF Register, Tamale Teaching Hospital, January 2007).

Curiously enough, skilled attendance (delivery) which is crucial in the prevention of obstetric fistula remains low (40%) at the Savelugu/Nanton district. The district recorded a total of 3197 births at both health institutions and by Trained TBAs in 2005. The 2005 annual report of the district also indicated that delays in the 1st and 2nd stages of labour as well as the poor skills of midwives in plotting and interpreting the partograph to prevent prolonged labour contributed to the still births recorded by the district. (GHS/DHMT Report 2005)

It is assumed that a number of factors accounted for why no obstetric fistula case was recorded from the district. These could be attributed to the following ;

- Ignorance of the communities about obstetric fistula due to lack of adequate information
- The health delivery systems (clinics, health centres etc) in the district had no IEC materials on fistula
- Health service providers in the district were not well informed about fistula.

- The communities did not see obstetric fistula as curable, and therefore did not encourage victims to seek treatment at the health facilities.
- Fistula victims were not comfortable exposing their ailment to the communities for fear of discrimination.
- Cultural and religious beliefs about obstetric fistula prevented victims from making their ailment public.

Various studies quoted in this work show that all the above stated factors could have been managed with IEC, considering the fact that most public health programmes have used various IEC activities to promote sound health programmes, including reproductive health. The study therefore, tried to find out how IEC activities on obstetric fistula were managed in the Savelugu/Nanton district.

Thus, is it the question of confirming the study by Wall L et al (2005) that the non availability of adequate information/education on obstetric fistula was one major challenge facing the management of obstetric fistula world wide?

This has also been confirmed by the UNFPA that lack of information and awareness about the obstetric fistula by family and community members generated discrimination and negative behaviour towards victims of obstetric fistula, as a result of which most of them decided to hide their ailment and suffer in silence. (UNFPA, 2005).

1.9. Principal Objectives

The principal objective of this study was to find out how IEC activities were being carried out in the prevention and management of obstetric fistula in the Savelugu Nanton District. And to do that, a number of specific objectives were considered amongst three stakeholders, whose aggregate responses were relevant to the study. These groups were; (i) Community Members, (ii) Traditional Birth Attendants (TBAs) and (iii) Health Service Providers. And the specific objectives were:

(1) For the Community Members,

- (i). To evaluate the attitude of the communities on maternal health.
- (ii). To assess the level of Knowledge of the community members on fistula.
- (iii). To determine the prevalence of obstetric fistula among community members.
- (iv). To assess the attitude of the community members on obstetric fistula victims.
- (v) To evaluate the peoples attitude towards information management

(2) Traditional Birth Attendants

- (i). To evaluate the level of contribution of TBAs in the promotion of maternal health.
- (ii). Assess the type of IEC activities the TBAs use in maternal health.
- (iii). Appraise the knowledge of the TBAs on fistula.
- (iv). To Evaluate the management of IEC activities by TBAs in the Prevention and Management of Obstetric Fistula

(3) Health Service Providers

- (i). To determine the extent of maternal health education by the health service providers
- (ii). To assess the level of Knowledge Attitude and Practice (KAP), of service providers on fistula.
- (iii). To determine the availability of IEC activities in the prevention and management of obstetric fistula in the health facilities in the area.

- (vi). To determine how IEC activities are used in the prevention and management of obstetric fistula in the health facilities in the area.

1.10. Rationale of the Study

In spite of available evidence that obstetric fistula is preventable and has a high success rate of repair, evidence of its eradication in North America and Europe, many women continue to suffer from the condition. It is also clear that the major factors that make women prone to developing the condition are avoidable yet; many women and men alike are ignorant about them. It therefore behoves on the health delivery services to make efforts to provide relevant health information, education and communication activities to address these issues particularly those that promote maternal health and access to Emergency Obstetric Care (EOC). The crux of the issue is that, understanding of obstetric fistula continues to remain a bizarre phenomenon amongst the general public.

The findings of this study would be used to improve and strengthen the packaging and delivery of programmes, activities and messages on obstetric fistula to sharpen and enhance the level of awareness of Obstetric Fistula. In addition to that, it would help to foster behaviour change regarding the condition. The findings would also be used to develop strategies that would encourage women with obstetric fistula and their families to access obstetric fistula repair services, with the ultimate aim of preventing the occurrence of the condition.

LITERATURE REVIEW

2.0. Background

The purpose of this chapter was to provide an interpretation of the relevant literature and to review the effectiveness of IEC in maternal health in general and obstetric fistula in particular. It thus, discussed empirical documentations on Information, Education and Communication (IEC) activities in the prevention and management of Fistula.

However, it is worth mentioning that, not much work has been done in the area of study and most of the literatures that were reviewed were hard copies as well as online seminar or conference reports on Fistula.

This phenomenon can be attributed to historical circumstances. Western medical literature on obstetric fistula was uncritical by current scientific criteria because most of them were based on anecdotes, case studies and personal experiences reported by dedicated surgeons. Therefore, by the close of the 20th century there was only one prospective, randomized clinical trial in clinical literature on obstetric fistula in development world. (Tomlinson and Thornton 1998) and one comparative study of surgical techniques in the repair of obstetric fistula (Rangnekar, Imdad et al 2000)

This thus, limited any serious discussion on the literature on how IEC has been used in the prevention and management of fistula. That notwithstanding, this chapter went a further mile to examine the literature from a broader perspective i.e. how IEC had been used in the management

of health activities, and more specific, reproductive health. Again, the chapter also provided some challenges to the use of IEC activities in health and reproductive health.

2.1. Related Studies

According to Israel R et al, (1989) IEC programmes could contribute in many ways to increasing knowledge, changing attitudes, and enabling action and mutuality which are important goals for women's well-being. Again, it could increase awareness of women's health problems among policy-makers, foster physical and social environments that are conducive to good reproductive health, promote appropriate action in the home and community, and discourage unsafe practices that harm women's health (e.g., delays in seeking care during pregnancy, and female genital mutilation).

Print materials, television, radio, interpersonal communication and counseling have been identified as powerful IEC tools that could be used to change adolescent behaviour and also keep youth focused on critical issues. According to (Malia-Boggs *et al*, 2006). Evaluators in 2 provinces of Cambodia found that:

"Mass media combined with the IPC [interpersonal communication] of partners' volunteers, village shopkeepers, and others have resulted in high awareness, improved knowledge, and use of the diarrhea treatment kit (DTK...Most frequently cited communication channels from which people learn about DTK are the TV spot, radio, village shopkeepers, and NGO volunteers and comedy groups. Partner NGOs developed IEC materials (banners, pamphlets with graphic demonstrations on the use of the product) that are used by shop owners for promotion and education, and by trained provincial- and district-level public health staff, health center volunteers (members of the [village health support group, or] VHSG), village shopkeepers, and community-based care groups in their demonstrations, health days, and health education sessions. Improved health practices are also promoted through home visits and edutainment sessions..." (<http://www.comminit.com/en/node/269345>)

In Mauritius, IEC programmes on maternal health and child health were introduced by the government, and that increased the contraceptive prevalence rate of married women from 24.3% in 1972 to 57.4% in 1984. Deliveries by Traditional Birth Attendants dropped from 45% to 20% from 1972 to 1984 respectively, and over 85% of babies were immunized yearly. The maternal mortality rates declined by 70.6% and prenatal mortality rate also declined by 53.7% from 1972 to 1984. (Radhakeesoon, 1987)

In Kingston, Jamaica *Ashe Caribbean*,. *Ashe* began as performing arts group providing sexual health information in a lively, realistic, and entertaining manner to youth in schools as well as in youth and community centers in 1992. This was in response to the increasing number of people living with, or dying from HIV/AIDS. The first production, *vibes in a world of sexuality*, was a humorous musical revue giving positive, accurate information to youth about self-knowledge, respect, empowerment, values, trust, and communication with parents and teachers as well as the integral role these attributes play in sexual decision making. From November 1992 to May 1993, more than 16,000 youth, teachers, parents, and opinion leaders in Jamaica were exposed to *Ashe's* messages. Over 6,000 condoms were distributed at community performances. Surveys later conducted before and after 20 *Ashe* performances indicated that there was 20 percent increase in knowledge among audience members.

The Planned Parenthood Association of Ghana (PPAG) launched a national marketing communications campaign to reposition the corporate image of the association as a youth focused sexual and reproductive health service provider. A corporate slogan 'sexual health for quality life' and jingle were developed. PPAG's youth programme was branded young and wise and promoted. Public response was overwhelming. More than 5,000 calls were made to the

newly established telephone helpline and clients also increased at the service delivery points. Approximately 800,000 youth were reached with 280,000 being served at clinical points. (PPAG, 2007)

As part of effort to combat high levels of unsafe abortion in Ghana, the Ghana Health Service developed a strategic plan in august, 2003, which included among others the development of appropriate information, education and communication (IEC) materials. (Odoi-Agyarko, 2003).

Cameroon was one of the last official pronatalist countries in Africa, where much of the population remained unaware of modern contraceptives until the early 1990's .A knowledge, attitudes and practices (KAP) study, which was conducted in the north province in 1989 showed that under 30% of those surveyed were aware of family planning, only slightly higher than the 28% recorded in the national 1978 Cameroon fertility survey. IEC activities were then developed based on the national strategy. This was done by providing adequate and correct method-specific information, reinforcing the positive attitudes and images of family planning users, and encouraging intra-couple communication about family planning and by 1991; awareness among the urban respondents was above 85%. (JHU/PCS, 1995)

In a similar vein, a study on how community-level communication could engage the most vulnerable people - such as children under 5 years of age and women in the economically poorest communities in Africa - in strategies to prevent and treat malaria concluded that good IEC activities were culturally appropriate, especially, if it took cognizance of appropriate local channels of communication (both interpersonal and media). For example, incorporating the wisdom of traditional healers into local project activities could help to prevent limited IEC

impact. The Study also stressed that the choice of terminology was also critical in developing effective health communication interventions that relate to local people. (Alison, 1999)

Samuel E, et al (2007) stressed the importance of IEC when they stated that

“Pregnant women who do not have adequate and appropriate information about pregnancy and child birth would be ill equipped to make choices that will contribute to their own well being. Delivering carefully developed messages through the mass media, especially the radio is an attractive and feasible strategy that has proven successfully with HIV/AIDS in the country”.

Aside of reproductive health programmes, IEC activities have been carried in other endeavors, according to Anupam-Srivastava (2006), Bahraich, India, was polio-free from the 2002 following the incorporation of IEC material in the immunisation drive and social mobilisation support until 2006.

In the water supply and sanitation sector, a review was carried out in 2002 to identify publications that describe IEC interventions to promote the health and well-being of people of Vietnam. A total of 44 publications, consultants’ reports, conference presentations, evaluations, and anecdotal testimonies were used for the evaluation which proved the effectiveness of IEC in the Kinh population and in Ethnic Minority Groups (EMGs) in mountainous regions of Vietnam. . (UNICEF, 2002).

2.2. Criticism of IEC

On the other hand, IEC activities have come under some criticisms. In 1998, the Office of Oversight and Evaluation (OOE) under the UNPFA, conducted a review to assess progress in the implementation of the reproductive health approach of the 1994 International Conference on Population and Development (ICPD) Programme of Action, and to propose modalities for improving the effectiveness, efficiency and the strategic direction of reproductive health programmes. The review was based on a sample of six countries: Burkina Faso, Mexico, Morocco, Nepal, Philippines and Uganda, which represented a range of levels of development and experiences in implementing the ICPD programme of action.

One of the principal area that was studied was information, education, and communication (IEC) activities. And it was the most criticised of the entire reproductive health programme. According to the review, too often IEC activities were independent, isolated and carried out as ends in themselves. The review therefore suggested a link between IEC to service delivery, which have behaviour change as an objective. Even though, the review also found out that the various national mass media and IEC campaigns have had some success in increasing awareness of reproductive health components and services, but that appeared superficial.(UNFPA, 1999)

2.3. Contextual and Theoretical Framework

This study ‘Assessment of IEC Activities in the Prevention and Management of Obstetric Fistula in the Savelugu-Nanton District’ is part of health communication. According to the National Cancer Institute (NCI), USA, health communication could contribute to all aspects of disease prevention and health promotion. The institute further indicated that effective health

communication could help raise awareness of health risks, provide the motivation and skills needed to reduce these risks and also help to find solutions as well as affect or reinforce attitudes. (NCI, 1989).

The National Cancer Institute further argued that health communication could also increase demand for appropriate health services and decrease demand for inappropriate health services. And that health communication could make available information to assist in making complex choices, such as selecting health plans, care providers, and treatments.

Further more, health communication could be used to influence the public agenda, advocate for policies and programs, promote positive changes in the socioeconomic and physical environments, improve the delivery of public health and health care services, and encourage social norms that would benefit health and quality of life.

Many theories in health education and health promotion have sought for answers to the fundamental question of why people behaved the way they do. More specifically, theories are used to promote understanding, predict how and why people change their unhealthy behaviors to healthier ones.

Thus, health communication and for that matter, IEC in the prevention and management of obstetric fistula is grounded on certain health and behavior change models. Notable are;

- Health Belief Model - by Rosenstock (1966), is a model that attempts to explain and predict health behaviours by focusing on the attitudes and beliefs of individuals, particularly, with respect to their perceived susceptibility, seriousness and severity of disease, benefits of

service, and barriers to accessing health care. The model was developed in response to the failure of a free tuberculosis (TB) health screening program. Since then, the HBM has been adapted to explore a variety of long- and short-term health behaviors, including sexual risk behaviors and the transmission of HIV/AIDS.

- Theory of Reasoned Action (TRA) - developed by Martin Fishbein and Icek Ajzen (1975, 1980). This theory specifies that adoption of behaviour is a function of intent, which is determined by a person's attitude (beliefs and expected values) towards performing the behaviour and by perceived social norms. TRA is derived from previous research that started out as the theory of attitude, which led to the study of attitude and behavior. The theory of reasoned action has "received considerable and, for the most part, justifiable attention within public behavior. Hale et al. (2003) said the TRA has been tested in numerous studies across many areas.

2.4. Importance of This Work

Interestingly, obstetric fistula is most common in poor communities in sub-Saharan Africa; however, due to lack of awareness it has been shrouded in the secrecy and shame thereby, making prevention and management a big challenge. It is against this background that in 2003, UNFPA and its partners launched the first-ever global Campaign to End Fistula. Three Prong approach was adopted

- Prevention- Dubbed "Preventing the Harm" key to ending obstetric Fistula. The same interventions in preventing obstetric fistula can save millions of women who die from complications of pregnancy and child birth

- Treatment - Dubbed ‘Healing the Wounds’ obstetric fistula is treatable, Needs committed society, surgeons and support staff. Most women are unaware of the availability of treatment
- Rehabilitation and Reintegration-Dubbed “Renewing Hope”, aimed at bringing to the attention of policy-makers and communities about the incidence of obstetric fistula for policy support as well as community appreciation of the ailment, with the hope of reducing the stigma associated with it, and helping women who have undergone treatment to return to full and productive lives.

It is in consequent of the above that in Ghana a project dubbed ‘Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana’ was officially launched in November 2006. The campaign covered the three Northern regions of Upper East, Upper West, and the Northern Region, which were considered as the most endemic areas. The campaign took cognizance of the need for IEC activities to manage the problem by adopting the following activities.

- Public education through the media.
- Integrating discussions on obstetric fistula in routine clinical/PH activities
- Case identification /search, registration and repair.

Thus, the relevance of this work ‘Assessment of IEC Activities in the Prevention and Management of Obstetric Fistula in the Savelugu-Nanton District’ is based in the context that IEC activities can be used to enhance the level of awareness of obstetric fistula as well as foster behaviour change regarding the condition, and encourage women with obstetric fistula and their families to access obstetric fistula repair services with the ultimate aim of effectively managing existing cases as well as preventing the occurrence of the condition.

CHAPTER THREE

METHODOLOGY

3.0. Background

This chapter describes the methodology employed in this study. In this chapter, the profile of the study area, the sampling frame, sampling techniques, data collection techniques, and data analysis are all explained.

The study sought to assess how IEC activities were managed in relation to the prevention and management of obstetric fistula in the Savelugu/Nanton district of the Northern Region. Consequently, a survey was conducted to gather the data. This technique was adopted because it was efficient and also allowed for the efficient collection of information with relative ease from different people. Besides, the methodology was less expensive because the administration of the questionnaire was simple, with little support for the respondents, and useful in describing the characteristics of the respondents. Again, the technique, using questionnaire, enhanced standardization and that made measurement more precise and high reliability easy to obtain by presenting all subjects with a standardized stimulus, thereby eliminating observer subjectivity.

3.1 Profile of Study Area

The Savelugu/Nanton district is one of the districts carved out of the West Dagomba District in the Northern region in 1988. The district is about 2,200 sq.km (Population and Housing Census 2000) and shares boundaries with the Tamale metropolis to the South, Gushegu/Karaga district to the east, West Mamprusi to the north, and the Tolon/Kumbungu district to the west.

The population of the district stands at 89,968 (Population and Housing Census 2000) and is mostly rural. There are 136 communities in the District with a population density of 41 square kilometres (Population and Housing Census 2000). The Dagomba ethnic group predominantly inhabits the area with a few other tribes from other parts of the country who are mostly working in government departments.

The Savelugu – Nanton District Polyclinic is the main referral point for health care in the district. It is supported by Health centers at Diare and Pong Tamale. At the bottom of the health delivery tier of the district is a network of about sixty (60) outreach centers, one operational CHPS zone, trained Traditional Birth Attendants, Village Health Workers and Guinea Worm Volunteers. Only 54% of the population of the district is served by the district's health delivery system. (Population and Housing Census 2000).

About 1434 as against a target of 1300 women were delivered by a skilled attendant in 2005. In spite of this achievement, 4.5% of deaths that occurred in the district in the same year were related to pregnancy, delivery and the puerperium. The District's 2005 annual report shows that maternal health care in the district had antenatal care attendance being high with coverage of 119.6% as against 168.3% in 2004. But skilled attendance (delivery) which is crucial in the prevention of obstetric fistula remained low at 40%. The district recorded a total of 3197 births at both health institutions and by Trained TBAs in 2005. The 2005 annual report of the district also indicated that delays in the 1st and 2nd stages of labour as well as the poor skills of midwives in plotting and interpreting the partograph to prevent prolonged labour contributed to the still births recorded by the district.

3.2. Sampling Frame

A sample frame is the list of people from which a sample is drawn (sallant and dillman, 1994). The total population of Savelugu /Nanton is 89,968, disaggregated by sex as 44,700 males and 45,268 females (Population and Housing Census 2000). There are 136 communities in the District with a population density of 41 square kilometer. For the purpose of this study, three categories of people were sampled, using two different sampling techniques. And this was due to the different information they were expected to offer for the generality of the study. They included the following

(i) Members of the Community: This category comprised the ordinary members of the community, aged 15 and above.

(ii) Medical Health Providers: These are group of people who are formally trained as health personnel and are working in health institutions by providing Maternal Health Services within the district. They are all staff of the Ghana Health Service. They include the Health Midwives and Community Health Nurses who are working at the various subs district health facilities.

(iii) Traditional Birth Attendants; These are women in the community, mostly illiterates, who have not had any formal education or training in midwifery but provide such services to their communities based on their experience and age.

3.3. Sample Size

A total of 250 eligible people, comprising the three categories of respondents were interviewed.

And the break down is as follows:

Community members- 210

Traditional birth attendants-30

Medical Health Providers-10.

3.4. Sampling Procedure

Two different sampling processes, probability and non-probability were used in the sampling of the respondents.

For the community members, probability sampling was used. The sample size was calculated on the principles of the 30 by 7 cluster sampling. The 30 by 7-cluster sampling technique was adopted by the World Health Organisation (WHO) in 1978. According to the EPI/ WHO, the 30 by 7 cluster design is best suited for a population greater than 30,000, which is applicable in this situation. The EPI/WHO describes a 'cluster' as a randomly selected group, which contains at least 7 of the study population. The study population per cluster could be more than the minimum 7.

A coverage survey contains 30 clusters and meets the following standards and reliability:

- A level of accuracy of within plus or minus 10% points of the true proportion.
- A confidence level of 95%.

The basic stages involved in the design are:

- Selection of Clusters
- Selection of Sampling Units.

The table below shows the steps involved in the two stages in the cluster 30 by 7 Sampling

Selection of Clusters	Selection of Sampling Units
Identify all communities within the study area	The selection of the first household (respondent) is done randomly through a variety of methods.
List all communities, their populations and cumulative populations	
Calculate sampling interval = Total Population /30clusters	
Select first cluster – Select a random number < to the sampling interval. Same number of digits. Cluster 1 is the first community with cumulative population equal to or more than the random number	
Select second cluster – Sampling interval + random number. The first community with cumulative population equal to or more than the figure is selected	
Select third cluster – Sampling interval + number that identified previous cluster. This is repeated until all 30 clusters are selected.	

Selection of Clusters: For the purpose of this study, a 'cluster' is a community, which contains the study population. Simple Random Sampling was used in the selection of eligible respondents from the community. A pen or bottle was span at the center of each selected community / village to choose the first house.

The Thirty (30) Traditional Birth Attendants were purposively selected from each of the 30 selected clusters.ie one TBA was each selected from a cluster. Purposive sampling was used here because TBAs are relevant to the study and any probability study, including the 30 by 7 cluster sampling may not include sufficient number of them or any at all.

Again, purposive sampling was used in the selection of the ten (10) professionally trained health workers who were on duty in each of the five health facility (five sub districts) in the district. This was because the common denominator for selection was that the respondent should be a

professionally trained health personnel working in a health facility in the district and was willing to be interviewed. And again, any probability sampling process, including the 30 by 7 cluster sampling may not include sufficient number of them or any at all. Two of such health personnel were picked from each of the five health facilities from each of the five sub-districts.

3.4. Research Instrument

Three different questionnaires were used in this study for each of the sampled groups, because of the various information that was required from each of them. Thus, the Community members, traditional birth attendants and trained health worker each had different sets of questionnaires. All the questionnaires contained both closed and opened ended questions. The questionnaires were written in English and translated into Dagbani for respondents who could not read English. The first part of the questionnaire sought to identify the demographic background of the respondents. Then followed by the subject matters. Owing to the low literacy level of most of respondents from the communities, the questionnaires were administered by the volunteers on the spot in Dagbani for those who could not speak English, and for the literate respondents they were allowed to answer the questionnaires in English.

Four Field enumerators and one supervisor who are fluent in both Dagbani and English were recruited and trained to administer the questionnaires.

3.5. Data Analysis

The data that was gathered from the field was analysed, using Epi info, a computer soft wear, \

CHAPTER FOUR

FINDINGS

4.0. Background

As indicated in earlier chapters, this study was aimed at identifying how IEC activities were used in the prevention and management of fistula in the Savelugu/Nanton District. The aggregate responds of the three categories of respondents helped to come out with the answers. They included the following (i) The people of the communities in the Savelugu-Nanton district, (ii) Health Service Providers in the district and (iii) the Traditional Birth Attendants (TBAs) in the area.

4.1 Demographic Data of Respondents from the Communities

A total of 250 respondents from 30 communities were interviewed, the youngest respondent was 17 yrs while the oldest was 70, but the bulk of the respondents 69% fell within the active age brackets of 25-50 years. About 160 (76.2%) of the respondents cannot read nor write. On their marital status, 141 (67.1%) said they were married, 24 (11.4 %) indicated that they were not married and the rest confirmed that they were either co-habiting, divorced, separated or widowed. Majority of the respondents 250 (85.7 %) are engaged in the informal sector, more specifically, the agriculture sector. This shows that the data is dealing with non literate respondents that are rural and less sophisticated and, therefore, their perception about issues would naturally fall within their community/ immediate social and cultural environment.

4.2. Evaluating the Attitude of the Communities on Maternal Health.

Table 1 shows opinion of 142 (67.6 %) of the 210 people interviewed that the woman cannot independently determine where to deliver, in a follow up question on why the respondents

Table1: Right of the Woman to Independently Determine Where to Deliver.

Respondents' View	Frequency	Percent
Yes	68	32.4%
No	142	67.6%
Total	210	100.0%

(Field Data: 2008)

thought the woman could not do that, the respondents gave various reasons but a good number of answers that resonated among the respondents were that (i) the woman has no right to decide because the man is the head of the family and it is he alone who can determine where the woman (wife) can deliver, (ii) quite a number of the respondents also added a religious dimension to the issue by indicating that it is only God who determines such decision and not any human being.

On the other hand, 68 (32.4 %) of the respondents indicated that it is the right of the woman to determine where to deliver. And the reasons they gave also varied, a significant number of them indicated, among others, that it was the fundamental human rights of the woman to decide on where to deliver. Other members also held the opinion that even though the woman had a right to determine where to deliver, but that should be influenced how urgent the situation is. The result is indicative that men are a very determinant factor in the management of maternal health in the area.

Table 2. Respondents' View on the Relations between Pregnancy and Superstition.

Respondents' View	Frequency	Percent
Don't know	61	29.0%
No	8	3.8 %
Yes	141	67.1%
Total	210	100.0%

(Field Data: 2008)

A total of 141 (67.1 %) of the respondents associated pregnancy with superstitious beliefs as indicated in Table 2. In a follow up questions for the respondents to list some of the superstitions, the respondents mentioned, among others, that (i) a pregnant woman should not eat too much meat and egg either than that the child will grow up to steal (ii) pregnant women should not laugh at or insult disabled persons or they will give birth to same persons (iii) Pregnant women should not stay late out side their rooms, bath late in the night, sleep outside because spirits travel in the night and may harm their pregnancy.

On the other hand, 8 (3.8 %) of the respondents said there was no connection or link between pregnancy and superstition. And 61 (29.0 %) of the respondents indicated that they did not know, meaning they were not certain whether pregnancy can be related to superstition or not.

It can however, be concluded that traditional beliefs influence a lot of decisions with regards to promoting maternal health in the district.

4.3. Level of Knowledge of the Community Members on obstetric fistula.

As indicated below in table 3, a total of 118(56.2%) respondents indicated that they have never heard of a condition called fistula.

Table 3: Respondents' Knowledge about Obstetric Fistula.

Respondents' View	Frequency	Percent
No Comment	31	14.8%
No	118	56.2%
Yes	61	29.0%
Total	210	100.0%

(Field Data: 2008)

On the contrary, 61(29.0%) of respondents indicated that they were aware of a condition called obstetric fistula - and 56 out of the 61 respondents said they have known the condition for more

than two years, and the rest said they got to know of obstetric fistula barely a year ago. This shows that knowledge about obstetric fistula is not pronounced among the communities.

Table 4: Respondents' Source of Information about obstetric fistula

	Respondents' answers	Frequency	Percent
1.	Health service providers	9	14.8%
2.	Health service providers and Relatives/Friends	2	3.2%
3.	Health service providers and Magazias (Community Women Leaders)	1	1.6%
4.	Magazias (Community Women Leaders)	5	8.2%
5.	Relatives/Friends	39	64 %
6.	Eye Witness	5	8.2%
	Total	61	100%

(Field Data: 2008)

The 61 respondents who indicated that they were aware of obstetric fistula gave various sources as their source of information on obstetric fistula as indicated in Table 4. Majority of the respondents, 39 (64%) said they heard about obstetric fistula from relatives/ friends during informal discussions. This was followed up by 9 (14.8%) of the respondents who said they heard of obstetric fistula from health service providers. About 5 (8.2%) indicated that they heard about obstetric fistula from the Magazias (Community Women Leaders) s– community women leader, whilst 5 (8.2%) of the respondents got to know of obstetric fistula as eye witnesses. Other individual respondents gave multi channels as their source of information; 1 person said he heard about obstetric fistula from both Health service providers and Relatives/Friends, another person indicated he got to know about obstetric fistula from the Mass Media, Health service providers and the Community Information Networks. The third person's sources of information were from Health service providers and Relatives/Friends.

Several scenario can be deduced from these facts (i) The communities are comfortable with information with regards to women through the use of inter personal channels. (ii) The most

reliable mode of getting information across to the communities are through the inter personal communication. (iii) The communities do not have access to mass media, as a result, the numerous radio programmes on obstetric fistula that was done under the campaign by Pathfinder International did not actually get to the targeted people.

Table 5: Respondents' View about Causes of obstetric fistula

Respondents' View	Frequency	Percent
Prolong Labour	45	73.8%
Prolong labour and use of herbs	3	4.9%
Superstition	3	4.9%
Use of herbs	5	8.2 %
Don't Know	5	8.2%
Total	61	100%

(Field Data: 2008)

Table 5 shows that the 61 respondents who indicated that they were aware of fistula, 45 (73.8%) identified prolong labour as the major cause of fistula, and 5 (8.2 %) of them attributed the cause of obstetric fistula to the use of herbs, while 3 (4.9%) of the respondents attributed obstetric fistula to superstition, same 3 (4.9%) of the respondents gave multiple cause- prolong labour and the use of herbs. About 5 (8.2%) respondents indicated that they did know the causes of fistula. And this shows that this category of respondents really knew what obstetric fistula is.

Table 6: Respondents' opinion about the possibility of treating Obstetric fistula

Respondents' View	Frequency	Percent
Herbalist/traditional healer	2	3.3%
Herbalist/traditional healer , Hospital	12	19.7%
Hospital	34	55.7%
Don't know	13	21.3%
Total	61	100.0%

(Field Data: 2008)

This group of 61 respondents further demonstrated their knowledge of the condition in Table 6, when 45 (73.8%) of them indicated that obstetric fistula could be treated. About 11 (18.0%) respondents, on the other hand, said obstetric fistula could not be treated, and 5 (8.2%) were not certain.

Table 7. Respondents' view on where obstetric fistula can be treated.

Respondents' View	Frequency	Percent
Don't Know	5	8.2 %
No	11	18.0%
Yes	45	73.8 %
Total	61	100.0%

(Field Data: 2008)

Table 7 shows the respondents view on the treatment of fistula. When the 61 respondents who said they had heard of obstetric fistula were asked to mention where obstetric fistula could be treated, barely half of them, 34 (55.7%) indicated that the condition could be treated at the hospital. And 12 (19.7%) said the ailment could be treated in both the hospital and by herbalists/traditional healers, 2 respondents (3.3%) said herbalist/traditional healer. And 13 (21.3 %) indicated that they did not know where obstetric fistula could be treated. This shows that even though knowledge about obstetric fistula was not so high, the management of the condition of obstetric fistula victims in the district was much lower, if one considers the 34 people who gave the right answer that the ailment could be treated in the hospital, as compared to the generality of the 210 who were sampled from the community.

4.4. Determining the Prevalence of Obstetric Fistula within the Communities

In a similar vein, Table 8 shows the responds of the same respondents in table 7, when they were asked whether they knew anybody who had the ailment, 50 (82.0%) said No, whereas 11 (18.0%) of them said Yes, and 3 members of that group said the victims were their relations.

Table 8. Respondents' familiarity with victims of obstetric fistula in the communities

Respondents' View	Frequency	Percent
Yes	11	18.0%
No	50	82.0%
Total	61	100.0%

(Field Data: 2008)

Again, 5 respondents who answered in the affirmative indicated that the victims sought for treatment – 3 from the hospital and 2 from the herbalist/traditional healer. That shows that obstetric fistula is prevalent in the district.

4.5. Assessing the Attitude of the Community Members on Obstetric Fistula Victims.

When the researcher sought to identify the attitude of the respondent with the question about whether an obstetric fistula patient could independently determine where to seek treatment. Majority of the respondents 49 (80.3%) rather point out that an obstetric fistula victim needed to seek the consent of her husband before seeking treatment as indicated in Table 9

Table 9. The right of fistula victim to independently seek treatment

Respondents' View	Frequency	Percent
Yes	49	80.30%
No	5	8.20%
Don't Know	7	11.50%
Total	61	100.0%

(Field Data: 2008)

Various reasons were assigned to this position. The respondents in a follow up question of WHY? Indicated that a woman in that state will need the financial and psychological support of the husband to manage her condition, again, the man is the head of the family and therefore has

the responsibility of seeing to the welfare of the woman. On the other hand, 5 respondents said there was no need for the victim to tell their husbands, and their position is based on religious belief that God determines the faith of mankind and the husband involvement will not determine the condition of the victim. About 7 of the respondents said they were not sure whether the victim should seek the consent of the husband or not. Again, the same 61 (100 %) of the respondents were of the opinion that persons with obstetric fistula needed the support and sympathy of the community to help them manage their ailment. That can be inferred that communities are or could be sympathetic to support obstetric fistula victims to overcome the challenges associated with the condition.

4.6. Evaluating the Peoples Attitude towards Information Management

Table 10 reflects the responds of the entire 210 respondents from the community who were sampled for this study.

Table 10: Trusted Sources of Information on Obstetric Fistula

Respondents' View	Frequency	Percent
Friends/relatives	20	9.5%
Magazias (Community Women Leaders)	18	8.6%
Magazias (Community Women Leaders), TBAs ,Local Government Officials	5	2.4%
TBAs	6	2.9%
Health Service Providers	132	62.9%
Local Government Officials	16	7.6%
Non Governmental Organisations	9	4.3%
Religious Groups	4	1.9%
Total	210	100.00%

(Field Data: 2008)

The question was about the source/s of information on obstetric fistula that they can trust. A total of 132(62.9%) said they could trust information on obstetric fistula if only it is coming from health service providers , this was followed by 20 (9.5%) of respondents who said they will trust

information on obstetric fistula if it is coming from relatives and friends, 18(8.6%) from Community Leaders/Magazias (Community Women Leaders) s, 16 (7.6%) from local government officials- (district chief executives, assembly members etc), 9 (4.3%) from Non-Governmental Organisations (NGOs), 6(2.9%) from TBAs and 4 (1.9%) said from religious leaders. Only 5 (2.4%) respondents gave a multiple answer indicating Community Leaders/Magazias (Community Women Leaders) s, TBAs, and Local Government Officials. That means health workers are a trusted source of information among the communities.

Table 11: Channel of Communication Appropriate For the Dissemination of Fistula

Respondents' View	Frequency	Percentage
Mass Media	22	10.5 %
Mass Media, Group Communication	70	33.3%
Mass Media, Group Communication, Inter-personal	29	13.8%
Mass Media, Group Communication, Inter-personal, traditional communication networks	11	5.2%
Mass Media, Group Communication, traditional communication networks	24	11.4%
Mass Media, Group Communication, Inter-personal	3	1.4%
Mass Media, traditional communication networks	10	4.8%
Group Communication	12	5.7%
Group Communication, Inter-personal	4	1.9%
Group Communication, Inter-personal, traditional communication networks	5	2.4%
Group Communication, traditional communication networks	5	2.4%
traditional communication networks	8	3.8%
NA	7	3.3%
Total	210	100. %

(Field Data: 2008)

Table 11 above also shows the responds of the 210 respondents when they were asked which channel of communication they thought information on obstetric fistula would be more appropriate to them. Most of the respondents gave multi channels, even though; some others

gave one channel source. Here, about 70 (33.3%) out of the 210 respondents indicated that Mass Media (Radio, Television, Newspaper etc) and Group-(Community Information Network - durbar, social gathering, Audi visuals, etc) were appropriate for them. This was followed by 299(13.8%) respondents who identified Mass media (Radio, Television, Newspaper etc) and Group-(Community Information Network - durbar, social gathering, Audi visuals, etc) and Inter-personal :counseling, gossips, chitchats, conversations etc as the most appropriate channels. Another group of respondents estimated at 24 (11.4%) selected the multi channels of Mass Media, Group Communication, traditional communication networks. Mass Media was the only single channel that was selected by an appreciable number of respondents.

What the table has also established is that, in terms of the individuals channels, the most trusted and convenient channels of communication among the communities are Mass media (Radio, Television, Newspaper etc), which was followed by Community Information Network (durbars, social gathering) and then Inter-personal (counseling, gossips, chitchats, conversations etc)

4.7. Evaluating the Level of Contribution of TBAs in the Promotion of Maternal Health

Respondents numbered up to 30. All the respondents were women, with none of them being a literate. Majority of them 20 (60.6%) fell within the age brackets of 49-69 years, 9 (30%) respondents were 70 and above years and only one was lower than 39 years. About 23 (76.6%) of the respondents said they have been given some training on midwifery and 7 (23.6%) said they have not been given any training. Except 1 respondents, the rest 29 (96.7%) said they have been practising this work for 10 years and above. Majority of the respondents 18 (60.0%) indicated that they work as TBA along other jobs, mostly, farming. While 12 (40.0%) indicated

that they are solely dependent on their work as TBA for survival. This meant that respondents were very experienced TBAs, whose input was essential for this study.

4.8. Assessing the IEC Activities TBAs Use in Maternal Health

Table 12, shows that most of the respondents/TBAs provided information on multiple topics on maternal health to their patrons, except 2 respondents-1 who said she restricted herself to discussing “Nutrition during pregnancy”, and another mentioned “Exclusive Breastfeeding”, which in any case, was not related to this study and maternal care.

Table 12. Issues on Maternal Health That TBAs Discuss with Clients

Respondents' View	Frequency	Percent
(a)Importance of Skilled attendance, (b).Complications associated with prolonged labour, (c)Nutrition during pregnancy	3	10.0%
(a)Importance of Skilled attendance, (b).Complications associated with prolonged labour, (c)Nutrition during pregnancy, Nutrition during pregnancy	4	13.3%
(a)Importance of Skilled attendance, (c)Nutrition during pregnancy	1	3.3%
(a)Importance of Skilled attendance,(c) Nutrition during pregnancy, (c)Nutrition during pregnancy	15	50.0%
(b).Complications associated with prolonged labour	1	3.3%
(b).Complications associated with prolonged labour, (c)Nutrition during pregnancy	2	6.7%
(b).Complications associated with prolonged labour,(d).Exclusive breastfeeding	1	3.3%
(c)Nutrition during pregnancy	1	3.3%
(d).Exclusive breastfeeding	1	3.3%
NA	1	3.3%
Total	30	100.0%

And when respondents were asked about the mode of providing the information 21 (70.0%) of the TBAs mentioned counseling as their mode, 7 (23.3%) mentioned that they did that by talking to their patrons in groups (group communication), only 2 (6.7%) of the respondents said they

used both counseling and, also talk to the women in groups. It can be deduced from this information that the TBAs are contributing to the promotion of maternal health and that interpersonal communication is the most appropriate wheel for the dissemination of information for them, followed by group communication because they are convenient for them to use without any cost.

Table 13 depicts the judgment of TBAs in relation to the factors that will compel them to refer to a health facility a woman who reports to deliver at their place. About 9 (30.0%) of the respondents mentioned that they will refer a woman in labour to a medical facility if the patient is over bleeding and weak.

Table 13: TBAs judgments on referrals of women in labour to a health facility

Respondents' View	Frequency	Percent
Nothing has ever prompt me over bleeding and weakness	1	3.3%
Prolonged and bleeding labour	9	30.0%
prolonged labour	1	3.3%
prolonged labour > 10 hours	4	13.3%
prolonged labour > 12 hours	1	3.3%
prolonged labour > 6 hours	3	10.0%
prolonged labour > 3 hours	10	33.3%
Total	1	3.3%
	30	100.0%

One respondent indicated that nothing will prompt her, another mentioned prolong labour and over bleeding. However, the remaining 19 (63.3%) respondents mentioned prolong labour, except that they also gave varying times/periods but none exceeded 24 hours. The level of judgment among the TBAs on referral cases can not be best described as appreciative in relations to prevention of fistula, considering the fact that a total of 11 respondents out of the total of 30 sampled did not realise prolonged labour needed to be referred to a health facility in order to prevent other birth complications like fistula.

4.9. Appraising The Knowledge Of The TBAs On Fistula.

Of the 30 TBAs who were interviewed, 16 (53.3%) of them said they have heard about obstetric fistula and indicated that it was a birth injury. Out of the group of 16 respondents who said they have heard of obstetric fistula before, 12 of them said they heard of the condition through friends and relatives and 2 said they heard about the condition through the media- radio. The remaining 14 (46.7%) respondents said they have never heard about fistula. The negative answers by this group can be directly related to the findings from Table 13, because the women do not know about fistula, therefore prolong labour as one of the major causes. They will not necessary refer a woman in prolong labour to the health facility.

Table 14 Knowledge of TBAs about Fistula

Respondents' View	Frequency	Percent
Yes	16	53.3%
No	14	46.7%
Total	30	100.0%

And when 16 respondents who said they have heard of obstetric fistula before, where asked to give their impression of the causes of obstetric fistula based on the information they heard. They all mentioned birth related complications. And 4 of them mentioned the local name of obstetric fistula (Dagbani) as 'Mahagu' meaning wetness, whilst 3 referred to it as 'Kalgus' meaning delivery crisis. Again, 6 of them mentioned that obstetric fistula could be prevented if the pregnant woman attends antenatal care, 5 indicated that obstetric fistula could be avoided if women deliver at the hospital and 5 also said they were not certain how obstetric fistula could be avoided. The 16 respondents were all unanimous that the condition can be treated at the hospital. Knowledge about obstetric fistula is relatively high based on these facts and their attitude

towards the condition is positive, and to the extent that some of the respondents have given two names about the condition in the local dialects (Dagbani) confirms that obstetric fistula exist in the communities.

4.10. Evaluating the attitude of TBAs towards the management of information for IEC Activities

Table 15 describes the opinion of the TBAs on what sources of information and through what channels of communication that information on obstetric fistula could be trusted and also adequately get to the communities. About 14 respondents (46,7%) indicated that health service providers could be trusted with the information and the most appropriate channel the Mass media (Radio, Television, Newspaper etc) . Same number of respondents 14(46.7%) also mentioned Health service providers as the most trusted source of information, but they mentioned the most appropriate channel as Community Information Network - durbar, social gathering, Audio visuals, etc.

Table 15 Sources/Channel of Information for Creating Awareness about Fistula

Respondents' View	Frequency	Percent
(a). Health Service Providers through Mass Media etc	14	46.7%
(b). Health Service Providers through Community Information Networks	14	46.7%
(c). Don't know	2	6.6%
Total	30	100.0%

(Field Data: 2008)

Only 2 respondents said they were not certain of what the trusted source and appropriate channels will be. Indications from the above information are that health service providers are the most trusted source of information and the use of the mass media and the Community Information Networks are the most appropriate channels.

4.11. Determining the Level of Maternal Health Education by Health Service Providers

Respondents were 10, selected from the 5 health centres in the district; two respondents were each selected from a health facility. All the respondents were female because the selection of this group was based on the criteria that respondents schedule should be closely linked to delivery and MCH. Out of the 10 respondents, 5 of them were community health nurses and similar numbers were Midwives.

In attempt to assess the knowledge of the respondents on maternal health, respondents were asked whether they have heard about the four delays that contributed to maternal morbidity and all the respondents answered in the affirmative and mentioned the four delays as (i). Delay in recognizing danger signs, (ii). Delay in deciding to seek medical care (iii). Delay in transportation to the hospital, (iv). Delay in receiving skilled care at the hospital. And this is an indication that respondents were very abreast of maternal care issues.

In terms of the IEC activities the health providers have been using in promoting maternal health, the following generic IEC activities were identified from the respondents.

- (a)** Talks to women in group
- (b)** Counseling on one – on one
- (c)** Role plays/drama
- (d)** Personal Testimonies.

However, to a question of, which of the above stated IEC activities each of the 10 respondents were using to promote maternal health? Respondents gave multiple answers as follows; Seven(7)

of the 10 respondents said they combined the following two i.e. **(a)** Talks to women in groups, **(b)** Counseling on one -on one.

Again when it came to the use of the combination of the three strategies i.e. **(a)**Talks to women in group, **(b)** counseling on one to one, **(c)**role plays/drama- 5 (50 %) of the 10 respondents answered in the affirmative. Only one out of the 10 health respondents said she used all the four approaches i.e. **(a)** Talks to women in group, **(b)** counseling on one to one,**(c)**role plays/drama , **(d)** Testimonies. It is important to note that all the respondents said they used the strategy of **(a)** Talks to women in group. Only one person indicated that she did not use **(b)** counseling on one-on one, but the remaining nine respondents said they did.

When respondents were asked about the issues they discussed with the clients the most pronounced topics or issues were (i)Importance of Skilled attendance (Ante – natal, delivery, post – natal, family planning) (ii) Process of labour and Complications associated with labour such as: Prolonged labour, Post - partum hemorrhage, Ruptured uterus, fistula, (iii)Nutrition during pregnancy, (iv)Exclusive breastfeeding.

4.12. Assessing the Knowledge, Attitude and Practice (KAP), Of Service Providers on Fistula.

Table 16 shows that knowledge on obstetric fistula was high among the health service providers, nine respondents representing 90% indicated that they were very conversant with obstetric fistula- only one respondent indicated that she has never heard of the condition. Again, 6 (60 %) of the respondents indicated that they heard about the condition during their professional training, while 3(30 %) mentioned that they heard about the condition during in-service training

Table 16. Knowledge of obstetric fistula among Health Service Providers

<i>Respondents' View</i>	<i>Frequency</i>	<i>Percent</i>
Yes	9	90 %
No	1	10 %
Total	10	100%

However, all the respondents indicated that they have never had any encounter with an obstetric fistula patient in the district. Only 1 respondent could mention a local name of the condition- “Mahagu”, the rest indicate that they were not aware of any local term for fistula.

4.13. Assessing the IEC Activities by Health Service Providers on Obstetric Fistula.

Table 17 shows that none of the 5 health facilities in the district has any IEC materials on fistula. All the 10 (100%) respondents indicated that they did not have any materials in their facility. When their opinion was sought, based on their experience, as regards to the type of IEC activities on obstetric fistula that could be effective in the communities, most of the respondents mentioned the use of radio by health personnel in the local dialect to create mass awareness of the condition for the necessary community support.

Table 17. Availability of IEC materials in health facilities.

Respondents' View	Frequency	Percent
Yes	0	0%
No	10	100.0%
Total	10	100.0%

(Field Data: 2008)

They again, suggested that talking to women in groups and on one on one basis could help to educate the women to take the necessary measures to prevent the condition from occurring.

KNUST



CHAPTER FIVE

CONCLUSION

5.0. Background

The study was motivated by the question of why no single case of fistula had been reported from the Savelugu-Nanton district within the period of 2005 to 2007, notwithstanding the numerous IEC activities that had been undertaken in the three Northern Regions under the ‘Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana’, which was being implemented by the Pathfinder International, the United Nations Population Fund (UNFPA) and the Ghana Health Service (GHS).

Consequently, a number of assumptions were made, and they included the following;

- Ignorance of the communities about obstetric fistula due to lack of adequate information
- The health delivery systems (clinics, health post etc) in the district had no IEC materials on fistula
- Health service providers in the district were not well informed about fistula.
- The communities did not see obstetric fistula as curable, and therefore did not encourage victims to seek treatment at the health facilities.
- Fistula victims were not comfortable exposing their ailment to the communities for fear of discrimination.
- Cultural and religious beliefs about obstetric fistula were preventing victims from making their ailment public.

Therefore, the principal objective of the study was to find out how IEC activities were being carried out in the prevention and management of obstetric fistula in the Savelugu-Nanton District that no single case had been reported from the area. The findings were aimed at the following:

- (i) Improving and strengthening the packaging and delivery of programmes, activities and messages to enhance awareness of Obstetric Fistula in the Savelugu –Nanton District.
- (ii) To help improve on behaviour of the communities and health service providers, including TBAs, towards positive maternal health care practices that will prevent fistula
- (iii) To develop strategies that will encourage women with obstetric fistula and their families to access obstetric fistula repair services.

As a result, a number of research questions were posed to three different stakeholders, whose input helped to arrive at a conclusion, they included the following;

(1)Community Members,

- (i).The attitude of the communities on maternal health.
- (ii).The level of Knowledge of the community members on fistula.
- (iii).The prevalence of obstetric fistula among community members.
- (iv).The attitude of the community members on obstetric fistula victims.
- (v).The people’s attitude towards information management

(2) Traditional Birth Attendants

- (i).The level of contribution of TBAs in the promotion of maternal health
- (ii).The type of IEC activities the TBAs use in maternal health
- (iii).The knowledge of the TBAs on obstetric fistula.
- (iv).The attitude of TBAs towards the management of information for IEC activities in the Prevention and Management of Obstetric Fistula

(3) Health Service Providers

- (i).The extent of maternal health education by health service providers in the district.
- (ii).The level of Knowledge Attitude and Practice (KAP), of service providers on obstetric fistula.
- (iii). To determine the availability of IEC activities in the prevention and management of obstetric fistula in the health facilities in the area.
- (vi).To determine how IEC activities were being used in the prevention and management of obstetric fistula in the health facilities in the area.

5.1. Summary

The study revealed that good maternal health practice, which includes early decision making in seeking skilled care is a precursor to the prevention of obstetric fistula was predominantly male decision considering the fact that 142(67.6%) of the 210 respondents believed that the man must determine where a woman(wife) should deliver , therefore, irrespective of the condition of the woman in labour, the final determinant of where to seek for attention is the man, and this can expose women in the district to all sorts of birth complications. And this goes to buttress the findings of the assessment done by Engender Health (June 2008) that male's role in decision making on where a woman delivers highly contributed to delay in seeking skilled care during difficult labour which predisposed the woman to developing fistula

Again, pregnancy was associated with superstition among the communities in the district, which meant superstitious beliefs could endanger the ability and right of the pregnant women or women in labour to seek delivery services.

The general implication is that the communities have very poor attitudes towards maternal health and that could expose women to birth complications like fistula.

The situation had been compounded by the traditional birth attendants (TBAs) in the district. About 50 % of the 30 TBAs, as indicated in Table 12, said they discussed with their patrons topics like importance of skilled attendance, nutrition during pregnancies, and only 30 % of them indicated that they discussed issues associated with the importance of seeking skilled labour during birth. This meant that topics related to obstetric fistula were not being treated by the TBAs, which should really be a concern because TBAs play significant role in deliveries in the district as indicated by the GHS/SNDHMT report for 2005, which stated that 'The district recorded a total of 3197 births at both health institutions and by Trained TBAs in 2005'.

This concern could also be derived by the responds of the TBAs in Table 13 and 14, that even though most of them had acknowledged that prolonged labour; spanning from 3 to 10 hours could be one of the major factors that would compel them to refer a woman to a health facility for delivery, the general impression they created in the subsequent responds was that, that notwithstanding, they do not inform or educate their patrons in the community on activities that prevent fistula.

This study also established that health care providers were abreast of maternal health issues because 9 out of the 10 respondents mentioned the 4 delays that causes maternal morbidity , and further indicated that they made effort to educate their clients on challenges related to maternal health, but Table 16, shows that the channel or medium of educating the public was

limited to interpersonal communication, which could help to change the behaviours of the women though, but then the general community is left out and yet it has been established by this study that the community, particularly men, play important role/s in maternal health. Therefore, it can be established that IEC activities on maternal health in the district was limited and skewed towards women.

The study also established that knowledge about obstetric fistula among communities in the Savelugu-Nanton district was inadequate. Only 61(29.0%) out of 210 respondents from the communities indicated that they have heard about the condition called obstetric fistula. But most curious was the responds of the TBAs, that notwithstanding the role they played in deliveries in the communities, as much as 14 out of 30 of them, indicated that they have never heard about fistula. On the other hand, all the health service providers indicated that they were aware of fistula.

But more importantly, the study confirmed that obstetric fistula existed in the district, because 11 out of the 61 members of the community who said they were aware of the condition said they knew persons with that condition in their communities. Two local terms 'Mahagu' and 'Kalgus' were used to refer to the condition.

The study also revealed that some of the IEC strategies that were aimed at, among others, creating mass awareness among communities in the three northern regions under the 'Strengthening Obstetric Fistula Prevention Activities and Access to Treatment in Ghana' project were not making any gains in the Savelugu-Nanton district. Majority of the 61

respondents said they heard about the condition from friends and relatives or they had seen the conditions, only 9 of the respondents indicated that they heard about the condition from health service providers. Similarly, the 16 out of the 30 TBAs who said they were aware of the condition said they heard about the conditions through friends/ relatives. And among the health service providers, only two mentioned that they heard about the condition during in-service training, the rest said they heard about the condition during their professional training.

It was also established by this study that the overwhelming majority of the people (132 out of 210) trusted health service providers as genuine source of information on health, only 20(9.5%) respondents mentioned that they trusted information on health from friends and relatives, the rest mentioned other sources. Yet, most of the respondents from the community and the TBAs who said they were aware of the condition of obstetric fistula mentioned friends and relatives as their source of information. It could therefore be inferred that most members of the community could have heard about the condition from friends and relative, but they refused to believe because it was not a trusted source of information on health. And that if the health service providers had taken up the IEC activities serious, most probably, the cases that had been established to exist in the district would have come out to seek treatment since, IEC activities are, among others, aimed at promoting health seeking behaviours as indicated by the Health Belief Model by Rosenstock (1966), that states that people will change their health behaviours if they belief they are under risk.

The study also revealed that none of the (5) five health facilities in the district had any IEC materials on obstetric fistula and that could have accounted for the inability of the health service

providers to inform/ educate the communities about obstetric fistula and that could have contributed to the poor level of awareness about obstetric fistula in the community.

Again, it was found out that mass media and group communication were the two major channels of communication that the respondents suggested would be the most appropriate for IEC activities on fistula. And this confirms the study by Israel R, et al (1989), that listed print, radio and television, which are all classified under the mass media, as powerful IEC tools that can be used to bring positive change in reproductive health.

5.2. Conclusion

In conclusion, the study has established the following;

- That knowledge and practice on good maternal health practices among the communities in the Savelugu/Nanton district was low.
- Knowledge about obstetric fistula is limited in the communities.
- There are obstetric fistula cases in the district
- IEC activities on obstetric fistula in the district are not being managed well
- The right communication channels, which are mass media and group communication, for the IEC activities are not being explored

5.3. Recommendation

The vast Majority of the respondents mentioned that they trusted information from health service providers, and again, a similar majority of the respondents mentioned the mass media (Radio, Television and Newspapers) , and group communication (community durbars, workshops, neighborhood meetings) as the most appropriate channels of communication on health.

It therefore, stands to conclude that health service providers should be given adequate education and the necessary support to undertake IEC activities on obstetric fistula in the district, using the mass media (Radio, Television and Newspapers), and group communication (community durbars, workshops, neighborhood meetings).

5.4. Further Research

This study was limited to assessing how IEC activities were being used to prevent and manage obstetric fistula in the Savelugu-Nanton District, however, certain issues that came out was that the right of the woman to determine certain maternal health rights, is determined by certain factors including the need for the woman to seek the consent of the husband before she can determine where to deliver. And again, pregnancies were related to superstitious beliefs. A study on how the human rights of women can help promote maternal care among rural communities in Ghana will help lessen birth complications, thereby reduce maternal morbidity.

Again, one of the fundamental roles of the Traditional birth attendants (TBAs) is to among others, mobilise and provide information on reproductive and child health to community members, yet only 6 (2.9%) of the 210 community members who were interviewed indicated that they would trust health information from the TBAs. This calls for concern and further study needs to be done to identify why the community members would not trust TBAs with health information.

APPENDIX I

KNUST, School of Medical Sciences, Department of Community Health, Kumasi.

Questionnaire for the Determination of IEC activities in the prevention and management of Obstetric fistula in the Savelugu Nanton District

Questionnaire for Community Level:

I would like to ask you some questions about your knowledge, attitude and perception towards a condition among women called fistula. Obstetric fistula is a hole, which forms between the bladder and vagina or the rectum and vagina. A woman with this condition leaks urine, faeces or both. The information we receive from you will be strictly confidential and will help us to design intervention programs to create awareness to prevent the reoccurrence of the condition among women. Other interventions will also be put in place to encourage women with obstetric fistula to come forward for treatment and reintegrated into their various communities. The interview will take approximately 1 hour of your time. Do I have your consent to continue?

Now I would like to ask you few questions regarding fistula. NB: (Describe in details again the condition and indicate that it is only among women).

Identification Particulars:

Name of the Region/District: _____

Name of the village/urban: _____

Name/Code for interviewee: _____

Name/Code for Interviewer: _____

Interview Date: _____

1. BACKGROUND CHARACTERISTICS

1. How old are you?

2. What is your sex? (a) Male (b) Female

3. Which community do you come from.....
4. Can you read and write? (a) YES. (b) NO. ▲
5. What is the highest level of school you have attended or completed?
- (a) None
 - (b) Primary
 - (c) Middle/JSS
 - (d) SSS
 - (e) Voc/Tech/Comm.
 - (f) Post Sec
 - (g) Tertiary
- 6 . What is your marital status: (a) married, (b) living in union, (c) divorced, (d) separated
(e) Widowed (f) single?
7. What is your occupation?
- 8 What is your status in the community? (a) Traditional leader (b) Assembly Member
(c) Religious Leader (d) opinion leader (e) Other
9. Can a woman from this community decide where to deliver her children? (a) Yes (b) No
10. (i) Do you think that pregnancy is associated with some mystical beliefs/practices?
(a) Yes (b) No
- (ii) List some of this/these belief/s.....
11. Do you know or have you heard of a condition called fistula? (a) Yes (b) No
12. For how long have you known or heard about this condition? (Circle the answer)
- (a) Less than a year ago
 - (b) 1yr
 - (c) 2yrs and above
13. From what source and channel did you get to know of Fistula?
- a. Mass media (Radio, Television, Newspaper etc)
 - b. Health information sources(community health nurses, midwives etc)
 - c. Community Information Networks(meeting, durbars, social gathering etc)
 - d. Inter-personal -relatives /friends

- e. Eye witness
- f. Others (Specify).....

14. What is/ are the cause/causes of fistula? (a) prolong labour (b) superstition (c) use of herbs and concoctions (d) don't know

15. Can obstetric fistula be treated? (a)Yes (b) No (c) I don't know

16. Where can a person with obstetric fistula condition go for treatment? (Record all the sources mentioned)

- a. Herbalist /Traditional healer
- b. Hospital
- c. Soothsayer
- d. Prayer camp
- e. Others (specify).....
- f. don't know

17. Do you know anybody, including a family member, friend or neighbour who has the obstetric fistula condition in your community? (a)Yes (b) No

18. Has she sought treatment for her condition? (a)Yes (b) No

19. From whom or where did *she* seek treatment? (Record all the sources)

- a. Herbalist /Traditional healer
- b. Hospital
- c. Soothsayer
- d. Prayer camp
- e. Others (specify).....
-

20.(i) Do you think a woman with obstetric fistula condition, as a matter of necessity; must seek the consent of a her husband before she undertakes any treatment? (a)Yes (b) No

(ii)Why (briefly explained:.....

21. Describe the perception of the community about women known to have fistula

- (a). As an outcast/cursed
- (b).People needing support
- (c). dirty
- (d) Don't know

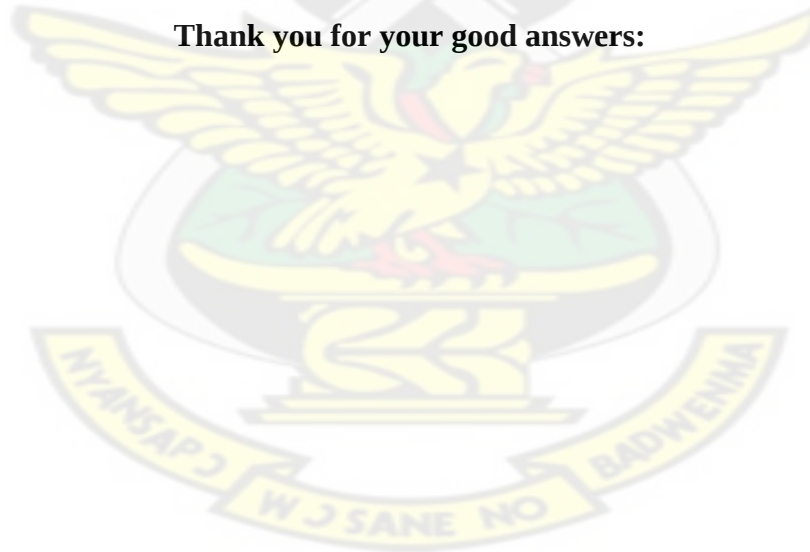
22. Which group of people can you trust information on fistula?

- (a) Chiefs, community leaders, Magazias (Community Women Leaders) s
- (b) Traditional Birth Attendants-TBAs
- (c) Health service providers
- (d) Local government officials-DCE, assembly members
- (e) Non –governmental organisations-NGOs
- (f) Religious leaders
- (g) Others (specify).....

23. What is/are Channel of communication for the dissemination of information on obstetric fistula that will be appropriate to you?

- (a). Mass media (Radio, Television, Newspaper etc)
- (b).Group communication- Community Information Network (durbar, social gathering, etc)
- (c).Inter-personal (counseling, private talks etc)
- (d). Traditionnel mode of communication (folklore, singers, drummers etc)

Thank you for your good answers:



APPENDIX II

KNUST, School of Medical Sciences, Department of
Community Health, Kumasi.

Questionnaire for the Determination of IEC activities in the prevention and management of
Obstetric fistula in the Savelugu Nanton District
Questionnaire for Traditional Birth Attendants:

I would like to ask you some questions about your knowledge, attitude and perception towards a condition among women called fistula. Obstetric fistula is a hole, which forms between the bladder and vagina or the rectum and vagina. A woman with this condition leaks urine, faeces or both. The information we receive from you will be strictly confidential and will help us to design intervention programs to create awareness to prevent the reoccurrence of the condition among women. Other interventions will also be put in place to encourage women with obstetric fistula to come forward for treatment and reintegrated into their various communities. The interview will take approximately 1 hour of your time. Do I have your consent to continue?

Now I would like to ask you few questions regarding fistula. NB: (Describe in details again the condition and indicate that it is only among women).

Identification Particulars:

Name of the Region/District: _____

Name of the village/urban: _____

Name/Code for interviewee: _____

Name/Code for Interviewer: _____

Interview Date: _____

1. Age..... (a). 70-above (b) 60-69 (c) 50-59 (d) 40-49 (e) 39 and below
2. Sex? (a) Male (b) Female
3. Name of community?.....
4. Can you read and write? (a) YES (b) NO

5. Are you a trained TBA? (a) Yes, How many years now (b) No
6. What is your marital status: (a) Married (b) Living in Union (c) Divorced (d) Separated (e) Widowed (f) single
7. Do you have any occupation in addition as a TBA? (a) Yes-Name occupation (b) No
8. What is your status in the community? (a.)Chief (b) Assembly Member (c) Religious Leader/Traditional Leader (d).Opinion Leader (f). Community Women' leader (Magazia) (e).Others.....(specify
9. What topics / Issues on maternal health do you discuss with the pregnant women who visit you?
- (a). Importance of Skilled attendance (Ante – natal, delivery, post – natal, family planning)
 - (b).Complications associated prolonged labour
 - (c)Nutrition during pregnancy
 - (d).Exclusive breastfeeding
 - (f). Others.....
10. How do you discuss / provide information on the issues you have mentioned (Tick and add as many as will be mentioned by respondents)
- (a) Talk to a group of mothers (b) One on one (c) others.....
11. What will prompt you to refer a woman in labour to a health facility?.....
12. Do you know or have you heard of a condition called fistula? (a). Yes (b).No
13. Describe the condition (record all mentioned)
14. For how long have you known or heard about his condition?
- (a). Less than a year ago (b) 1yr (c) 2yrs (d) 3yr (e) 4+yrs
15. From what source did you get to know of Fistula?
- (a). Mass Media (Radio, TV)
 - (b). Health care providers etc
 - (c).interpersonal -friends/relatives/neighbors etc
 - (d).Community Information Networks - social gatherings/ community meetings/ etc
 - (e). Others (Specify)

16. Could you mention what in your view cause(s) fistula?.....
17. What is the local term for fistula?.....
18. In your opinion, what channel or sources will the people of this community would like to hear message/information about fistula.....
19. What do you think can be done to prevent and manage obstetric fistula in this district?
20. Where can a person with obstetric fistula go for treatment?.....



APPENDIX III

KNUST, School of Medical Sciences, Department of Community Health, Kumasi.
Questionnaire for the Determination of IEC activities in the prevention and management of
Obstetric fistula in the Savelugu Nanton District
Questionnaire for Health Service Providers

I would like to ask you some questions about your knowledge, attitude and perception towards a condition among women called fistula. Obstetric fistula is a hole, which forms between the bladder and vagina or the rectum and vagina. A woman with this condition leaks urine, faeces or both. The information we receive from you will be strictly confidential and will help us to design intervention programs to create awareness to prevent the reoccurrence of the condition among women. Other interventions will also be put in place to encourage women with obstetric fistula to come forward for treatment and reintegrated into their various communities. The interview will take approximately 1 hour of your time. Do I have your consent to continue?

Identification Particulars:

Name of the Region/District: _____

Name of community: _____

Name/Code for interviewee: _____

Name of Interviewer: _____

Interview Date: _____

1. BACKGROUND CHARACTERISTICS

i. Age?

ii. Sex? (a) Male (b) Female

iii. Which cadre of nursing do you belong? (a) Community Health Nurse (b) Midwife
(c) Community Health Nurse Midwife

1. Have you heard of the four delays that contribute to maternal morbidity?
(a) Yes (b) No

2. Can you list them
3. What are the IEC activities you do on maternal health.....?
4. What topics /Issues on maternal health do you discuss with your clients (Tick and add as many as will be mentioned by respondents)?
- (a) Importance of Skilled attendance (Ante – natal, delivery, post – natal, family planning)
 - (b) Process of labour and Complications associated with labour such as: Prolonged labour, Post - partum hemorrhage, Ruptured uterus, fistula, others (tick as many as will be mentioned)
 - (c) Nutrition during pregnancy
 - (d) Exclusive breastfeeding
 - (e) Others(specify).....
5. How do you discuss / provide information on the issues you have mentioned (Tick and add as many as will be mentioned by respondents)
- (a) Talk to a group of mothers
 - (b) One on one with client
 - (c) Using films
 - (d) Using audio materials
 - (e) Others.....
6. Do you know or have you heard of a condition called obstetric fistula?
- (a). Yes (b)No
7. Describe the condition.....
8. For how long have you known or heard about this condition?
- (a)Less than a year ago (b) 1yr (c) 2yrs (d) 3yr (e) 4+yrs
9. From what source did you get to know of Fistula?
- (a) I was taught in class during my training (b)During my field attachment as a student
 - (c) From my senior colleagues (d) During In – Service training /Workshop
 - (b) Others (Specify)
10. Can you mention the local term the people use to refer to the condition?.....
11. (i) Have you had any experience of attending to a client with fistula? (a) Yes (b) No

(ii) What did you do or tell the client.....

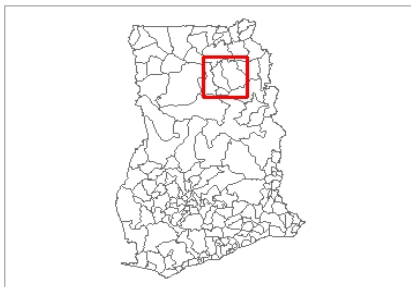
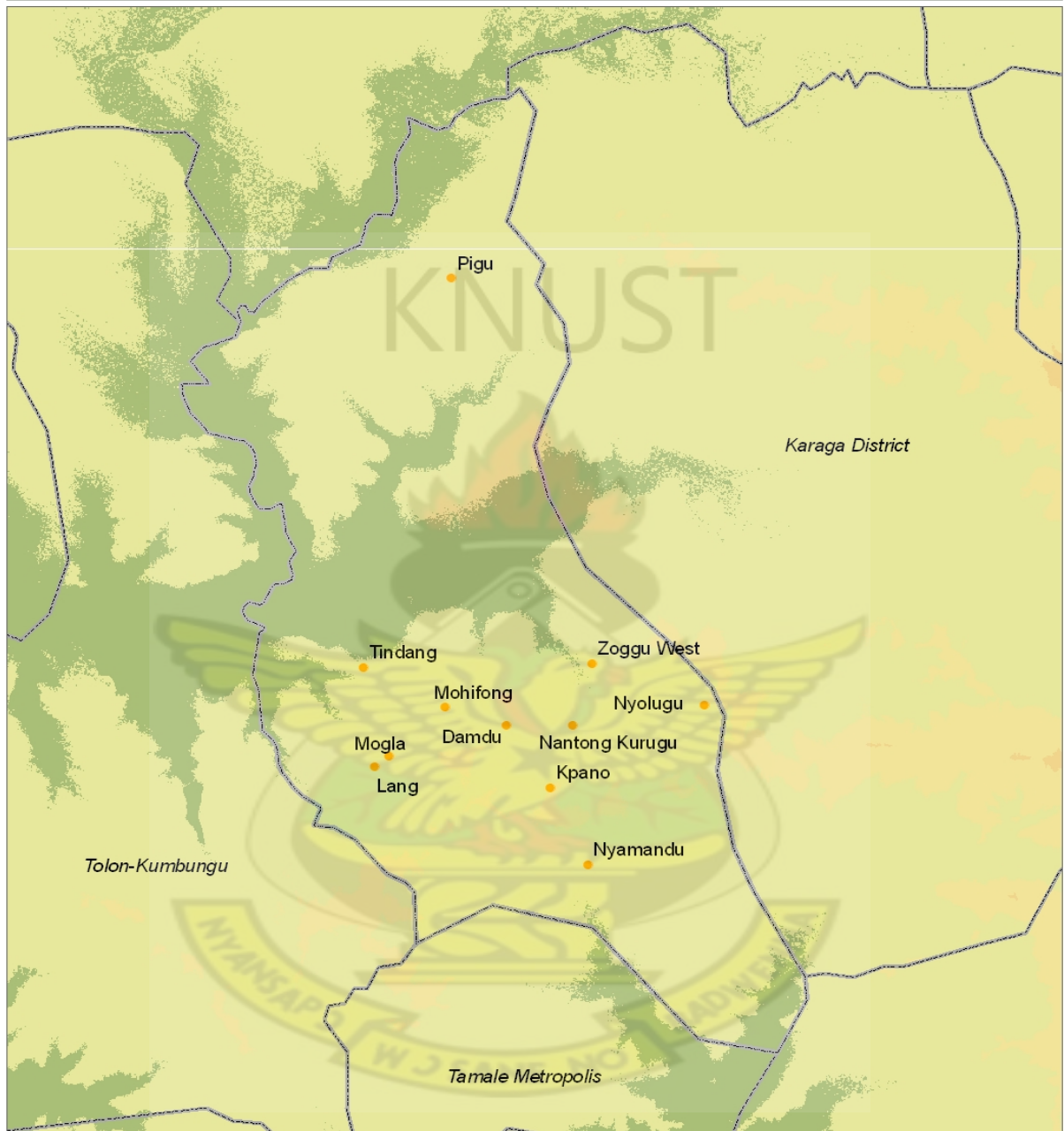
12. In your opinion, what IEC activities can be effective in the prevention and management of fistula?.....

13. If a client with obstetric fistula reports to you, what are the sources of information to help you manage her?

- (a) Brochures
- (b) Protocols and guidelines on fistula
- (c) Policies
- (d) Others (specify)
- (e)



Sampled communities for data collection in Savelugu-Nanton District



Legend

- Some of the study communities
- Savelugu-Nanton
- Neighbouring districts



0 0.05 0.1 Kilometers

BIBLIOGRAPHY

Ampofo, K., T. Out, et al (1990) "Epidemiology of Vesico-Vaginal Fistulae in Northern Nigeria" West Africa Journal of Medicine 9:98-102

Anupam Srivastava (2006), "Pilgrims visit Ghazi Baba's Dargah as Their Children Get Polio Drops". <http://www.comminit.com/en/node/287546/292>

Arrowsmith, S.D., E. C. Hamlin, et al (1996), "Obstructed Labour Injury Complex: Obstetric Fistula Formation and Multifaceted Morbidity of Maternal Birth Trauma in the Developing World" Obstetrical and Gynecological Surveys 51: 568-574

Dunn, Alison (1999) "Participatory Communication in Malaria Control: Why Does It Matter?" <http://www.comminit.com/en/node/220888/>

Engender Health, 2003. "Fistula Needs Assessment in Ghana." http://www.endfistula.org/docs/na_ghana_rwanda.pdf (assessed, 2nd June 2008)

Everett, H.S. and R. F. Mattingly (1956), "Vesicovaginal Fistula" American Journal of Obstetrics and Gynecology 72:712-724

Fishbein M and Ajzen I (1975). Belief, Attitude, Intention and Behaviour: An Introduction To The Theory and Research. Reading MA: Addison-Wesley

Ghana Demography and Health Survey Report (GDHS), 2003

Ghana Health Service: Savelugu Nanton District Directorate of Health Report 2005

Howard W, J, et al (2005) "The Obstetric Vesicovaginal Fistula in the Developing World" Obstetrical Gynecological Survey Vol 60

Information, Education and Communication; Lessons from the Past; Perspectives for the Future WHO/RHR/01.22

Israel R., R, Nagano. (1998). "Promotion Of Adolescent Reproductive Health: Lessons Learned From Social Marketing And Communications Projects". Newton, MA, Educational Development Center, for USAID,

Johannesburg Call to Action meeting held in October 23 – 26 2005, with the theme, 'Making Motherhood Safer by Addressing Obstetric Fistula'

John Hopkins University/ Programme Support Unit(JHU/PSU 1995), Child Spacing Promotion Project. www.tukne.edu/sfps/camlit/hmt

Jozwik, M and M. Jozwik (2000) "Clinical Classification of Vesicouterine Fistula" International Journal of Gynecology and Obstetrics. 70: 353-357

Langkilde, N. C, T. K. Pless, et al (1999) 'Surgical Repair of Vesicovaginal Fistulae: A Ten Year Retrospective Study" Scandinavian Journal of Urology and Nephrology 33: 100-103

Lawson J. B. (1968) "Birth Canal Injuries" Proceedings of Royal Society of Medicine 61: 22-24

Lazko, E. (1942) "Post Operative Vesicovaginal Fistulas; Genesis and Therapy" American Journal of Surgery 58(211-228)

Malia-Boggs, Dainah Fajardo, Susan Jack, Susan Mitchell, and Patricia Paredes "Social Marketing Zinc to Improve Diarrhea Treatment Practices - Findings and Lessons Learned from Cambodia." <http://www.comminit.com/en/node/269345>.

Meyer Bill, B. R., I. E Nygaard et al (2001) "Ureterouterine and Vesi Coureteroutine Fistula as Complication of Cesarean Section" Journal of Urology 165:1212-1213

National Cancer Institute (NCI). *Making Health Communications Work*. Pub. No. NIH 89-1493. Washington, DC: U.S. Department of Health and Human Services (HHS), 1989. <http://www.helthypeople.gov/document/HTMLvolume 1/11heathcom>

Odoi-Agyarko, Henrietta (2003) Profile of Reproductive Health Situation in Ghana. (WHO, 2003)

Planned Parenthood Association of Ghana (2007) "Report of PPAG in Northern Ghana" www.ppag.gh.org.

Population and Housing Census.(PHC 2000)

Radhakeesoon B (1987) "Management of IEC in Population Programmes In Mauritius", in: Population Communication in Asia, Edited by Ellen Sattar. Kuala Lumpur, Management Contributions to Population Programmes Series Vol. 5

Robert Piggott "Sierra Leone's Silent Sufferers" News Report, British Broadcasting Corporation (BBC), Friday, June 18, 2004, 09:23 GMT. <http://news.bbc.co.uk/2/hi/africa/3817009.stm>.

Rogers EM and Story ID. 'Communication on Campaigns'. Hand Book Of Communication Science, Ed By Burger C R and Chateb S H.; Beverly Hills California.Sage. 1987

Tahzib, F. (1983), "Epidemiology Determinants of Vesicovaginal Fistulas" British Journal of Obstetric F and Gynaecology 90: 357-391

Tahzib, F. (1985), “Vesicovaginal Fistula in Nigerian Children” Lancet 2:1291-1293

Thaddeus, S. and D. Maine (1994) “Too Far To Walk : Maternal Mortality In Context” Social Science And Medicine 3:1091-1110

United Nations High Commissioner Refugees (UNHCR), 1999. “Information, Education and Communication (IEC) Programmes; Reproductive Health in Refugee Situation, An Inter – Agency Field Manual” <http://www.unfpa.org/emergencies/manual/a1.htm> (assessed, 31 - 05 - 07)

United Nations Children Emergency Fund UNICEF, 2002. “Effective Information, Education and Communication (IEC) in Vietnam: A Literature Review”. <http://www.comminit.com/en/node/1598>

United Nations Education Scientific Organisation (UNESCO Bangkok.) “ASRH what is IEC/BCC-Adolescent Reproductive and Sexual Health (ARSH); what is Information, Education and Communication (IEC)/Behaviour Change Communication (BCC)?” <http://www.unescobkk.org/index.php?id=3409> (assessed, 2nd June 2008)

United Nations Education Scientific Organisation (UNESCO) 2005, Country work plan format for Cambodia. <http://www.unescobkk.org/fleadmin/user>.

United Nations Population Fund UNFPA, 2004. “Healing Wound, Surgical Repair; Campaign against Fistula” http://www.endfistula.org/surgical_repair.htm (assessed 31 - 05 - 08)

United Nations Population Fund UNFPA, 2004. “Needs Assessment Report: Findings from Nine African Countries” <http://www.unfpa.org/fistula/docs/index.htm> (assessed, 2nd June 2007)

United Nations Population Fund UNFPA, 2004. “Frequently Asked Questions; Campaign to End Fistula” http://www.endfistula.org/q_a.htm (assessed, 31 – 05 – 08)

United Nations Population Fund UNFPA (1999), ‘Implementing the Reproductive Health Vision: Progress and Future Challenges for UNFPA’. Evaluation Findings, Issue 20 July 1999. www.unfpa.org/monitoring/pdf

United Nations Population Fund (UNFPA), 2004. “Obstetric Fistula: A Tragedy to Deliver Maternal Care” <http://www.unfpa.org/mothers/fistual.htm>

United Nations Population Fund (UNFPA), 2004. stepping up efforts to save mothers lives” <http://www.unfpa.org/mothers/index/htm>

United Nations Population Fund (UNFPA), “2006. Obstetric fistula in brief”. <http://www.endfistula.orgcampaign.brief.htm>

United Nations Population Fund (UNFPA), 2006. “The campaign in brief –what is obstetric fistula?” <http://www.endfistula.org/index.htm>.

Wall L. L. (1988), Hausa Medicine: Illness and Wellbeing in a West African Culture. Durham, NC Duke University Press.

Wall L. L. (2002), “Thomas Addis Emmet, the Vesicovaginal Fistula; the Origins of Reconstructive Gynaecologic Survey” *International Urogynecology Journal* 13: 145-155

Wall L. L., J. A. Karshima et al (2004), “The Obstetric Vesicovaginal Fistula: Characteristics of 899 Patients from Jos, Nigeria” *American Journal of Obstetrics and Gynaecology* 190: 1011-1019

World Health Organisation (WHO), 2005. “545 Women Operated On During obstetric fistula Fortnight”. <http://www.afro.who.int/whd2006/experience/fistual.pdf>.

Yip S. K., and T. Y. Leung (1988) “Vesicouterine Fistula; an Updated Review” *International Urogynecology Journal* 9: 252-256

