FACTORS AFFECTING THE UTILIAZATION OF THE VESICO VAGINAL FISTULA (VVF) CENTER IN EBOYI STATE, NIGERIA

MATHIAS Bentina Alawari & NZEKWESI Maureen Department of

Sociology/Anthropology, Nnamdi Azikiwe University, Awka Email: bentinad1@yahoo.com & mathiasbentina@gmail.com
Phone: +234 (0)805 902 2311 & +234(0)806 345 8934

Abstract

This paper examined the factors affecting the utilization of the Vesico Vaginal Fistula (VVF) Center at Abakaliki, Eboyi state. A sample size of 92 respondents was drawn from the VVF center in Abakaliki. The non probability sampling technique was adopted in selecting the samples. Data was collected through the use of questionnaire and in-depth interview (IDI) guide. Findings showed that factors such as illiteracy, cultural belief, distrust in western civilization (medicine), low income, religious beliefs, fear of stigmatization and ignorance about the cause of the disease affect the utilization of the center by victims. The paper then suggests that public lectures should be organized in local dialects to educate the people on the relevance of the VVF center.

Key words: Civilization, Culture, Ignorance, Stigmatization, Utilization

Introduction

Vesico Vaginal Fistula (VVF) is an abnormal communication between the urinary bladder and the vagina that result in the continuous involuntary discharge of urine into the vaginal vault (Fasakin2008). It is a subtype of female urogenital fistula (UGF). VVF is an abnormal fistulous tract extending between the bladder and the vagina that allows the continuous involuntary discharge of urine into the vaginal vault. In addition to the medical sequelae from these fistulas, they often have a profound effect on the patient's emotional well-being. Professor Sunday Adeoye, a surgeon and director of National Obstetrics Fistula center Abakiliki Ebonyi State refer to VVF as an occurrence of abnormal hole between the bladder or rectum and the vaginal which is characterized by continuous and uncontrollably leakage of urine (Anioke, 2014).

Historically, the understanding of "Vesico vaginal fistula" has shown to us that the condition used to be a common scourge throughout the world. In the vast area of the world, South East Asia, Burma in India, in parts of Central America, South America and Africa about 50,000,000 women bring forth their children in sorrow and are exposed to grave dangers. In consequence today as ever in the past, uncounted hundreds of thousands of young mothers annually suffers childbirth injuries which reduces them to the ultimate state of human wretchness (Fasakin, 2008).



Vesico vaginal fistula has been a health problem for women in many countries especially developing countries, this abnormality is mostly as a result of childbirth, crude attempt of induced abortion, home delivery, early marriage, obstructed labour, unskilled birth attendants, economic and socio-cultural factors to mention but a few (Kees, 1994). Before the 19th century, women who suffered from VVF were judged harshly and rejected by society. Throughout the 19th century, treatment for VVF was limited because the practice of gynecology was perceived as taboo. Doctors were almost entirely male at this time and looking at a nude female, even for medical purposes, was seen as divergent from 19th-century values (Ojanuga 1993).

The true incidence of VVF in Nigeria is not widely known because most of the victims are not registered in hospitals, clinics and maternal centers due to fear of stigmatization and rejection. According to Sadik (2001), victims of VVF often work alone, eat alone and are not allowed to cook for anyone. This disease has its physical, psychological, social and economic effects on its victims.

In the yesteryears, the disease ravaged women of Ebonyi state in particular and the South East Nigeria in general. There was no hospital that could adequately treat the ailment in the entire region. According to Professor Sunday Adeoye, patients back then were referred from Ebonyi state to VVF center in Akwa Ibom state (Anioke, 2014).

In the bid to reduce the scourge, the management of the Ebonyi State teaching hospital (EBSUTH) became desirous of establishing a fistula unit in the teaching hospital and that was how the center came in place in 2002. The unit was established in 2002 and between 2002 and 2007; they were able to operate on over 120 VVF patients (Anioke, 2014).

Anioke (2014), further stated that Adeoye and his team's perseverance, hardwork and challenge was noticed by the wife of the then Governor of Ebonyi State Mrs Josephine Elechi who in 2007 established her pet project "The Mother and Child Initiative" (MCCI). The initiative was aimed at reducing maternal mortality; eradicate maternal morbidities such as VVF among the women in the South East zone. According to Anioke, the result of the hardwork done by this initiative reduced the plight of these sufferers with the target to eradicate the burden of obstetric fistula which involves the actual screening of women who are leaking urine.

The United States Agency for international Development (USAID, 2015), reported that the center was established as one of the major VVF centers in the South East zone. The Federal Government has since taken over the center because of its significances. Research has shown that 70% of the victims of the VVF in Ebonyi State VVF center are northerners living in the state. Due to the excellent work being done at the center, women travel from far North and other parts of the country for the treatment hence high number of VVF cases



are recorded which makes the center to have 25% of the total nationwide cases (USAID, 2015).

United Nations Population Funds (UNFPA, 2005),noted that Obstetric fistula is the most devastating of all pregnancy morbidities or disabilities. Njoku (2006) on the other hand stressed that more than two million women in developing nations of the world are suffering from this conditions and about fifty thousand to one hundred thousand new cases are recorded yearly. Bandipo (1995) also observed that the victims of VVF in the Northern Nigeria are usually in their mid-teens that have been married at 12-13 years of age.

The cases of VVF in Ebonyi State is fewer compared to that of the Northern States in Nigeria which is as a result of the high rate of early marriage among the young girls who are below 18 years of age and this is one of the major causes of VVF. These women with VVF are often rejected by their husbands, families and communities impoverished and divorced. The consequence of this condition is that the victims are stigmatized because the society often develops negative attitude response to these women living with VVF (Bandipo, 1995). This study therefore examines the factors affecting the utilization of the VVF center in Ebonyi State.

Statement of the Problem

Nigeria has a Vesico vaginal rate of 350 cases per 100,000 deliveries at hospitals. This condition is so enormous, ravaging Nigeria women that the country's Federal ministry of women affairs and youth development has estimated that the number of untreated VVFs cases in Nigeria stands between 800,000 to 1,000,000.going by this report Nigerian women are under serious siege of VVF.((Anioke 2014).

The problem of VVF however is on the increase as the general development of the community worsens. Despite the availability of VVF repair facilities in Nigerian hospitals, for almost a century now the problem persists. This can be associated with the underdevelopment of the community health services structure and widespread poverty that has become ingrained in the lives of majority of Nigerians (Anioke, 2014).

One of the major handicaps that hinder the utilization of VVF centers for women living with this disease is the high rate of poverty which is amongst them since most of them have been abandoned by their husbands and families especially those who resides in rural areas. Some patients who wanted to visit the hospitals for repairs had to go back because they could not afford to pay ((Njoku 2006).

In some cases the sufferer may not be able to meet up with the certain conditions necessary to qualify one for the surgery. For example, it is necessary that the patient awaiting surgery must take 2-4 liters of clean water a day to help clean the bladder in preparation for the



surgery. With the low economic status of the women with VVF, affording that amount of water in addition to good food, pre and post operation is hardly achievable.

Professor Adeoye of the Obstetrics Fistula Center, Ebonyi State added that the efforts had been made by both federal government and non-governmental organizations to helps in reducing the scourge but despite these funding not much success had been achieved. According to him, more hands and sponsors are also needed for the VVF center Ebonyi State University Teaching Hospital (EBSUTH) to meet the increasing influx of patients who flock the center daily for treatment (Anioke, 2014).

Another problem is the high rate of illiteracy which is one prevailing factors among these women because their education is cut short by their parents as they are being married off at a very early age, with majority of them having little or no knowledge of the disease. So when inflicted with VVF, some of them may think it is a disease sent from the unknown to hinder creation while some see it as disease sent to punish women. With this rigid notion about the disease, these women thereby segregate themselves and suffer in silence rather than seeking help or treatment.

Vesico vaginal fistula has a major impact in society. It has created enormous fears among the women in the population especially those of child bearing age. The menace of this disease could be arrested or tackled if proper care is taken to understand the nature, causes and consequences of the disease. It is pathetic to observe that some women especially in the rural areas are left to labour for days without medical intervention, thereby creating a conducive atmosphere for the development of the disease.

Objectives of the Study

The specific objectives of this study are:

- 1. To identify the socio- cultural factors that affect the utilization of VVF center in Ebonyi state.
- 2. To identify measures that can be put in place to improve the utilization of VVF center in Ebonyi state.

Review of Related Literature

Utilization can be referred to the use of something especially for a practice purpose (0xford dictionary). That is to put to use especially to make profitable or effective use of something. The amount per unit population of healthcare services, the pattern of use of a service type of service in a specified time, usually expressed in rate per unit of population at risk for a given period (McGraw Hill, 2002). In healthcare, the consumption of services or supplies such as the number of office visits a person make per year with a healthcare provider, the number of prescribed drug taken or the number of days a person is hospitalized (Medical dictionary, 2009).



Therefore, 'utilization" is the use or consumption of something or services especially for a profitable or effective advantage of a person or people consuming the services. Then the public utilization of VVF center can be refer to as the general ideas of Vesico vaginal fistula and how these ideas affect the level of consumption of the service and also the number of visits to the center in Ebonyi State.

The World Health Organization (W.H.O) in 1947 described Fistula as the single most dramatic aftermath of neglected childbirth. Vesico Vaginal Fistula occurs when the blood supply to the tissue of the vaginal and the bladder is restricted during prolonged labour, the tissue die between these organs forming holes through which urine can pass uncontrollably. Fistula results in the constant leaking of urine through the vagina (Miller et al. 2005). Apart from continuous leakage of urine, VVF often leaves its victims with foetal demise, cervical and pelvic damages and neurological conditions such as foot drop, urogenital infection, kidney infection among others (Hilton, 2003).

An obstetric fistula is the breakdown of tissue in the vaginal wall extending into the bladder (Vesico vaginal fistula VVF) or rectum (Recto vaginal fistula RVF) or both. It is one of the maternal most degrading morbidities resulting from pregnancy and childbirth. Maternal morbidities are a result of VVF or RVF is particularly high in Nigeria. Out of an estimated 200 cases, 70 percent occurs in the Northern Nigeria (Kuti, 2006). The true incidence of Vesico vaginal fistula in Nigeria is unknown because most of the victims are not registered in hospitals, clinics or maternal centers due to fear or stigmatization and rejection. VVF has physical, physiological, social and economic effect on the victims (Njoku, 2006).

According to the United Nations Population Fund (UNFPA, 2005) Obstetric fistula is the most devastating of all pregnancy disabilities. While Njoku (2005) stressed that more than two million women in developing nations of the world are suffering from this condition in the world and about fifty thousand to one hundred thousand are recorded yearly. A national workshop on VVF organized by the national taskforce on Vesico vaginal fistula in collaboration with grassroots health organization in Nigeria in 1993, noted that there is no true survey of Vesico vaginal fistula in Nigeria particularly as regards to the areas of concentration but estimated that 200,000 cases are presented in existence and 10,000 new cases are seen annually (Njoku, 2006).

This condition comes with a lot of maltreatment and discrimination as well as stigmatization. For instance, the malodorous nature of the VVF exposes its victims to maltreatment and discrimination leading them to be casted away by their husbands, families and community. In some cases these women are not even allowed to share food at public events (Pope et al. 2011). Vesico vaginal fistula is a preventable condition and hence, the problem of VVF should not be allowed on a large proportion especially among women



Specific Socio-cultural Factors affecting the Utilization of VVF center

In a survey conducted at the VVF center of Murtala Mohammed Specialist Hospital Kano, Nigeria. Kano State which is located in the Northern part of Nigeria has a population of 9.4 million (NPC, 2006). The study was conducted by Dr Mohammed Kabir and his team of researchers. A structural questionnaire was used with a total of 120 respondents aged between 10-36 years with a median of 16 years.

The findings, showed that the socio-cultural factors that affect the utilization of VVF centers includes, cultural beliefs, poverty, illiteracy or unawareness about the disease and unavailability of healthcare services. The most prevalence factors were poverty and illiteracy. 78.3% of these women were illiterates and thus are ignorant of the fact that VVF is preventable. While 70-75% of these women do not utilize healthcare centers because of poverty. Economically, these women cannot work because they were shunned by the society.

Socio- Psychological Consequences of VVF on its Victims

Murphy (1981) reported that 77% of the Fistula patients with two or more years are living apart from their husbands. Earlier study by Ampofo, Omotara, Otu and Uchedo (1990) also corroborated Murphy's findings and reported that many marriages have been dissolved because of the condition. Kelly (1989) also noted "The fistula patient incontinent of urine (and sometimes also faeces) ashamed of her offensiveness is rashly disowned by her family and society and resorts to a life of begging".

The Vesico vaginal fistula patients are subjected to a life of isolation and humiliation, rejection by those who put them in the condition and several studies have confirmed this, Pendes (1989) remarked that obstetric fistula sufferers often remain isolated usually separated from their household work. Haile (1983) reported that most of the VVF patients in his study felt extreme shame at their condition. Odu (2000) noted that VVF leaves a woman physically, emotionally, financially and socially traumatized. Lack of support not only from husbands but the families and society will be the hardest consequences to bear psychologically. Some even commit suicide (Odu, 2000).

Theoretical Orientation

This paper is anchored on the Delay Models. The delay theory or model was propounded by Maine and Thaddeus (1994). This model talks about the three stages of delay that prevents people from utilizing the provided health care center. In each of these stages, it reviews the aims of identifying and understanding the delay in receiving treatment and corresponding barriers to accessing these centers for treatment. The delay is understood as comprising three stages or phases.



Phase one, is a delay in deciding to seek care by an individual, family or both and including factors associated with decision making, women's status, illness characteristics, distance from facilities, financial and opportunity costs, previous health system experiences and perceived quality of care. Phase two, comprises delay in reaching adequate care at a facility including the adequacy of the referral system and shortages of supplies equipment and untrained personnel as well as competence of available personnel.

Phase three, comprises delay in receiving adequate care at a facility including the adequacy of the referral system and shortages of supplies equipment and untrained personnel as well as competences of available personnel. This model is criticized for being too materialistic without putting into consideration the relationship of the victims with its society that is the non-victims.

The study adopted the Three Delay Model as its theoretical framework because it best explains what delays the sufferers of VVF from utilizing the VVF center and seeking fistula treatment. The first phase which emphasizes on them deciding to seek medical care, this can be related to the psychological effect of the illness on them such as them being stigmatized and shunned by the members of the society and their loved ones, cultural belief, their awareness about the disease and social effect of it which is how the society in which they reside perceive the illness.

The second phase stresses on these victims inability of identifying and reaching medical facility which is as a result of their financial status and the problem of transportation. The third phase is based on their disbelief of receiving appropriate and adequate treatment. These victims of VVF do not see the need of utilizing the VVF centers because of the shortage of health facilities in these areas and the quality of care given to them by the health workers. These build their doubt of ever being cure of the disease. This three delay model provides the theoretical context for understanding the barriers to accessing obstetric fistula care.

Materials and Methods

The design for the study is cross-sectional design. The cross-sectional design is perhaps one of the most important designs employed in the social sciences. The design is often identified with survey research, a method of data collection common in social sciences (Oranye, 2000). The area of study is the VVF center which is resides in Abakiliki, the capital of Ebonyi State. This center was established in year 2002 by the management of the Ebonyi State teaching hospital (EBSUTH). And in 2007, a pet project "Mother and Child Care Initiative (MCCI)" was put in place by the then first lady of Ebonyi State Mrs Josephine Elechi. This project helped in enhancing the VVF center and tackling its challenges Anioke 2014).



Ebonyi state is located in the Eastern part of Nigeria. it was created in October, 1996 from the old Abakiliki division of Enugu State and old Afikpo division of Abia State. Ebonyi State is in the South-Eastern part of Nigeria. it is inhibited and populated by the Igbos. Its capital and largest city is Abakiliki. Other major townships include Afikpo, Onneke, Edda and Onicha. It is known as the "Salt of the Nation" because of its large salt deposits. The state has 13 local government areas (LGAs). Namely: Abakiliki, Afikpo North, Afikpo South, Ebonyi, Ezza North, Ezza South, Ikwo, Ishielu, Ivo, Izza, Ohaozara, Ohaukwu, Onicha (NPC, 2006). The population of Ebonyi State is 2,176, 947(NPC, 2006). However, the target population of the study are women who are 13years and above. The sample size is 92 respondents drawn from the VVF center. Non probability sampling technique was adopted in selecting the samples for the study and this incorporates quota sampling technique. The non-probability sampling technique which is also known as purposive sampling in this type of sampling items for the sample are selected deliberately by the researcher. Data was collected through the use of questionnaire and in-depth interview (IDI) guide.

Findings/Results

Table 1: Socio-Demographic Characteristics of Respondents

Variable	Frequency	Percentage
Age		_
13-17	17	18.5
18-24	17	18.5
25-31	16	17.4
32-38	14	15.2
39-45	11	11.9
46-52	12	13.0
53 and above	5	5.4
Marital status		
Single	29	31.5
Married	44	47.8
Separated	4	4.3
Divorced	3	3.3
Widowed	12	13.0
Total	92	100
Religious affiliation		
Christian	81	88.0
Islam	2	2.2
African traditional religion	9	9.8
Total	92	100
Educational qualification		
No formal education	20	21.7
Primary	11	12.0
Secondary	49	53.3
Tertiary	12	13.0
Total	92	100
Occupation		
Civil servant	19	20.7
Politicians	9	9.8
Students	11	12.0
Business	26	28.3
Farmer	18	19.6
Unemployment	9	9.8
Total	92	100



The table shows that the respondents between the ages of 13-17 and 18-24 are 17 (18.5%), representing a higher percentage of the population while those between the ages of 53 and above were found to constitute the lowest segment of the respondents with just 5.4% of the entire population. In terms of marital status, the table shows that majority of the respondents are single while 3 (3.3%) of them are divorced. Distribution of respondents according to educational qualification shows that49 (53.3%) of the respondents are WAEC/SSCE holders while 11 (12.0%) of the m are FSLC holders. The table also shows that there are more Christians (88.0%) than practitioners of other religions in the study. The reason for this is attributable to the concentration of Christians in the south eastern part of Nigeria. Lastly, table 1 reveals that 26 (28.9%) of the respondents are business people while 19 (20.7%) of them are civil servants which also comprises of the health workers at the clinic.

Table 2: Socio-cultural factors that affect Utilization of VVF Center in Ebonyi State

Responses	Frequency	Percentage
Religious belief	9	9.8
Illiteracy	18	19.6
Cultural belief	7	7.6
Distrust in western	9	9.8
civilization		
Low income	18	8.7
Unawareness about the	16	17.4
disease		
Stigmatization	25	27.2
Total	92	100

The table above shows that a greater percentage of the respondents (27.2%) identified stigmatization as the specific socio-cultural factor that affects perception and utilization of the VVF center in Ebonyi State. This finding is supported by data from the IDI.

One of the interviewee stated:

One of the reason people are skeptical of disclosing whatever medical condition they have is because of the fear of stigmatization. The cases we have handled that got so bad before they were brought to us were cases of people not coming out to seek for help on time. Do you know that because of stigma, some of the patients confide in us to keep their conditions away from their husbands? (Female, married, 46, Matron at Ebonyi State VVF center)



Another interviewee who is a victim of VVF had this to say:

The fear of what people will say and how they will start seeing you is usually the beginning of the problem with conditions like this. I never imagined I could even come out to seek for help considering how afraid I was about people's views and perceptions. I was dying slowly until I summoned courage to seek help. I must tell you, it requires so much gut and support to forget about stigmatization and start looking for help (Female, Separated, 31, VVF victim)

Table 3: Respondents Views on the Reasons for the Non- Utilization of the VVF Center in Ebonyi Center

Responses	Frequency	Percentage
Distance of the center from the people	8	8.7
people	12	13.0
Poor healthcare services		
	19	20.7
Poor health worker-patient relationship		
•	16	17.4
Shortage of health workers		
	12	13.0
Low facilities		
	25	27.2
Not applicable		
	92	100
Total		

This able shows that majority of the respondents identified poor health worker-patient relationship as the reason for non-utilization of the VVF center in the State. The implication of this finding is that the victims of VVF are not willing to access the VVF center in the state because the health workers are not as friendly and accommodating as they would want them to be owing to the peculiarity and sensitivity of their condition. Data from the IDI disagrees with this finding. An IDI participant stated: the basic reason for non-utilization by patients is because they are afraid of being seen around the center as this would result to stigmatization for them (Male, 43, married, Doctor at Ebonyi VVF Center)

Another participant stated:

The victims are always scared of family member and friends about how they will react if they notice they are approaching the center for a condition like VVF. So, that consciousness of public perception continues to keep people away from visiting the center (Female, 53, married, matron at Ebonyi VVF center).



Table 4: Respondents views on Measures that can be employed to improve the Utilization of VVF Center in Ebonyi State

Responses Provision of adequate health care services	Frequency 32	Percentage 34.8
Intensive information dissemination by the media	16	17.4
Organizing of public lectures in local dialects	14	15.2
Improving the health facilities	19	20.7
All of the above	11	12.0
Total	92	100

The above table shows the measures that can be employed to improve the utilization of the VVF center in Ebonyi state by patients of VVF. From the table, majority of the respondents identified provision of adequate healthcare services. This indicates that provision of adequate healthcare services will improve the utilization of the VVF center in the state. This is in line with the data from the IDI participants.

One of the IDI participants stated:

We need more doctors and health facilities too. In this clinic we have just 2 consultants considering the fact that this is the only VVF center catering for the whole of South East. This will bring the healthcare services closer to the people. The reality today is that patients are not accessing the center the way they should this is because it is inadequately equipped to carter for their needs in this regard (Female, 53, married, matron Ebonyi state VVF center)

Another IDI participant stated:

The people should be enlighten through seminars and conferences in their indigenous dialects so they can understand the importance of accessing help as soon as they notice symptoms associated with VVF. Awareness should be created to against women with knowledge as regard the signs and symptoms associated with VVF (Female, 31, married, nurse at the VVF center Ebonyi state).



Discussion of Findings

The study found that there are socio-cultural factors that affect the public perception and utilization of the VVF center in Ebonyi state. Factors that were identified included illiteracy, cultural belief, distrust in western civilization, low income, religious beliefs, fear of stigmatization and ignorance about the cause of the disease. The finding is corroborated by that of Kabir (2010) in his study where he identified illiteracy, cultural belief and poverty as the factors responsible for non-utilization of the VVF facilities. The study also found that there are measures that can be put in place to improve the perception and the utilization of the VVF center in Ebonyi State. The major measure that should be put in place as the study found is provision of adequate healthcare services. Other measures that can be employed as the study found includes intensive information dissemination by the media, organizing of public lectures in local dialects and improving health facilities in the sector.

Conclusion

The study set out to understand the factors affecting the utilization of the VVF center in Ebonyi state. It identified the socio-cultural factors affecting the way VVF patients utilize the VVF center in Ebonyi state. Illiteracy, cultural belief, low income and stigmatization among others were identified as the factors that influence the way the people perceive VVF and their usage of the VVF center in the state. On measures to improve the utilization of the VVF center in the state, the study identified the provision of adequate healthcare facilities, organizing of public lectures in local dialects and improving the health facilities in the center.

Recommendations Based on the findings, the following recommendations are made:

- 1. There should be intensive dissemination of information by the media on issues surrounding VVF. This will enlighten the public adequately on the issue of VVF.
- 2. Public lectures should be organized in local dialects to educate the people on how to handle issues relating to VVF.
- 3. Health facilities in the Ebonyi VVF center should be improved. Government and relevant authorities including donor agencies should see this as an important area of concern.
- 4. Access to services at the VVF center should be made very easy and stress-free by those in charge.

References

- Ampofo,K et al (1990), Risk Factors of Vesico Vaginal Fistula in Maiduguri Nigeria; A case study tropical doctor, 138-139.
- Anioke, O. (2014). VVF center: The feats, the prospect
- Bandipo, (1995). "Research Report on Social Study of Patients with Vesico Vaginal Fistula (VVF)". Attending ABUTH Nigeria, 1-6
- Fasakin, G.J (2008). *Vesico Vaginal Fistula and psycho-Social Well-being of Women inNigeria*. An M.Sc Thesis, Department of Health and Society.
- Haile, A. (1983). Fistula a socio-medical problem. Ehiopian Medical Journal, 21 (2) 71-78.
- Hilton, P. (2003) Vesico Vaginal Fistula in developing countries; international journal ofgynecology and obstetrics 82, 285-295
- Kabir, M., et al (2003) *Medico-social problems of patients with Vesico Vaginal Fistula* in Muritala Mohammed Specialist Hospital, Kano State, Nigeria.
- Kees, W. (1994). The Surgical Management of Bladder Fistula in 775 women in Northern Nigeria.
- Kees, (2006). Prevalence of Obstetric Fistulae in Northern Nigeria. (Report).
- Kuti, O. (2001). *The Girl, bringing her out of the shadow of tomorrow's woman choicemagazine*, August, Vol. 1 No. 5, published by populationinformation and communication Bureau, Federal Ministry of Information.
- Mc Graw Hill concise dictionary of modern medicine (2002).
- Miller, S. et al. (2005). Obstetric Fistula: A preventable tragedy, *Journal of midwifery* and women's health 50, 286-294
- Murphy, M. (1981). Social consequences of Vesico Vaginal Fistula in Northern Nigeria: *Journal of Bio-social science* 13, 139-150
- National Population Commission (2009), 2006 population and housing, tables priory. Tables Vol. 1 Abuja: NPC



The Nigerian Journal of Medical Sociology

- Njoku, N.C. (2006). Perception of Women about the Effects of Vesico Vaginal Fistula on theirhealth in Kastina, Kastina State. AnM.Sc. Thesis, Department of Physical and Health Education.
- Odu, B. (2000): Vesico Vaginal Fistula, The causes and the psychological implication. Tropical issues, Ado Ekiti. Yemi Printing Press.
- Ojanuga D (1993). The medical ethics of the 'father of gynaecology', Dr J Marion Sims" Journal of Medical Ethics. 19 (1): 28–31. PMC 1376165. PMID 8459435.
- Pendes, V. (1989). In WHO report on Obstetric Fistula
- United Nation Population Fund (UNFPA). Fistula Forthnight 21stFeb- 6th March 2005 in Kastina State.