

## Characteristics of Patients with Obstetric Fistula in a Fistula Centre, Zamfara State, Northern Nigeria

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### Abstract

**Introduction:** Obstetric fistula is a highly stigmatized medico-social problem affecting mainly women of reproductive age group. It is commonly due to prolonged obstructed labour leading to necrosis of the urinary bladder and/ or rectum and subsequently to uncontrolled leakage of urine and or/ stool, disability and occasionally death. About two million women live with obstetric fistula worldwide with 400,000 to 800,000 in Nigeria. We conducted this study to describe the socio-demographic characteristics of patients with obstetric fistula, and determine the causes and types of obstetric fistula seen in Zamfara State, northern Nigeria

**Methodology:** This was a cross-sectional study. A total of 210 cases were enrolled and administered semi-structured questionnaire to obtain data on socio-demographic characteristics and obstetric history. We performed speculum examination screening procedure to ascertain the type of fistula. We analyzed data using SPSS software and Microsoft office Excel 2007.

**Results:** The median age at marriage and occurrence of fistula were 14years and 17years (IQR; 15.5-20.3) respectively. Of 210 cases, 18 (8.6%) had at least primary education and 178 (84.8%) were rural dwellers. Only 8 (3.8%) had antenatal care services (ANC), 144 (68.6%) laboured for more than 24hours and 145 (69.1%) delivered at home. The main reasons for home delivery were husband/family did not allow hospital delivery (44.8%), not customary (22.7%), no transport (21.4%) and care expensive (7.6%). 96 cases (66.2%) were assisted by Traditional birth attendants, 36 (24.8%) by health workers at home and 13 (9%) by relatives. Vesico-vaginal fistula cases were 203 (96.6%), recto-vaginal fistula 2 (1%) and combination of both fistulae 5 (2.4%).

**Conclusion:** Obstetric fistula is common among teenage women with poor educational status and barrier to health services. Zamfara state government should support girl child education and ensure access to quality health services. Behavioural change/modification and increase awareness of people on the dangers of obstetric fistula are essential.

**Keywords:** Obstetric fistula, home delivery, prolonged labour, Zamfara state, Nigeria

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### Introduction

Obstetric fistula (OF) is a term used to describe an abnormal connection between urinary bladder and vagina (vesico-vaginal fistula) and / or rectum (recto-vaginal fistula) due to complications arising during

labour.<sup>1</sup> Vesico-vaginal fistula (VVF) results in uncontrollable and continuous leakage of urine, whereas recto-vaginal fistula (RVF) leads to leakage of faeces which may be intermittent. Obstetric fistula is due to prolonged obstructed labour from whatever cause during childbirth leading to sustained

pressure from the presenting parts of the baby to the vagina wall, bladder and/ or rectum resulting to tissue damage, disability and some instances death of a woman.<sup>2,3</sup> Patients with obstetric fistula are often the lucky survivors of the traumatic prolonged childbirth, whom might be living without the joy of a baby that often times dies during labour.<sup>4</sup> They live a sorrowful and pathetic life due to stigmatization and are often divorced by their husbands, rejected by the society and seen as social outcasts in the community.<sup>2,5,6,7</sup> There are about two million women living with OF worldwide with 50,000 to 100,000 new cases annually and majority are living in sub-Saharan Africa.<sup>1,8</sup> In West Africa, three women develop OF per 1000 births.<sup>4</sup>

Nigeria has an estimated 400,000 to 800,000 women living with OF and 12,000 to 20,000 new OF cases annually with incidence of 2.11 per 1000 births<sup>1,9,10</sup> and Prolonged obstructed labour accounts for 65.9% to 96.5% of the cases.<sup>9</sup> In some states, efforts are being made to provide free maternal health services and increasing access to health care services by the communities to improve maternal health.<sup>9</sup> In November 2012, the Nigerian Federal Ministry of Health in collaboration with United Nations Population Fund (UNFPA) and Fistula Care project under United States Agency for International Development (USAID) launched a national strategic framework for the elimination of obstetric fistula in Nigeria 2011-2015.

Many studies were carried out on OF in other fistula centres in Nigeria, but not much is documented from Zamfara state. Our

study is aimed at describing socio-cultural characteristics of patients with obstetric fistula seen at Farida VVF Centre Gusau from January 2009 to December 2010, so as to come up with recommendations that will assist policy makers towards implementation of the strategic framework for the elimination of the fistula.

## **Methodology**

### Study Design

The study was a cross-sectional descriptive study on obstetric fistula patients in Zamfara state from January 2009 to December 2010.

### Study Setting

The study was conducted in Farida General Hospital Gusau, which is the VVF Centre in Zamfara state. The Hospital is one of 12 Centres in Nigeria that presently offer surgical and medical care services to obstetric fistula patients. It is a referral health facility from other VVF Centres and also training Centre for Doctors and Nurses on management of VVF patients with a capacity of 40 beds.

### Study Subjects

We enrolled all patients in the hospital diagnosed of having obstetric fistula following speculum examination (screening) procedure. Semi-structured questionnaire was administered to the patients and socio-demographic data, obstetric and labour history collected. Clinical data were also extracted from the patients' case note.

Data Analysis

Data were analyzed using SPSS software version 16 and frequencies were generated by univariate analysis.

Ethical Approval

Approval was obtained from the Hospital management and informed consent from the patients or their parents/ guardians.

**Results**

Table 1 shows that the patients were mainly teenagers lived with fistula for more than a year before accessing the health facility and the fistula occurred at first pregnancy.

**Table 1:** Baseline characteristics of obstetric fistula patients, Gusau, 2010 (n=210)

<b>Characteristics</b>	<b>Median (IQR)</b>
Age at first marriage (year)	14 (13-16)
Age at fistula occurrence (year)	17.1(15.3-20.3)
Duration of fistula (year)	1.5(0.7-2.1)
Parity at repair	1(1.0-2.0)

IQR = Inter-quartile range

Table 2 shows that 91.4% of the patients were illiterate, 84.8% rural dwellers and 31.4% divorce rate.

**Table 2:** Socio-demographic variables of obstetric fistula patients, Gusau, 2010 (n=210)

<b>Variable</b>	<b>Percent (%)</b>
Marital status	
Single	2.4
Married	66.2
Divorced	31.4
Education level	
None	91.4
Primary and above	8.6
Residence	
Rural	84.8
Urban	15.2

Table 3 shows that antenatal care attendance was very poor (3.8%), high rate of home delivery (69.1%) and delayed labour (68.9%). Husband/ family influence, cost of treatment and feeling that it was not necessary were the main reasons for not delivering at hospital. 66.2% of the deliveries were conducted by traditional birth attendants.

**Table 3: Obstetric and labour history obstetric fistula patients, Gusau (n = 210)**

Variable	Percent (%)
Attended antenatal care	3.8
Delivered at home	69.1
Labour >24 hours	68.9
Reason for non-delivery at hospital:	
Husband/Family did not allow	28.3
Hospital too expensive	21.0
No transport	7.7
Not necessary	21.0
Not customary	21.0
Assistant during delivery:	
Traditional birth attendant	66.2
Nurse /mid wife	24.8
Doctor	8.0
Others	1.0

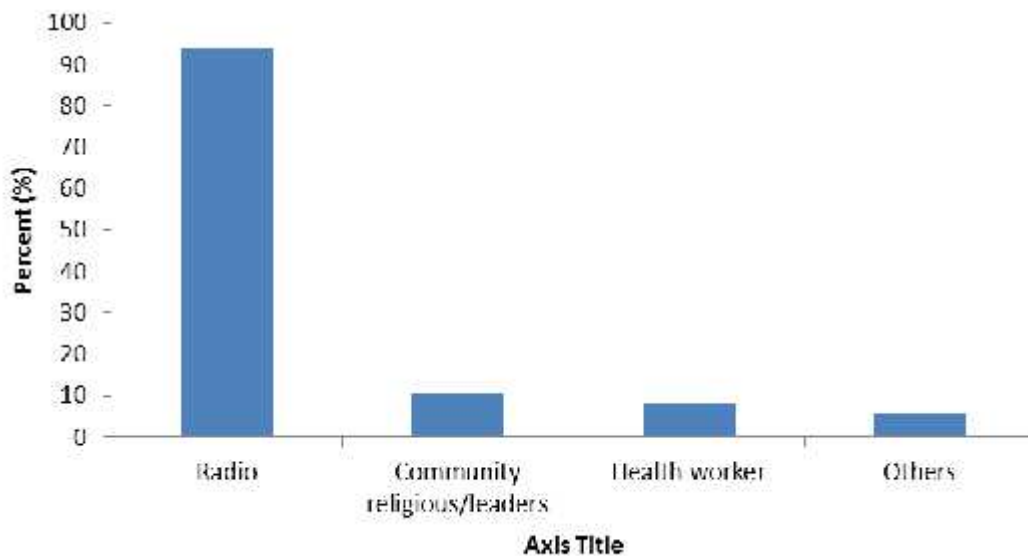


Figure 1: Sources of information on fistula treatment centre, Gusau (n=210). This shows that Radio was the main source of getting information on fistula repair centre

## Discussion

This study shows that about 70% of patient with obstetric fistula delivered at home and laboured for >24 hours under supervision of unskilled birth attendants. Our findings are similar to previous studies reported in Nigeria<sup>11,12</sup> and other sub-Saharan African countries.<sup>13,14</sup> The reasons for delay in accessing health care services were mainly non permission from the husband/ family, cost of health care services and some of them were because it was not customary. This is similar to the study finding from Jos<sup>15</sup>, although very few of them mentioned transport as a reason for the delay in our study which was a major season in the Jos study. In our study, husband's permission is very much respected both culturally and religiously before a wife could go out of her matrimonial home, though with exception in case of necessity like seeking for medical care. This underscores the importance of more sensitization of people especially on the right of women to access medical care which is a basic necessity to their well-being survival as human beings.

Our study also revealed that majority of the patients had no formal education. The knowledge level was similar to the other findings in Sokoto<sup>16</sup> and Kano.<sup>2</sup> This might be due to the fact that they dwell in rural areas with poor educational services. We found low divorce rate than Sokoto and Kano despite the fact that they share similar cultural and religious norms, but similar to the studies in Ilorin<sup>12</sup> and Maiduguri.<sup>17</sup> The patients were mainly teenagers with median age of 17 years at the time of fistula occurrence. Our findings are similar to those

from Sokoto<sup>16</sup>, Kano<sup>2</sup> in north western region and Waaldijk's series<sup>18</sup>, but contrary to the studies from Sagamu<sup>19</sup> and Port Harcourt<sup>20</sup> in the southern part of Nigeria that recorded higher age group among the patients. This portrays differences in the cultural and religious practices which permit early marriage in the north with poor access to maternity services. Moreover, Radio was the major source of information to fistula patients on fistula repair services. Therefore radio should be used in disseminating all key health messages to reach rural population especially. However, this study was limited by its being hospital based in setting, which did not capture other patients that could not get access to the fistula repair centres.

We advocate for community involvement especially sensitization and awareness creation of men, through radio on the importance of prompt seeking of health care services by women during labour and attendance of antenatal care. Government should ensure girl child education and provide affordable, quality and accessible health care services by provision of free maternal services, skilled personnel and encouraging deliveries in the health facilities.

## References

1. Federal Ministry of Health Abuja Nigeria National strategic framework for the elimination of obstetric fistula in Nigeria 2011-2012. (2012).
2. Kabir, M., Iliyasu, Z., Abubakar, I. S. & Umar, U. I. Medico-Social Problems Of Patients With Vesico- Vaginal Fistula In Murtala Mohammed

Specialist Hospital , Kano. *Annals of African Medicine*. 2 (2), 54–57 (2003).

3. Frajzyngier, V. *et al.* Factors influencing choice of surgical route of repair of genitourinary fistula, and the influence of route of repair on surgical outcomes: findings from a prospective cohort study. *BJOG: an international journal of obstetrics and gynaecology* 119, 1344–1353 (2012).

4. Ampofo, K., Otu, T. & Uchebo, G. Epidemiology of vesico--vaginal fistulae in northern Nigeria. *West African Journal of Medicine* 9, 98–102 (1990).

5. Frajzyngier, V., Ruminjo, J. & Barone, M. A. Factors influencing urinary fistula repair outcomes in developing countries: a systematic review. *American journal of obstetrics and gynecology* (2012).doi:10.1016/j.ajog.2012.02.006

6. R.J. Cook, B.M. Dickson, S. S. Obstetric fistula: the challenge to human rights. *International Journal of Gynaecology & Obstetrics* 87, 72–77

7. Lewis G, deBernis L. Obstetric fistula: Guiding principles for clinical management and programme development. *Integrated management of pregnancy and childbirth*. WHO Press, (2006).

8. The National Foundation on VVF. Report of rapid assessment of obstetric fistula in Nigeria. (2003).

9. Ijaiya, M. *a et al.* Vesicovaginal fistula: a review of Nigerian experience. *West African Journal of Medicine* 29, 293–8 (2010).

10. Tsui AO, Creanga AA, Ahmed S. The role of delayed childbearing in the prevention of obstetric fistulas. *International Journal of Gynaecology & Obstetrics* 98–107 (2007).

11. Orji EO, Adeloju OP, O. V. Correlation and impact of obstetric fistula on motherhood. *Journal of Chinese clinical medicine* 2, (2007).

12. Ijaiya MA, Aboyeji AP, I. Z. Epidemiology of vesico-vaginal fistula at University of Ilorin Teaching Hospital, Ilorin, Nigeria. *Tropical Journal of Obstetric and gynaecology* 19, (2002).

13. Roy KK, Malhotra N, Kumar S, Seth A, N. B. An experience from a Tertiary care Hospital. *Archive* 3, 144–147 (2006).

14. Muleta M. Fistula in developing countries: a review article. *Journal of obstetric and gynecology* 28, (2006).

15. Wall LL, Karshima JA, Kirschner C, Arrowsmith SD. The obstetric vesico-vaginal fistula: Characteristics of 899 patients from Jos, Nigeria. *American Journal of Obstetrics and Gynecology* 2004;190:1011-9

16. Ibrahim T, Sadiq AU, Daniel SO. Characteristics of VVF patients as seen at the Specialist Hospital, Sokoto, Nigeria. *West African Journal of Medicine* 2000;19:59-63.

17. Ampofo K, Otu T, Uchebo G. Epidemiology of vesico-vaginal fistulae in northern Nigeria. *West African Journal of Medicine* 1990;9:98-102

18. Waaldijk K. The management of fresh obstetric fistulas. *American Journal of Obstetrics and Gynaecology*. 2004; 795–799

19. Odusoga OL, Oloyede OAO, Fakoya TA, Sule-Odu AO. Obstetric Vesico-Vaginal Fistula in Sagamu. *Nigeria Medical Practitioner*. 2001; 39: 73–75.

20. Inimgba NM, Okpani AOU, John CT. Vesico-Vaginal Fistulae in Port Harcourt, Nigeria. *Tropical Journal of Obstetrics and Gynaecology*. 1999; 16: 49–51.

Conflict of interest: Nil