Birth and sorrow: The medico-social consequences of obstetric fistula in Ilesha, Nigeria

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ABSTRACT
Background: Obstetric fistula is an abnormal communication between the epithelium of female genital tract and the bladder and (or) the rectum. It is not just “a hole”; it affects every aspect of the life of the sufferers.
Objective: This study examined the etiology, psychosocial and medical consequences of obstetric fistula on the patients.
Methodology: It was a cross-sectional study with quantitative and qualitative data collection methods employed. Quantitative data collection was done by the aid of a structured interviewer-administered questionnaire while qualitative data collection was by focus group discussions (FGDs) and in-depth interviews (IDIs). The sample consists of eligible and consenting patients with obstetric fistula admitted for repair at the Wesley Guild Hospital, Ilesha between July 2017 and August 2018. Purposive sampling technique was used to select 86 patients.
Results: The mean age of patients was 28.7 years ± 7.5 (SD) with a divorce rate of 40%. Only 10% of them had their first marriage between ages 15 and 20 years. Prolong obstructed labor accounted for 55.8% of all the obstetric fistula in this study. The remaining were either following hysterectomy or cesarean section. Reported medical problems were dermatitis (60%), dyspareunia (25%), recurrent urinary tract infection (UTI) (10%), infertility (5%), and amenorrhea (5%). Socially, 45% felt ostracized, and 50% were economically impoverished by job loss. Some 56.6% respondents suggested that hospital delivery was a preventive measure, while 8% felt that avoidance of early marriage would prevent obstetric fistula.
Conclusion: Obstetric fistula is still a major reproductive health problem. Most of these patients understand the role of unsupervised childbirth in its development.
Key words: Medico-social consequences; obstetric fistula; prolong obstructed labour.

Introduction
Childbirth is a life-changing event, outcome of which is a pleasant and joyful experience for many mothers. On the other hand, it is a regretful and challenging period for others, mainly when serious illness, debilitating injuries, and death of the baby or mother or both occurred. About half a million women die yearly from the causes related to pregnancy and delivery, and for each maternal death, approximately

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How to cite this article: Fehintola AO, Fehintola FO, Adetoye AO, Ayegebusi EO, Alaba OA, Ajiboye AD, et al. Birth and sorrow: The medico-social consequences of obstetric fistula in Ilesha, Nigeria. Trop J Obstet Gynaecol 2019;36:442-7.

Received: 23-04-2019 Revised: 27-08-2019 Accepted: 07-11-2019
Published Online: 22-01-2020

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10–15 other women sustain severe morbidity including obstetric fistula. Thus, obstetric fistula (vesicovaginal fistula [VVF]) is the aftermath of a “near-miss maternal death.”

Female genital tract fistula (VVF or rectovaginal fistula [RVF]) is an “abnormal communication between the vagina and the bladder (or rectum) of a woman that results in constant leakage of urine and feces.” It is called obstetric fistula when it is related to childbirth or its management. There are many causes for obstetric fistula, including obstructed labor, cesarean section, hysterectomy, and difficult instrumental vaginal delivery.

Globally, over 2 million women are estimated to be living with obstetric fistula, and the majority is in sub-Saharan Africa and South Asia. The reported incidence rates in West Africa range between 1 and 4 per 1,000 deliveries. Between 100,000 and 1,000,000 Nigerians are living with obstetric fistula. Over 70,000 Bangladeshi women live with obstetric fistula, and about 9,000 new cases occur each year in Ethiopia. While obstetric fistulas have vanished from the industrialized world, despite the efforts of many charitable organizations, they continue to occur in epidemic numbers in developing countries. The number of obstetric fistulas in a region reflects the quality and the level of prenatal care delivered by the local health systems. In areas where health care (particularly maternal health care) is deficient or absent, the number of obstetric fistulas is likely to be high. Vesicovaginal fistula is a preventable disease but is prevalent among the less privileged and marginalized members of the population; the poor, young, illiterate girls and women in the remote rural areas of the world, where access to emergency obstetric care, family planning services, and skilled birth attendance are unavailable, and the available ones are poorly utilized.

Patients may complain of recurrent cystitis, perineal skin irritation due to constant leakage, vaginal fungal infections, and pelvic pain. VVF also causes a social stigma for those who are affected because of urine leakage and offensive odors. The condition is primarily an affliction of the poorest in the society and seals the fate of its victims, who often spend the rest of their lives alone and destitute. Without a doubt, social isolation and stigma often lead to psychological trauma, including depression, anxiety, and in some cases, suicide.

Victims of obstetric fistula are usually the lucky survivors of prolonged traumatic childbirth, but often without the joy of a baby as the baby invariably dies during childbirth. They become social outcasts. Divorced and rejected by families, they travel long distances in search of treatment, which often eludes them. They often have to take to begging or prostitution for survival.

This study was conducted to assess the medical and social impact of this condition among patients seeking at the obstetric fistula unit of Obstetrics and Gynecology Department of Obafemi Awolowo University Teaching Hospitals Complex, Wesley Guild Hospital Ilesha.

Methodology

The study was carried out at the obstetric fistula unit of Obstetrics and Gynaecology Department of Obafemi Awolowo University Teaching Hospitals Complex, Wesley Guild Hospital Ilesha, Osun State, South-West Nigeria between July 2017 and December 2018 among women with obstetric fistula.

It was a cross-sectional study. Both qualitative and quantitative data collection methods were employed. A purposive sampling methodology was used to select 86 eligible patients. We excluded those who refused to participate in the study. We obtained ethical clearance from the ethics and research committee of Obafemi Awolowo University Teaching Hospitals Complex, Osun state. During data collection, individuals were informed about the purpose of the study, confidentiality, and the right not to participate or withdraw at any time without any effect on their health or other services.

Quantitative data were collected using semi-structured facilitated self-administered questionnaires. This tool was designed based on findings from the literature. To ensure the validity of the instrument, face validity, content, and construct validity were applied.

The face validity provided that extraneous factors, and we removed ambiguous variables from the instrument.

The construct validity enables the researcher to interpret the information received from the questionnaire to infer under investigation.

The face validity, construct, and content validity was examined and ascertained by experts in the field to measure what it was supposed to measure.

Information on the educational status of the patient and the job description of the husband were also collected. This information was used for separating the patients into socio-economic classes.
In this study, classes 1 and 2 were grouped as upper social class, class 3 as a middle social class while classes 4 and 5 were grouped as the lower social class to aid data analysis. We administered the instrument in the Yoruba language after translation from English, appropriately trained interviewers conducted interviews.

Qualitative data were collected using 16 in-depth interviews (IDIs) and 8 focus group discussions (FGDs) (6 patients per group) with each session lasting 1 h.

Quantitative data entry was done using the Statistical Package for Social Science version 20 [IBM Corp. Released in 2011. IBM SPSS Statistics for Windows, Armonk, NY]. Descriptive analysis was used, among others, for the sociodemographic characterization of the respondents and other relevant variables (age, education, social status, etc.). Audio recordings of FGDs and IDIs were transcribed within 48 h of the interview to ensure data credibility. We then carried out content analysis.

Results

Results of quantitative data

The patient’s age ranged between 15 and 60 years, with a mean age of 28.7 years ± 7.5 (SD) and a divorce rate of 40%. Only 10% of them had their first marriage between ages 15 and 20 years. A majority of the patients, 40 (46.5%) were between 25 and 34 years of age. A majority of these patients, 56 (65%) belonged to the lower socio-economic class with no formal education and are mostly subsistence farmers and artisans.

The majority, 54 (62.8%), of the patients had their first marriage between the ages of 25 and 34 years while only 9 (10.4%) were married and living with their spouses at the time of the study.

Most of the patients 67 (77.5%) did not book for antenatal care during the index pregnancy preceding the development of the fistula while 55% experienced obstetric fistula in their first confinement.

The mean duration of constant urinary and or fecal leakage was 8.5 years ± 4.8 (SD). The average length of labor was 2.5 days (±1.8) with 85% perinatal loss as shown in Table 1.

Prolonged obstructed labor accounted for 55.8% of all the obstetric fistula in this study while the remaining were iatrogenic (either following hysterectomy or cesarean section). The mean age at the onset of the condition was 25 years ± 1.5 (SD) while 55 (64%) have had at least a previous failed repair. Only 24 (27.9%) delivered in a health care facility while others gave birth at home, in mission homes, or with the traditional birth attendants (TBAs) as shown in Table 2.

Table 3 shows that the most frequently associated medical problem among the patients is vulvar dermatitis (68.6%), dyspareunia (51.2%) and amenorrhea (26.5%) followed. There was associated infertility in (19.8%) of the patients.

About 50% of the patients were bitter about the condition they found themselves in. A third of the patients were psychologically depressed, while 37.2% live with shame leading to isolation. Only a minority (7.0%) were indifferent. Also, more than 75% of the patients suffered from adverse societal reactions, as shown in Table 3.

Table 1: Sociodemographic characteristics of the respondents

| Variables                  | Frequency (n=86) | Percentage (%) |
|----------------------------|-----------------|----------------|
| Age (in years)             |                 |                |
| 15-24                      | 15              | 17.4           |
| 25-34                      | 40              | 46.5           |
| 35-44                      | 18              | 20.9           |
| 45-54                      | 10              | 11.6           |
| ≥55                        | 3               | 3.6            |
| Mean (±SD)                 | 28.7 (±7.5)     |                |
| Age at marriage (in years) |                 |                |
| 15-24                      | 22              | 25.6           |
| 25-34                      | 54              | 62.8           |
| 35-44                      | 10              | 11.6           |
| Mean (±SD)                 | 25.54 (± 6.5)   |                |
| Age at onset of fistula (in years) |            |                |
| 15-24                      | 10              | 11.6           |
| 25-34                      | 48              | 55.8           |
| 35-44                      | 28              | 32.6           |
| Mean (± SD)                | 29.98 (±5.8)    |                |
| Parity at the onset of fistula |               |                |
| 1                          | 56              | 65.3           |
| 2                          | 16              | 18.4           |
| ≥3                         | 14              | 16.3           |
| Social class               |                 |                |
| Upper                      | 6               | 8.1            |
| Middle                     | 24              | 27.9           |
| Lower                      | 56              | 64.0           |

Table 2: Obstetric characteristics of the patients

| Variable                  | Frequency (n=86) | Percentage (%) |
|---------------------------|-----------------|----------------|
| Types of fistula          |                 |                |
| VVF                       | 60              | 69.8           |
| RVF                       | 16              | 18.3           |
| UVF                       | 8               | 9.3            |
| Combined (VVF and RVF)    | 2               | 2.6            |
| Etiology of fistula       |                 |                |
| Prolonged obstructed labor| 48              | 55.8           |
| Cesarean section          | 24              | 27.9           |
| Hysterectomy              | 14              | 16.3           |
| Place of delivery         |                 |                |
| At home                   | 13              | 15.1           |
| Mission home              | 15              | 17.4           |
| TBA centers               | 20              | 23.3           |
| Hospitals                 | 38              | 44.2           |

VVF, Vesicovaginal fistula; RVF, Rectovaginal fistula; UVF, Utero-vesical fistula; TBA, Traditional birth attendant
Theme 1. Perceived causes of vesicovaginal fistula

Across the focus groups, some participants reported that the condition could be as a result of being unlucky with pregnancy. Some said that obstetric fistula is a curse from the gods. Some of the subjects believed that it might have been because of their sins resulting in the gods punishing them. However, there was a general agreement among the participants that it is as a result of the delivery process as shown in Table 4. Some of the subjects lamented their suffering during labor that may have resulted in their problems. Participant 12 said, “I spent 9 days in labor. My family tried all traditional practices. However, I was getting tired, and I couldn’t bear the pain anymore. Finally, they took me to the health post, and I gave birth there. Only if I did not labor for that long, I would not have had this problem.”

Theme 2. Feelings about having the disease

Many subjects felt confused and could not explain the nature of the problem. They generally felt apprehensive and anxious. One of them put it this way “I was apprehensive and anxious. I could not sleep and had no appetite.” Another felt as if her world has come to an end and queried what kind of problem obstetric fistula could be? Many thought that they were alone with the condition and wondered why it must be them. During one of the IDIs, participant 13 said, “Why only me? Other women in our village delivered at home without any problem. I am tired of living.”

However, some participants felt differently. One said she did not feel too bad. “Though I felt bad initially, I encouraged myself because I saw it as one of the challenges that could come to human beings. I did not do any bad thing by getting pregnant for my husband. I believe that very soon, this problem will be over.”

Theme 3. Perceived social support available to the subjects

Poor social support was available to subjects with obstetric fistula. The majority of the patients were noticed to be abandoned by their spouses. Help from their relatives was mainly in the form of material provisions which was often insufficient. Appreciable support came from health workers in the form of encouragement and consolation.

A higher number of the subjects (82%) confirmed the lack of social support from their spouses. Some said that their husbands neglected them and refused to attend to their needs while others said that they were divorced and excommunicated.

Discussion

The highest frequency of obstetric fistula was recorded in the 25–34 years age bracket accounting for 46.8% of the patients with a mean age at onset being 29.93 years (±5.8). This age is in contrast to previous studies in which age of acquisition of obstetric fistula was in the early teenage years. The result is similar to the report of a recent study by Raji et al. where the median age at acquisition of obstetric fistula was above 20 years. Early marriage followed by early pregnancy

### Table 3: Medico-social consequences of obstetric fistula

| Medical complications                  | Frequency (n=86) | Percentage |
|----------------------------------------|-----------------|------------|
| Amenorrhea                             | 23*             | 26.7       |
| Vulva dermatitis                       | 59*             | 68.6       |
| Foot drop                              | 16*             | 18.6       |
| Infertility                            | 17*             | 19.8       |
| Dyspareunia                            | 44*             | 51.2       |
| Recurrent UTI                          | 56*             | 65.1       |

### Table 4: Patients’ views on the etiology, psychosocial consequences, and prevention of obstetric fistula from IDIs and FGDs

| Response                                              | Participants |
|-------------------------------------------------------|--------------|
| Possible predisposing factors to obstetric fistula:    | ++ ++ ++     |
| Being cursed/evil spirit                              | ++           |
| Will of God                                           | ++           |
| Early marriage                                        | +            |
| Urethra catheterization                               | +            |
| Lack of decision power                                | +            |
| Shortage of skilled attendants at birth               | ++           |
| Challenges encountered by fistula patients            | ++           |
| Powerlessness                                         | ++           |
| Prolonged obstructed labor as a traumatic experience   | ++           |
| Emotional challenges associated with fistula          | ++ ++        |
| Anger, sadness, and shame                             | ++           |
| Fears about the future                                | ++           |

IDIs: In-depth interviews; FGDs: Focus group discussions; Key: +++, Opinion of majority of the participants; ++, Opinion of about half of the participants; +, Opinion of some of the participants; -, Not mentioned
and childbirth has been blamed as major risk factors for this. Marriages in northern Nigeria take place more often than not either at or before puberty when the pelvis is not adequate for labor.

Despite the occurrence of teenage pregnancies in the developed countries, obstetric fistula is a rare occurrence. Therefore, early marriage or early pregnancy *per se* is not the cause of obstetric fistula, but unsupervised deliveries.

The majority of the patients in this study belong to the lower socio-economic class with primary or no formal education. This finding is consistent with that of Harrison[^17] in which he reported a strong correlation between illiteracy and incidence of VVF in Zaria. Education gives young women better access to gainful employment. It also reduces the rate of high-risk pregnancies, unwanted pregnancies, and abortions by increasing contraceptive use and reducing fertility. As girls stay in school longer, the average age at marriage tends to rise, as does the average age at first birth. Especially when family planning services are readily available and accepted by women.[^18]

Prolong obstructed labor from unsupervised delivery account majority of obstetric fistula in this study.

The majority of participants in this study did not have any form of antenatal care. Many of them also utilized traditional birth attendant’s (TBA) services in labor that lasted more than 2 days with subsequent huge perinatal losses. These findings are consistent with that of other previous studies.[^19-21] Vesicovaginal fistula could be prevented in developing countries if essential obstetric services are provided and utilized by all women. Getting rid of harmful traditional practices, for example, female genital cutting are eliminated in addition to girl-child education will also help.[^17]

It is worthy of note that the occurrence of obstetric fistula following elective cesarean section and cesarean hysterectomy is of significant proportion in this study. This finding is similar to recent studies carried out globally.[^22-24] Some of these procedures were carried out in government hospitals, including teaching hospitals, while the majority were from quacks. The root cause identified was the surgical error or unsafe surgical technique, and they confirmed that the rate of iatrogenic fistula is increasing. These studies concluded that urgent look into iatrogenic fistula is needed globally.[^22-24]

While approximately two-thirds of the deliveries in Nigeria are still largely unsupervised,[^25] some of the remaining one-third who assessed orthodox health care now suffer untold hardship from iatrogenic fistula.

It is a well-known fact that VVF is associated with medical and psychosocial complications. The quantitative analyses were in-line with the themes that emerged from the IDIs and the FGDs (qualitative). Most of the respondents abandoned traced the rejection by their spouses to inactive sexual life due to painful coitus and occasional leakage of urine even after surgical repairs. They expressed difficulties in coping due to lack of support (emotional and financial). They, therefore, tend to be withdrawn, frustrated, and resorted to spirituality and resigned to fate, living on charity and even begging. The plight of these unfortunate victims can be so devastating and dehumanizing that even when cured after surgery, some of them never regain their self-esteem and as such, shun social life. Economically they cannot work because they cannot stay in public and will not be employed. The patient thus becomes an economic burden on others. These social problems were also observed by Murphy *et al*. among VVF patients in Zaria.[^26] Arrowsmith *et al*.[^27] noted that women with obstetric fistula were stigmatized, while some were called “witches” who have eaten their children. A study that reviewed the causes, complications, and outcomes of vesicovaginal fistula in Nigeria reported that stigmatization, divorce, and social exclusion were frequent complications.[^23] Participants in this study during the FGD experienced lots of stigmatization in society.

This study has some limitations. These include the relatively small sample, the fact that we conducted it at a single center, and the reliance of the self-reported questionnaire. Furthermore, extensive multicenter studies are needed.

### Conclusion

This study has highlighted the fact that iatrogenic fistula contributes significantly to obstetric fistula and that the patients suffer physically, emotionally, and socially. The findings here mostly agree with the results of earlier studies except for the previous undue emphasis laid on early marriage as the etiology of the disease. The lack of skilled supervision and adequate obstetric emergency facilities are to blame. The medical and social consequences of the disease amount to agony and unqualified tragedy of its unfortunate victims while the disease is mostly preventable. There is the need to urgently look into training and retraining of doctors in surgical specialties in basic techniques to reduce surgical errors. Strengthening the task force to combat quackery in all ramifications in medical practice would contribute immensely to the decline in obstetric fistula incidence.
List of Abbreviation

OB = Obstetric Fistula
FGDs = Focus Group Discussions
IDIs = In-Depth Interviews
VVF = Vesico Vaginal fistula
IF = Iatrogenic Fistula
UTI = Urinary tract infection
TBAs = Traditional Birth Attendants.

Acknowledgments

We are using this opportunity to acknowledge useful contributions of Prof. Oladosu Ojengbede, of the Department of Obstetrics and Gynaecology, University College Hospital Ibadan, our mentor and trainer in fistula surgery of the study participants. We also appreciate Dr. Olorunfemi Ogundele of the community health department, Obafemi Awolowo University Teaching Hospitals Complex, Ile Ife, Osun State, Nigeria for his input in writing of this article.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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