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Demographic Characteristics of Patients Attending at National Fistula Centre with Vesicovaginal Fistula

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ABSTRACT

Background & objective: Obstetric fistula is one of the most dreadful complications encountered in obstetrics and gynaecology and constitute a major surgical challenge for the Gynaecologists. With advanced obstetric care, this fistula is rare in industrialized world but it is still a major health problem in developing countries like Bangladesh. Victims of fistula become physically cripple, socially outcast, psychologically traumatized. Surgical repair can mend this injury. This study describes the demographic characteristics of the patients of obstetric fistula attended at National Fistula Centre, Dhaka Medical College Hospital, Dhaka between January to December 2016.

Materials & Methods: This descriptive study was carried out in the National Fistula Centre of the Department of Obstetrics & Gynaecology, Dhaka Medical College Hospital, Dhaka from January 2016 to December 2016. The total number of obstetric fistula patients treated over the 1-year period (n = 50) were consecutively included in the study. Diagnosis was based on the patients' history and examination findings of attending physicians confirmed by the concerned specialist. Other types of fistula other than obstetric were excluded. The fistula was classified into vesicovaginal and rectovaginal fistula. The records were confirmed with the records that were kept by the only surgeons who operated on these patients during the requested period.

Results: Forty percent of the patients were 30 – 40 years old with mean age of the patients being 36.6(range: 13-70) years. Over half (54%) of the patients was illiterate, 34% primary level and 10% secondary level educated. All but a single patient was married. Over three-quarters (78%) of the patients were married and were living with their husbands. Majority (98%) was Muslim. The mean age of the patients at marriage was 14 years (range: 6 – 22 years and the mean age at first child birth was 16(range: 12 – 26) years and the mean age at occurrence of fistula was 21.2 (range: 13 – 33) years. One-fifth (20%) of the patients was divorced or separated. Nearly 40% of the patients' husbands remarried within 6 – 12 months after separation with their previous wives or have had a second marriage. Over 60% of the patients were in a stage of amenorrhoea and the rest were menstruating. Eight (16%) patients reported they have had used contraceptive sometimes in the past. Five out of 8 used contraceptives before the development of fistula and 5 started them using after the development fistula. Majority (86%) of the patients blamed their fate for development of fistula.

Conclusion: Obstetric fistula is a preventable and treatable condition, so no woman should suffer from this misery. Direct causes of fistula include premature child bearing, obstructed labour and limited access to emergency obstetric care. Some of the indirect causes, such as poverty, women's status in the society, and lack of education, prevent women from accessing services that could prevent the onset of such conditions

Key words: Obstetric fistula, vesicovaginal, rectovagional fistula, demographic characteristics.

ORIGINAL ARTICLE

Introduction:

Genitourinary fistula is the most dreadful complication encountered in obstetrics and gynaecology. An obstetric fistula is either a hole in the wall of the vagina connecting to the bladder (known as vesicovaginal fistula) or a hole to the rectum (known as a rectovaginal fistula). Over two million women worldwide are living with obstetrical fistula. The incidence of fistula has

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been estimated about 1-2 per 1000 deliveries worldwide, with an annual incidence of upto 50,000 to 100,000.[1] The incidence varies from country to country. World Health Organization estimates the prevalence of obstetrical fistula to be 0.3% of all deliveries. In Bangladesh 1.9% women are suffering from genitourinary fistula.[1] The obstetric fistula situation in Bangladesh first reported by UNFPA (United Nations Population Fund) and EngenderHealth showed that the number of women living with fistula is estimated to be about 17 per 10000 ever married women.

Obstetric fistula is considered as 'near miss death' and its prevalence could indicate the level of obstetric care in a country. Its prevalence is high in the rural setting.[2] In developing countries 90% of these fistulas are a consequence of neglected and obstructed labour as opposed to developed countries, where they are a complication of surgery or radiotherapy.[3] The anterior vaginal wall and the bladder become compressed between the fetal skull and the maternal symphysis, resulting in pressure necrosis, which gives rise to obstetric fistula.[4] Though prolonged, obstructed labour is the primary factor associated with obstetrical fistula, other major socio-cultural factors include poverty, illiteracy, low status of women, sex inequality, malnutrition, fertility, early marriage, health seeking behaviour and susceptibility to fistula, social and cultural issues to family planning and the lack of emergency obstetric care.[5] Illiteracy is also a major factor which determines kind of medical help to be sought. It deters people from attending hospitals particularly when hospital staffs are from an alien culture with differing traditions, custom and language.[6] Education gives young women better access to profitable employment. It also reduces the incidence of high-risk pregnancies and unwanted pregnancies and this may reduce the incidences of obstetric fistula.[7]

Women with obstetric fistula suffer from urinary incontinence which if not properly managed cause them to smell of urine. This continuous urine leakage makes them vulnerable to urinary tract infection, vaginitis and excoriation of the vulva, vaginal stenosis, secondary amenorrhea, possible future inability to carry a child even after repair of fistula. A low child survival rate has been shown to be related to obstetric fistula.[8,9] Obstetric fistulae are repaired through orthodox surgical correction. A successful repair is gauged by whether the woman is continent of urine and the operation could be by vaginal, transperitoneal or transvesical approach. Repairs are generally successful, depending on the extent of damage and duration of condition.[10] As sociodemographic and cultural issues act as determinants of healthcare seeking behavior, prevention and treatment of fistula depends mostly on socio-cultural characteristics of the community in which the women live. This study was, therefore, designed to get information on how the socio-cultural issues ensue the development of obstetric fistula and affect its treatment.

Materials & Methods:

This descriptive study was carried out in the National Fistula Centre (NFC), Dhaka Medical College Hospital, Dhaka from January 2016 to December 2016. The 20-bedded NFC was open in 2009. National Fistula Centre is the first-ever centre of excellence in the country aimed at providing better healthcare facilities for obstetric fistula patients. Obstetric fistula patients from all over the country come to this centre to avail the service. The centre has created an opportunity for specialized training, research and academic learning for doctors, nurses and paramedics who are dealing with fistula patients. The total number of obstetric fistula patients treated over the 1-year period (n = 50) were consecutively included in the study. Diagnosis was based on the patients' history and examination findings of attending physicians confirmed the concerned specialist. Other types of fistula other than obstetric were excluded. The fistula was classified into vesicovaginal fistula (when there was a hole in the wall of the vagina connecting to the bladder) rectovaginal fistula (when the hole in the wall of the vagina communicates to the rectum). The records were confirmed with the records that were kept by the only surgeons who operated on these

patients during the requested period. Data were collected on variables of interest using semi structured questionnaire. Data were analysed using SPSS (Statistical Package for Social Sciences), version 17 and were analysed by the descriptive statistics.

Results:

Forty percent of the patients were 30 – 40 years old followed by 24% 40 – 50 years, 20% 20 – 30 years and 12% < 20 years old. Very few were < 20 years and 50 or > 50 years old. The mean age of the patients was 36.6(range: 13-70) years. Over half (54%) of the patients was illiterate, 34% primary level and 10% secondary level educated. Over three-quarters (78%) of the patients was married. Majority (98%) was Muslim (Table I). Conjugal history of the patients reveals that mean age at marriage was 14 years with lowest and highest ages at marriage being 6 and 22 years respectively. The mean duration conjugal life was 20.4(range: 2-55) years. The average age at first child birth was 16(range: 12 – 26) years. The mean age at occurrence of fistula was 21.2 (range: 13 – 33) years. One-fifth (20%) of the patients was divorced or separated with median number of separation being 4(range: 1- 18). Nearly 40% of the patients' husbands remarried within 6 – 12 months after separation from their previous wives or have had a second marriage (Table II). More than 60% of the patients reported that they were in a stage of amenorrhoea, 30% regularly menstruating and 8% with irregular menstruation (Fig. 1). Asked about whether the patients have ever used any contraceptive methods in the past, 8(16%) patients reported they have had so. Of them 7(87.5%) used pill and 1(12.5%) used injectable method. Five out of 8 used contraceptives before the development of fistula and 5 started them using after the development of fistula (Table III). Fig. 2 shows the patients' opinion about the development of fistula. Majority (86%) of the patients blamed their fate for development of fistula. Very few patients blamed their husband (4%), mother-in law (4%) and society (6%) for the condition.

TABLE I. Distribution of patients by their demographic features (n = 50)

Demography	Frequency	Percentage
Age (yrs)		
< 20	6	12.0
20 – 30	10	20.0
30 – 40	20	40.0
40 – 50	12	24.0
≥ 50	2	4.0
Education		
Illiterate	27	54.0
Primary	17	34.0
Secondary	5	10.0
Above high school	1	2.0
Marital status		
Married	39	78.0
Unmarried	1	2.0
Divorced	2	4.0
Widowed	5	10.0
Separated	3	6.0
Religion		
Muslim	49	98.0
Hindu	1	2.0

***Mean age** = (36.6 ± 11.0) years; range = (13 – 70) years

TABLE II. Distribution of patients by their conjugal history (n = 50)

Conjugal history	Frequency	Percentage	Mean ± SD (range)
Age at marriage (yrs)	---	---	14.1 ± 2.6 (6-22)
Duration of married life (yrs)	---	---	20.4 ± 12.6 (2-55)
Age at 1st child birth (yrs)	---	---	16.1 ± 3.1 (12-26)
Age at occurrence of fistula (yrs)	---	---	21.2 ± 3.1 (13-33)
Divorced/separated	10	20.0	---
Number of separation	---	---	4 (1-18)
Husband remarried	19	38.0	---

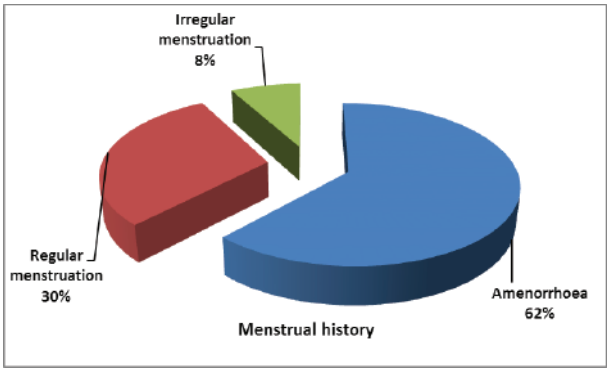

Fig 1. Distribution of patients by their menstrual history (n = 50)

TABLE III. Distribution of patients by their contraceptive history (n = 50)

Contraceptive history	Frequency	Percentage
Contraceptive taken ever	8	16.0
Type of contraceptives (n = 8)		
Pill	7	87.5
Injectable	1	12.5
Time when contraceptive taken (n = 8*)		
Before fistula	5	62.5
After fistula	5	62.5

*Total will not correspond to 100% for multiple response.

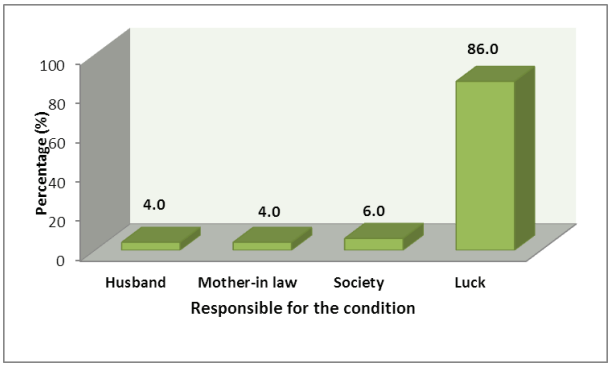

Fig 2: Patients' opinion about the development of fistula (n = 50)

Discussion:

Fistula is one of the devastating pregnancy-related morbidity. Reliable data on obstetric fistula are scarce.[11] The full extent of the problem has never been mapped. However, a cross-sectional study on maternal morbidity in Bangladesh conducted in 1996 in four Divisions, namely Dhaka, Chittagong, Rajshahi, Khulna reported that over 400000 women are suffering from vesico-vaginal fistula (VVF) and over 16000 from rectovaginal fistula (RVF).[12] Fistula usually occurs when a woman is in obstructed labor for days on without medical help leading to pressure necrosis and formation of a hole in the bladder and rectum or vagina, there are a lot of contributing factors predisposing its development and/or prevent its treatment. The contributing factors are similar all over the world. Women living with fistula in Bangladesh are usually younger (15-30 years), illiterate, poor and unaware that treatment is available, or cannot access or afford it.[12] Reconstructive surgery can mend this injury. But there is either inadequacy of curative facilities to mend it or there is adequate medical facilities available, but they are not trusted, or may be used only as a desperate last resort when damage is already far advanced.

In the present study nearly two-thirds (64%) of the patients attended at the clinic for fistula were between 30 – 50 years with mean age at presentation being 36.6 years. Begum[13] in her study demonstrated that nearly 65% of the patients with genitourinary fistula attended at a peripheral hospital between 20 – 35 years of age. The reason of higher age at presentation in the present study compared to that in Begum's study is that the former was carried out at Fistula Clinic, Dhaka Medical College Hospital, Dhaka, where obstetric fistula cases usually seek care as a last resort after all sorts of traditional and medical help failed, while the latter study was performed in a peripheral hospital, where the fistula cases usually present themselves shortly after the occurrence of the condition. Consistent with the findings, a study conducted in Nigeria showed that obstetrical fistula occurs usually in younger age group.[14] The lag time between the mean age at occurrence of fistula (21.2 years) and mean age at presentation at NFC in the present study was 15 years indicating a wide gap in communication between the patients and the service-providers.

Over half (54%) of the patients in the present study was illiterate, 34% primary level and 10% secondary level educated. Over three-quarters (78%) of the patients were living with their husbands, 20% were divorced/separated or widowed. Majority was Muslim. A community level study conducted on 132 VVF patients showed that about 54% of the respondents developed VVF as an outcome of their first pregnancy and none of them had a living child, and 39% fell in the age group 15-20 years. The same study revealed that majority (94.7%) of the respondents was Muslim over two-thirds (68%) were illiterate and over half (52%) were poor with a monthly family income up to Tk. 1000/ only. About 65% of the respondents had a home delivery assisted by TBA and 72% had a history of prolonged labor. Fifty six percent of respondents did not feel comfortable using the

health facilities of the nearby health clinic/hospital because of lack of privacy, objection from husband/family, and because of deliveries were carried out by male doctors.[15] Kullima and associates in an epidemiological study of VVF in Northeastern Nigeria reported that VVF constituted 1.4%, of the total gynecological admissions and 8.0% of the major gynecological surgeries performed during the period. Majority (76.2%) was over 20 years, with a peak-age specific prevalence rate of 33.8% at the 20-24 years age group and most patients belong to the social class IV and V. Over half (51.3%) of patients sustained the VVF during their first childbirth and in about 90% of the cases, prolonged obstructed labour was the leading cause. Ninety percent of them had no supervised antenatal care and had their deliveries at home under traditional birth attendant (TBAs). Seventy five percent had successful repair. Fifty percent were either divorced or neglected by their husbands.[16]

Conjugal life data revealed that the mean age at marriage was 14 years (range: 6 – 22 years) and the mean age at first child birth was 16(range: 12 – 26) years. One-third of the patients was divorced or separated. Nearly 40% of the patients' husbands remarried within 6 – 12 months of separation from their previous wives or have had a second marriage. More than 60% of the patients were in a stage of amenorrhoea and the rest were menstruating. Use of contraceptive to prevent unwanted pregnancy was inappreciably low. Majority of the patients blamed none but their fate for the development of fistula. Unsympathetic attitudes of husband and in-laws, expressed willingness of husband for taking another wife, disturbed socio-psycho-sexual life and deterioration of general health of the suffering patients and often break the harmonious relationship with their husbands, in-laws and the society as a whole. Gender imbalances, traditional beliefs and misconceptions all results in additional risk factors for obstetric fistula in Bangladesh. Low literacy levels, especially among women in rural areas, continue to perpetuate misconceptions and superstition. Women in general are not recognized as equal partners in relationships and marriages and there is still an expectation that women will have children because it is their duty rather than their choice or desire. As a result, women affected by obstetric fistula tend to remain invisible and the silence that surrounds their suffering is an additional burden that increases their difficulties at individual level as well as in their relationships with their partners, husbands, families and communities.

Conclusion:

Obstetric fistula is a preventable and treatable condition, so no woman should suffer from this misery. Direct causes of fistula include premature child bearing, obstructed labour and limited access to emergency obstetric care. Some of the indirect causes, such as poverty, women's status in the society, and lack of education, prevent women from accessing services that could prevent the onset of such conditions.

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