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Social Demographic Characteristics of Fistula Patients at Fistula Center of Rangpur Medical College Hospital, Rangpur, Bangladesh

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Abstract

Introduction: Fistulas are abnormal connection between two body parts that is not supposed to be there. Differenc types of fistulas can occur among both male and female, but obstetric fistulas are more common among women. Because of the physical, psychological, and social repercussions of urine leakage, people with Vesicovaginal Fistula become severely incapacitated. These fistulas are typically caused by hindered labor and trauma. The most prevalent kind of fistula is vesicovaginal fistula, which is a serious condition that can bring physical, emotional, and social issues for both the afflicted and their family. Fistulas are more common in underdeveloped nations. The study's goal was to look at the socio-demographic features of fistula patients in a specific area. ***Aim of the study:*** The aim of the study was to observe the social demographic characteristics of fistula patients of Rangpur region. ***Methods:*** This prospective descriptive study was conducted at the Department of Obs and Gynae, Rangpur Medical College Hospital, Rangpur, Bangladesh. The study duration was 2 years, from September 2006 to September 2008. A total of 50 patients were selected for the present study following the inclusion and exclusion criteria. ***Result:*** 60% of the patients were between the age of 21-30 years, and 38% were between 31-40 years. 62% of the precent study participants had low socio-economic status. 72% of the women were of smaller stature (≤145 cm). 84% of the patients had vesicovaginal fistula, 12% had mixed type of fistulas. 24% had associated complications. Successful outcome was observed in 84% of cases. ***Conclusion:*** The study showed that obstetric fistula is more common among the women of lower social economic class with low availability of medical facilities. Women of small stature are at higher risk of fistulas, and among the different types of fistulas, vesicovaginal fistulas are the most common.

Keywords: Fistula, Obstetric, Vesicovaginal.

INTRODUCTION

A genitourinary fistula is an abnormal connection between the genital and urinary systems that can be acquired or congenital and causes involuntary urine flow into the vagina [1]. A genitourinary fistula, also known as a urinary fistula, is an irregular channel or hole that connects the urine and genital structures. Although genitourinary fistulas can occur in males, this anatomical deformity is significantly more common in women [2]. In a larger sense, a fistula is the designation of a hole or channel in the human body that should not be there. Urinary fistula is one of the most unpleasant consequences that can occur following difficult vaginal births, obstetric and gynecologic operations. It has a significant influence on the social, psychological, and sexual lives of those who are afflicted. The etiology of genital tract fistula is multifactorial in nature [3]. Such fistulas can be caused by surgery, trauma, childbirth, miscarriage, infection or malignancies of the pelvic organs, and can also be a result of a combination of such cases [4]. Obstetrical cause and injuries during childbirth are the most prevalent causes of female

genital tract fistulas [5-7]. Obstetric or genitourinary fistula can be classified into different types of fistulas. A hole between the urinary tract and a women's genital tract is recognized as vesicovaginal fistula (VVF), while a hole between the intestines and the genital tract is classified as rectovaginal fistula. Both vesicovaginal and rectovaginal fistulas are linked with a persistently foul odor, which leads to social stigma and ostracization of the women who have them [8, 9]. Among the different types of fistulas, vesicovaginal fistula has the highest prevalence globally [10, 11]. The prevalence of fistulas are highest among the developing country, with paucity of medical resources and knowledge. This is quite apparent in many countries of sub-saharan Africa and South Asia, where the overall health systems are lacking, and appropriate medical treatment is not available to all [5, 12]. Obstetric fistula can cause various social and physical damages to the female population, including infertility, social isolation and even unemployment [13]. In developing countries, obstructed labour is a common problem for a variety of reasons. Women are economically underprivileged, illiterate, married early and have poor access to family planning and medical services. Teenage pregnancy is common and antenatal care unavailable to the vast majority of women in rural areas. Women with cephalopelvic disproportion or malpresentations may be in obstructed labour which leads to ischemic vascular injury from compression of the soft tissues between the fetal head and maternal pelvis. Ischemic tissue necrosis leads to the development of a genitourinary fistula in the puerperium, usually after 7-10 days [3]. The present study was conducted with the aim of observing the socio-demographic characteristics of fistula patients.

OBJECTIVE

General Objective

- To observe the social demographic characteristics of fistula patients

METHODS

This prospective descriptive study was conducted at the Department of Obs and Gynae, Rangpur Medical College Hospital, Rangpur, Bangladesh. The study duration was 2 years, from September 2006 to September 2008. A total of 90 patients had VVF among those who were admitted into the Gynae. Department of the study hospital. Among them, 84 were operated on, and 50 were selected for the present study following the exclusion and inclusion criteria from those admitted at the study hospital. Ethical approval was obtained from the study hospitals ethical review committee, and after taking consent from the patient, history was taken, clinical examination was done and follow-up were done till discharge of the patient. All the information was recorded in a pre-organized data collection sheet.

Inclusion Criteria

- Women of all age selected for local repair of VVF through vaginal route
- Patients having 2 or less fistulas
- Patients who had given consent to participate in the study.

Exclusion Criteria

- V.V.F operated through abdominal route
- Unable to answer the criteria question.
- Genito-Urinary fistula other than V.V.F
- Patients associated with RVF

RESULTS

Table 1: Age distribution of the participants (n=50)

Age group	Frequency	Percentage (%)
21-30	30	60.0
31-40	19	38.0
41-50	0	0.0
≥51	1	2.0

The age of the patient varied from 17 to 55 years. Majority of the patient belongs to the age group of 21 to 30 years (60%), followed by 2nd common group of 31-40 years of age (38%). No patients were from the age range of 41-50 year (0.0%). One patient was admitted at the age of 55 years (2%).

Table 2: Occupation of the study women (n= 50)

Occupation	Frequency	Percentage (%)
Housewife	49	98.0
Service	1	2.0

98% of the study participants were housewives, while only 2% were in the service industry.

Table 3: Socio-economic condition of the patents: (n=50)

Socioeconomic condition	Frequency	Percentage (%)
Low	31	62.0
Middle	18	36.0
High	1	2.0

62% of the precent study participants had low socio-economic status. 36% of the participants were from the middle socio-economic class, while only 1 participant was from high socio-economic condition.

Table 4: Height distribution of the patients (n = 50)

Height (cm)	Frequency	Percentage (%)
≤145	36	72%
> 145	14	28%

72% of the participants were 145 cm or less in height. 28% were taller than 145 cm.

Table 5: Distribution of patients by type of fistula (n=50)

Fistula type	Frequency	Percentage (%)
Vesicovaginal	42	84.0
Vesicocervical	1	2.0
Urethrovaginal	1	2.0
Mixed	6	12.0

An Overwhelming portion of patients (84%) had vesicovaginal type of fistula. 2% had vesicocervical fistula, 2% had urethrovaginal fistula, and 12% had mixed types of fistulas.

Table 6: Distribution of patients by the size of the fistula (n=50)

Fistula size	Frequency	Percentage (%)
Small (< 2 cm)	22	44.0
Medium (2 - 4 cm)	20	40.0
Large (5 - 6 cm)	8	16.0

44% of the patients had small (<2 cm) fistulas, while 40% had medium (2-4 cm) sized fistulas, and 16% of the participants had large (5-6 cm) fistulas.

Table 7: Distribution of participants by presence of scarring (n=50)

Scarring	Frequency	Percentage (%)
Absent	16	32.0
Mild	17	34.0
Moderate	9	18.0
Gross	8	16.0

Among the participants, 34% had mild scarring, 18% had moderate scarring, 16% had gross scaring, and 32% had no scarring.

Table 8: Final outcome of operation (n = 50)

Outcome	Frequency	Percentage (%)
Fully cured	42	84.0
Failed	8	16.0

Following the operation procedure, 84% of the patients were fully cured. Unfortunately for the remaining 16%, the surgery failed.

Table 9: Causes of operative failure (n = 8)

Causes	Frequency	Percentage (%)
Very Bad Case	6	75%
Postoperative Catheter problem (Drainage Problem)	1	12.5%
Postoperative infection	1	12.5%

Among the 8 failed cases of operative failure, 75% were because of the severity of fistula. 1 was due to post operative catheter problem, and the remaining 1 case was due to postoperative infection.

DISCUSSION

Women in impoverished countries suffer greatly from vesico-vaginal fistula (V.V.F). It is a lesion that causes significant social, home, and marital difficulties for a huge number of women in current culture. It is not only the patient's difficulties, but also the problems of those in her social circle. Currently, most studies have shown that the majority of genitourinary fistulas arise in underdeveloped nations as a result of obstetrical damage. Obstructed labor is the most prevalent type of obstetrical damage. Obstructed labor is more prevalent in rural places where

transportation is poor and access to medical treatments is restricted. Among genitourinary fistulas, V.V.F is the most common, and 90% of iatrogenic vesicovaginal fistulae are caused by gynecological procedures [14-16]. If such a fistula develops, these women's lives are shattered unless they can acquire access to curative medical procedures. Their spouses and family members find them disgusting due to their continual uncontrollable dribbling of pee. They are no longer able to live with their family. The majority of them eventually become socially shunned, despite the fact that they are otherwise healthy, competent young women. Their situation has a huge social and economic cost. The present study was conducted with the goal of observing the socio-demographic characteristics of fistula patients of Rangpur, Bangladesh. VVF can be treated surgically or conservatively, and the time of correction is debatable. According to the literature, there is no agreement on the definitions of late (2 to 4 months) and early (1 to 3 months) repair [17]. Among the participants of our study, majority were younger than 30 years of age. Other than 1 participant of age 55, no other participants were older than 40 years. Although obstetric fistulas can occur in young and old women alike, most studies show high prevalence of fistulas among the younger women, similar to the present study [12, 18]. This is largely due to difficulties or abnormalities while giving birth, though no definite cause can be identified for fistulas. Among the participants, 98% were housewives, while only 1 patient was a service holder. This was largely affected by lack of higher education among the female population, along with oppositions from the in-law's family. According to the social standards of Bangladesh, majority (62%) were from low socioeconomic class, while 36% were from the middle class and 2% were of high socioeconomic status. This high prevalence of low-socioeconomic-status patients among the participants was similar to the findings of other studies [19, 20]. This might be due to the lack of medical opportunities and benefits faced by those of low social and economic status. Height is an important index of pelvic adequacy & more generally reproductive efficacy. Women whose height are less than 140 cm are more likely to have different degree of cephalopelvic disproportion and require surgical intervention [21]. In the present study, 72% of the women had ≤145 cm of height on average, and only 28% of the participants had height of >145 cm. This was despite the average height of Bangladeshi women being 152 cm [22]. So it can be surmised that vesicovaginal fistulas are more common among women of lower height. Among the 50 patients with genitourinary fistulas of the present study, 84% were vesicovaginal, 2% were vesicocervical, 2% were urethrovaginal, and the remaining 12% were mixed fistula cases. Majority of the participants had small and medium fistula size, while 16% had large (5-6 cm) fistulas. The most difficult problem met with repair or fistula is the presence of much scar tissue, which can cause results to be unsatisfactory with regards of both closure and incontinence. In this series, 16 % of cases were grossly scarred, which contributed in failure of repair. All patients in this study had undergone local repair through vaginal approach. The trans vaginal1 approach seems to be faster, less morbid, with relatively minimum blood loss and also has advantage in terms of patient comfort. Among 50 (Fifty) patients repair was successful completely in 84% and 16% cases were failed. The success rate of the present study was similar to the findings of Homaira [23].

Limitations of The Study

The study was conducted in a single hospital with small sample size. So, the results may not represent the whole community.

CONCLUSION

The study showed that obstetric fistula is more common among the women of lower social economic class with low availability of medical facilities. Women of small stature are at higher risk of fistulas, and among the different types of fistulas, vesicovaginal fistulas are the most common.

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