



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3773772>Available online at: <http://www.iajps.com>

Research Article

**AN OBSERVATIONAL STUDY ON THE PROFILE OF
WOMEN'S WHO EXPERIENCED THE VESICOVAGINAL
FISTULA BECAUSE OF OBSTERIC TRUMA**¹Misbah Rahat, ²Dr Amira Batool, ³Dr Ammara Iqbal¹Gomal University Dera Ismail Khan²University Medical and Dental College Faisalabad³Gujranwala Medical College

Article Received: February 2020

Accepted: March 2020

Published: April 2020

Abstract:

Objective: To evaluate the characteristics of demography, social, cultural and environmental factors accountable for Vesicovaginal Fistula because of obstetric trauma.

Methodology: This observational research work carried out in the patients suffering from vesicovaginal fistula. The recruitment of these patients carried out in DHQ Hospital Dera Ismail Khan, in March 2019. We conducted the interview of 27 patients. We collected the information about the characteristics of demography of these patients, social, cultural and environmental factors and utilization of SPSS V. 20 carried out for the statistical analysis of the collected information.

Results: The average age of the patients was 25.37 ± 6.50 years. Average age of the patients at the time of 1st delivery was 18.55 ± 2.40 years. Most of the patients 81.50% (n: 22) were uneducated and 77.80% (n: 21) patients were from poor social and economic class. 70.40% (n: 19) patients were present with transport availability 24 hours in a day. 88.90% (n: 24) patients traveled from 1 to 5 hours to approach the health care facility.

Conclusion: Marriage and pregnancy at very early age, poor social and economic condition, illiteracy, and non-availability of the obstetric care in emergency condition by skilled professionals are the main causative factors for vesicovaginal fistula.

KEYWORDS: Vesicovaginal Fistula, Obstetric, Pregnancy, Causative, Pathology, Health Care.

Corresponding author:**Misbah Rahat,**

Gomal University Dera Ismail Khan

QR code



Please cite this article in press Misbah Rahat et al, A An Observational Study On The Profile Of Women's Who Experienced The Vesicovaginal Fistula Because Of Obsteric Truma., Indo Am. J. P. Sci, 2020; 07(04).

INTRODUCTION:

There is estimation by WHO that in the whole world greater than 500000 females die of different reasons of pregnancy. Most of the mortalities and disabilities occur among the poor persons of the countries which are under development [1, 2]. Vesicovaginal Fistula is the direct communication of pathology between vagina and urinary bladder mainly due to the long or obstructed labor, causing uncontrollable urine from vagina of females [3]. There is unknown prevalence of vesicovaginal fistula. There is an estimation that from one to two per thousand deliveries in whole world, a yearly prevalence of 50000 to 100000 [4]. In country of Pakistan, prevalence of vesicovaginal fistula is 3.0%, it is approximately 2% in province of Punjab [5]. The prevalence of vesicovaginal fistula is closely associated to maternal care in the duration of pregnancy and at the time of childbirth. Many physical, social, economic and political factors interplay for vesicovaginal fistula causation [6].

This complication is prevalent in the region where marriage at early age and pregnancy at very young age are common [7, 8]. There is social and cultural stigma accompanied with vesicovaginal fistula, along with uneasiness because of the continuous leakage of the urine. These types of patients are also rejected by their husbands, separated from their society. These patients also suffer from mental issues, status loss and dignity, unable to offer their prayers [9]. Many research works have been carried out on the success of surgeries of vesicovaginal fistula in our country Pakistan. However, there is little research works available on the social and cultural influences in vesicovaginal fistula causation. Current research work carried out on the patients who appeared with vesicovaginal fistula in DHQ Hospital Dera Ismail Khan in March 2019 to evaluate the characteristic of demography, social, environmental and cultural factors accountable for the development of vesicovaginal fistula.

MATERIAL AND METHODS:

This observational research work carried out on the patients suffering from vesicovaginal fistula because of obstetric trauma. We included these patients from DHQ Hospital Dera Ismail Khan in March 2019.

The repair of vesicovaginal fistula carried out by the specialists of the field. 70 patients got admission, among them 32 patients were present with urogenital fistula and other remaining patients were present with other issues of gynecology. Out of 32 patients, 29 patients appeared with vesicovaginal fistula. 27 patients were present with obstetric fistula whereas in 2 patients, the cause of fistula was the gynecological surgical intervention. We took the consent of the patients after describing them the purpose of this research work. We obtained the detailed history of the patients suffering from obstetric fistula. We collected the information about age, characteristics of demography, and reproductive parameters as education level of husband and patient, socio-economic status, age at marriage time and age at the time of first delivery, total children and amount of live births. A few females were present with the CNIC showing their original birth dates; hence it was not possible to know about their exact age. We categorized the patients with low social and economic class if their monthly income was less than five thousand rupees in a month.

Detail about the factors of environment as transport's availability, facility of health care and total distance from their home to facility were also collected. We used a questionnaire for the collection of information. SPSS V 20 was in use for the statistical analysis of collected information.

RESULTS:

At the time of surgical intervention, the age of youngest patient was 18 years and the age of the oldest patient was 45 years. The average age of the patients was 25.37 ± 6.50 years. The average age of these females at the time of marriage was 16.07 ± 3.50 years with a range from 10 to 24 years. Mean age at the time of 1st delivery was 18.55 ± 2.40 years and range of this age was 14 to 25 years. About 81.50% (n: 22) females never went to school whereas only 18.50% (n: 5) females were present with maximum 8 years of education. Regarding the education level of husbands, 63.0% (n: 17) were illiterate whereas 29.60% (n: 8) and 3.70% (n: 1) were present with 8 and 12 years of education correspondingly. Most of the females 77.80% (n: 21) were from poor social and economic class as described in Table-1.

Table-I: Demographic Profile of the Study Subjects (n=27)

Variables	No.	%	
Age of patient (in years)	18-24	15	55.6
	25-31	8	29.6
	>31	4	14.8
Age at Marriage (in years)	11 -14	7	25.9
	15-19	16	59.3
	20-24	4	14.8
Age at first delivery (in years)	14-17	9	33.3
	18-21	16	59.3
	22-25	2	7.4
Parity	1 - 2	17	63
	3 - 4	5	18.5
	>4	5	18.5
Education of women	No formal education	22	81.5
	5 years	3	11.1
	8 years	2	7.4
Education of husband	No formal education	17	63
	5 years	7	25.9
	8 years	2	7.4
	10 years	1	3.7
Socioeconomic status	Poor	21	77.8
	Middle class	6	22.2

37.0% (n: 10) patients were facing their first delivery whereas 63.0% (n: 17) females were Para from 2 to 9. Average parity number was 2.96 ± 2.36 . Average number of live births was 1.37 ± 1.60 . 92.60% (n: 25) females gave birth of stillborn baby whereas only 7.40% (n: 2) deliveries gave lives. 66.70 (n: 18) patients gave delivery through vagina at home whereas 33.30% (n: 9) gave delivery through Cesarean Section at hospital because of obstructed labor started at home.

Traditional birth attendants attended most of the patients at their homes. Among total population of

study, 70.40% (n: 19) patients were present with the availability of transport for 24 hours while 29.60% (n: 8) patients were having this facility in morning times only. 88.90% (n: 24) patients had to travel for 1 to 5 hours to reach the facility of health care while 3 patients had to travel for a long time. 59.30% (n: 16) patients approached hospital for vesicovaginal fistula repair within 1 year after the formation of fistula, whereas 25.90% (n: 7), 11.10% (n: 3) and 3.70% (n: 1) patient approached hospital within 1 to 6 years, 7 to 12 years and greater than 12 years respectively as described in Table-2.

Table-II: Environmental Factors Responsible for the Causation of Vesicovaginal Fistula

Factors	No.	%	
Availability of public transport	Round the clock	19	70.4
	AT morning time only	8	29.6
Availability of health care facility (In village or nearby village)	Primary health care center	6	22.2
	Secondary health care center	1	3.7
	Tertiary health care center	5	18.5
	No health care facility	15	55.6
Time required to reach health facility (in hours)	1 - 5	24	88.9
	6 - 12	1	3.7
	13 - 24	2	7.4
Time between formation of fistula and repair	Within 25 days	6	22.2
	1-3 months	6	22.2
	4-9 months	4	14.9
	1-6 years	7	25.9
	7-12 years	3	11.1
	>12 years	1	3.7

DISCUSSION:

Vesicovaginal fistula was an issue of past in the countries which are developed whereas it is a serious health problem for millions of young females in the countries with poor resources. Marriage at very early age and 1st pregnancy at young age are the important factors for the development of the obstetric fistula [10-13], this finding also supported by this current research work. Present research work found that majority of the females 81.50% (n: 22) were uneducated and those females who were educated 18.50% (n: 5) were present with only 8 year of education whereas the education level of husbands, 63.0% (n: 17) were not literate and only 33.30% (n: 9) were present with 8 years of schooling [14,15]. Most of the females 77.80% (n: 21) were from poor social and economic class. These results are similar with the other research works where illiteracy, poor social and economic class and non-urban location were the prompting factors for this condition [16,17].

In the countries with poor resources, deficiency of essential facilities of obstetric care or adverse utilization of these services of health care because of sociocultural norms for delivery at home [18], adverse seeking behavior for health care because low education level, poorness, travelling of long distances and deficiency in the facility of transport particularly at night times are the main causes of the obstructed labor which are the most important reasons for the development of the vesicovaginal fistula [19,20]. These reasons have been reported in this current research work supported this view. Among studied patients, it was discovered that 59.30% (n: 16) patients were passing their lives with leakage of urine from one year [21]. There is presence of similar findings in the study [22]. Restrictive and ignorant behaviors towards females and deficiency of awareness about the centers of health care fields with the facility of repair of vesicovaginal fistula may be the main reason of delayed approach for seeking of care.

CONCLUSION:

An obstetric fistula is the outcome of avoidable reasons. Delay in first pregnancy and marriage, increase in the formal education for males and females, provision of vital obstetric care for 24 hours in a day and basic facilities like smooth and good roads and availability of transport for 24 hours can help to prevent the occurrence of vesicovaginal fistula.

REFERENCES:

1. Yadav, P., Bathla, S., Sharma, T. C., Dhamija, P. A., Singh, P., & Agarwal, N. (2019). Clinical Profile, Surgical Approach and Outcome of

- Complicated Genital Fistulae in Urban Population of a Developing Nation. *The Journal of Obstetrics and Gynecology of India*, 1-6.
2. Hassan, M., & Nasir, S. (2019). Co morbidities associated with vesico vaginal fistula in patients managed in Maryam Abacha Fistula Hospital Sokoto, Northwestern Nigeria. *Tropical Journal of Obstetrics and Gynaecology*, 36(1), 44-48.
3. Razzaque, S., Nahar, N., Jesmin, S., & Akhter, H. (2016). Aetiological Factors of Urogenital Fistula and the Treatment Outcome of Patients with Urogenital Fistula Admitted in Rajshahi Medical College Hospital, Rajshahi. *TAJ: Journal of Teachers Association*, 29(2), 11-15.
4. Bodner-Adler, B., Hanzal, E., Pablik, E., Koelbl, H., & Bodner, K. (2017). Management of vesicovaginal fistulas (VVF) in women following benign gynaecologic surgery: a systematic review and meta-analysis. *PLoS one*, 12(2).
5. Delamou, A., Delvaux, T., El Ayadi, A. M., Tripathi, V., Camara, B. S., Beavogui, A. H., ... & Barry, T. H. (2017). Fistula recurrence, pregnancy, and childbirth following successful closure of female genital fistula in Guinea: a longitudinal study. *The Lancet Global Health*, 5(11), e1152-e1160.
6. Patel, D. N., Fok, C. S., Webster, G. D., & Anger, J. T. (2017). Female urethral injuries associated with pelvic fracture: a systematic review of the literature. *BJU international*, 120(6), 766-773.
7. Loue, V. A., Traore, M. S., Koffi, K. A., Adjoby, C. R., Kouame, A. D., Gbary, A. Y., & Boni, E. S. (2017). Obstetric Vesicouterine Fistulas: About 26 Cases Managed at Cocody's University Hospital (Abidjan-Cote d'Ivoire). *Journal of Gynecology and Obstetrics*, 5(1), 20-24.
8. WHO 2006? Obstetric fistula: Guiding principles for clinical management and programme development. Available at www.who.int/reproduction-health/docs/obstetric_fistula/index.html.
9. Kelly J. Ethiopia: an epidemiological study of Vesicovaginal fistula in Addis Abada. *World Health statistics report* 1995; 48(1):15-7
10. Nafiou I, Idrissa A, gharchaton A, Roenmeburg M, wheeless C, Genadry R. Obstetric Vesicovaginal fistula at National Hospital of Niamey Niger. *International J Gynecology and Obstetrics* 2007;99(1): S71- S74.
11. Mubeen RM, Naheed F, Anwar K. Management of Vesicovaginal fistula in urological context. *J Coll Physicians Surg Pak* 2007; 17(1): 28-31.
12. Melah GS, Massa AA, Yahaya UR, Bukar M, Kizaya DD, El-Nafaty AU. Risk factors for

- obstetric fistula in North-eastern Nigeria. *J Obstetrics and Gynecology* 2007; 27(8):819-823.
13. Kabir M, Iiyasu Z, Abubakar IS, Umer UI. Medicosocial problems of patients with Vesicovaginal fistula in Murtala Mohammed Specialist Hospital, Kano. *Annals of African Medicine* 2003; 2: 54-57.
 14. Ojanuga Onolemhemen D, Ekwempu CC. An investigation of sociomedical risk factors associated with vaginal fistula in northern Nigeria. *Women Health* 1999; 28(3):103-16
 15. Emembolu J. The Obstetric fistula: Factors associated with improved pregnancy outcome after successful repair. *International J Gynecology and Obstetrics* 1992; 39:205-212.
 16. Myer L, Ascher Walsh CJ, Norman R, Idrissa A, Herbert H. Commonalities among women who experienced Vesicovaginal fistula as a result of obstetric trauma in Niger. Results from survey given at the National Hospital fistula centre, Niamey, Niger. *Am J Obstet Gynecol* 2007; 197:90e1-90e4.
 17. Loue, V. A., Traore, M. S., Koffi, K. A., Adjoby, C. R., Kouame, A. D., Gbary, A. Y., & Boni, E. S. (2017). Obstetric Vesicouterine Fistulas: About 26 Cases Managed at Cocody's University Hospital (Abidjan-Cote d'Ivoire). *Journal of Gynecology and Obstetrics*, 5(1), 20-24.
 18. Watt, M. H., Mosha, M. V., Platt, A. C., Sikkema, K. J., Wilson, S. M., Turner, E. L., & Masenga, G. G. (2017). A nurse-delivered mental health intervention for obstetric fistula patients in Tanzania: results of a pilot randomized controlled trial. *Pilot and feasibility studies*, 3(1), 35.
 19. Nannyonga, B. K., & Singull, M. (2020). Impact of health education on knowledge and behaviours toward obstetric fistula among women of reproductive age in Uganda. *Applied Mathematics and Computation*, 372, 124997.
 20. Maheu-Giroux, M., Filippi, V., Maulet, N., Samadoulougou, S., Castro, M. C., Meda, N., ... & Kirakoya-Samadoulougou, F. (2016). Risk factors for vaginal fistula symptoms in Sub-Saharan Africa: a pooled analysis of national household survey data. *BMC pregnancy and childbirth*, 16(1), 82.
 21. Jarvis, K. D. (2016). An Exploration of a Culture of Reintegration with Women Who Have Experienced Obstetrical Fistula Repair in Northern Ghana, West Africa.
 22. Rwhura, O. C., & Mbangala, B. (2017). Information Professionals' Role in Enhancing Awareness Creation towards Obstetric Fistula Treatment in Rural Areas of Tanzania. *Library Philosophy and Practice*, 1.