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Retrospective Study of Obstetric Fistula among Clients Admitted To Fistula Unit Jimma University Specialized Hospital, Oromia Region, South West Ethiopia

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Abstract

Background: Obstetric fistula is an injury that occurs during prolonged and obstructed labor causing tissue damage to organs inside the pelvis and result in urinary and fecal incontinence or both. It remains a major public health problem in areas where unattended obstructed labor is common.

Objective: To assess obstetric fistula among women admitted to Jimma University Specialized Teaching Hospital (JUSH), Gynecology ward.

Methods: Hospital based one year retrospective study was conducted in JUSH from September 03, 2016 to September 15, 2016. A total of 93 patients were admitted to JUSTH fistula unit from September 11, 2014 to September 10, 2015 out of which 86 patients were included in the study because of lost chart and incomplete documentation. The data was collected using structured questionnaire. The cards of patients were collected from Gynecology ward with fifth year five medicine students. Then the data was summarized and analyzed using SPSS software, result is displayed using graphs and texts.

Result: A total of 86 patients chart who were admitted to fistula unit of JUSH from September 11, 2014 to September 10, 2015 were included in this study. Out of this 68 (79.1%) developed Vesico-vaginal fistula (VVF), 13 (15.1%) developed Recto vaginal fistula (RVF) and 5.8% developed Recto vesico-vaginal fistula (RVVF). Majority of the respondents were from rural area and 65.1% of them were illiterate. Most of the patients were in the age group of 18 to 24 years, 65.1% of them were primparous and 60.5% had no regular antenatal care follow-up. About 61.6% of the obstetric fistula cases were due to obstructed labor followed by prolonged labor accounting for 34.9%.

Conclusion and Recommendation: Most of the women with obstetric fistula are from rural areas and are illiterate so efforts should be made to increase educational status especially in rural areas so that to improve maternal and child health.

Keywords: Obstetric fistula; Incontinence; Public health; Gynecology; Antenatal care

Background

Obstetric fistula is an injury that occurs during prolonged and obstructed labor causing tissue damage to organs inside the pelvis and resulting in urine and fecal incontinence or both. Obstetric fistula remains a major public health problem in areas where unattended obstructed labor is common [1]. Fistula is a medical condition in which an abnormal communication between the urinary (ureters, bladder, and urethra) and the genital (uterus, cervix, and vagina) systems after severe or failed child birth, when adequate medical care is not available [2]. It is considered as disease of poverty because of its tendency to occur in women in poor countries who do not have health resources comparable to developed nations [3]. Until the end of the 19th century and even in early years of 20th century fistula of birth canal from obstetric cause were common diseases (disasters) in Great Britain Europe and USA [4]. Nowadays obstetric fistula becomes a history in developed world even if it occurs it is due to other factors like surgical error or Crohn's Disease [5]. The improvement in the general obstetric care and universal access to emergency obstetric care helped to eliminate obstetric fistula from North America and Europe [6]. In developing countries, women who are affected by obstetric fistula do not necessarily have full agency over their bodies or their households rather their family members or their husbands have control in determining the health care that the women receive [7]. Like many other women in remote areas of poor countries, most women who develop fistula give birth at home without assistance from skilled birth attendants [8]. According to World Health Organization (WHO) report, obstetric fistula affects about 50,000 to 100,000 women of the glob every year. It is forecasted that more than 2 million young women are affected with untreated obstetric fistula in Asia and Sub-Saharan Africa [9].

Others estimate show that as many as 130,000 new cases of fistula are occurring annually in Africa [10] and globally up to 3.5 million women may believing with the condition [11]. Women who are living with fistula very often experiences stigmatization and discrimination and become social outcasts. This not only has individual psychological

and social consequences but also it causes women living with fistula often to be hidden to seek treatment and thus more difficult to reach even if repair services are available [12]. Access to a health institution is a major problem of fistula patients, chiefly because of long distance to reach care, poor transportation and lack of money and because of parturition is regarded as something that can be managed at home [13]. Typical fistula patients in Ethiopia are young girls who are married in their early teens to farmers, to illiterate or no education. The girls are given heavy task at home and poorly educated. They have no access to health institution during pregnancy and labor and helped during labor at home. Then deliver dead baby after being in a labor for days. Although obstructed labor kills many of these girls, the survivors develop urogenital fistula because they excluded from their social life they often whish death [13]. Maheu-Giroux and colleagues reported that more than 110,000 women in Ethiopia currently have vaginal fistula on a meta-analysis conducted on prevalence of vaginal fistula symptoms in Sub-Saharan African countries [14]. The finding of this study will help policy makers and health planners for designing strategy for improvement of maternal health towards the abolishment of obstetric fistula through provision of prenatal and intra-natal quality care. The information identified by this study may also services as a baseline for subsequent research that deal with obstetric fistula.

Method and Materials

The study was conducted at Jimma University specialized teaching Hospital (JUSH) Gynecology ward, located at 335 km south west of Addis Ababa. It is a referral teaching hospital providing services for approximately 15,000 inpatient, 160,000 outpatients, 11,000 emergency cases, 4500 deliveries in a year from catchment area of 15 million people. The study was conducted from September 03, 2016 to September 15, 2016. Retrospective cross-sectional study design was carried out (record review). All records of women with obstetric fistula who were admitted to JUSH fistula unit of gynecology ward during the study period were reviewed. Accordingly, 93 records of women with obstetric fistula who were admitted to fistula unit of gynecology ward in JUSH from September 11, 2014 to September 10, 2015 extracted. Variables included during the review were fistula type, age, ethnicity, marital status, educational status, religion, parity, ANC follow-up, number of ANC follow-up, age at first marriage, age at first delivery, number of children, place of delivery, birth attendant, birth outcome, urine incontinence, faecal incontinence, duration of labor, residence, occupation. After preparing a structured data collection format the whole card of Obstetric fistula patients was reviewed from Gynecology department by year five medical students. For this purpose the card number in the registration book of admission in the Gynecology ward was used. After selecting the cards the structured format was filled.

Data Analysis and Quality Assurance

Data was analyzed with SPSS and the result is displayed using tables, graphs and texts. A brief training was given to data collectors on how to extract the necessary information from the cards. The principal investigator had supervised each data collector during the data collection to ensure the quality of data by checking filled formats for their completeness and consistency on daily basis.

Results

A total of 93 women were admitted to JUSTH gynecology ward from September, 11 2014 to September, 10 2015. Out of which 86 women's chart was used because of incomplete documentation and lost chart. Majority of the respondents (79.1%) were from rural area and illiterate (65.1%). Most of the patients are in the age group 20-24 years (57%) and 47 (54.7%) of them are married. Age at first marriage for 69% of the respondents is between 15 and 19. The mean age of the women at the time of study was 25 years. Majority of the respondents (65.1%) were housewives. Among the reviewed records 68 (79.1%) developed VVF (Vesico vaginal fistula), 13 (15.1%) developed RVF (Recto vaginal fistula) and 5 (5.8%) developed RVVF (Recto-vesico vaginal fistula) (Table 1).

Variables		No.	Percentage (%)	Variables		No.	Percentage (%)
Place of residence	Urban	18	20.9	Age	15-19	4	4.7
	Rural	68	79.1		20-24	49	57
	Total	86	100		25-29	28	32.6
Ethnicity	Oromo	50	58.1		30-34	5	5.8
	Amhara	13	15.1		Total	86	100
	Kaffa	20	23.3	Number of children	0	47	54.7
	Tigre	3	3.5		1	21	24.4
	Total	86	100		2	4	4.7
Religion	Orthodox	32	37.2		03-04	14	16.3
	Muslim	46	53.5		Total	86	100
	Protestant	8	9.3	Educational status	Illiterates	56	65.1
	Total	86	100		Can read and write	14	16.3
Age at first marriage	15-19	59	69		Primary	8	9.3

	20-24	27	31		Junior	4	4.7
	Total	86	100		Secondary	4	4.7
Marital status	Married	47	54.7	Occupation	House wife	56	65.1
	Divorced	39	45.3		Merchant	14	16.3
	Total	86	100		Daily labor	16	18.6

Table 1: Socio-demographic characteristic women with obstetric fistula at JUSTH, Jimma Zone, Oromia Regional States, South West Ethiopia September 11, 2014 to September 10, 2015.

The finding of this study shows that 60.5% of the respondent had no ANC follow-up. Among the respondent 50% women were given birth at home and the rests delivered at health institutions. About 85.6% were in labor for more than two days and 51.2% of the women were assisted by non-trained birth attendant. Only 44.2% of the women were assisted by health professionals during delivery. Regarding the outcome of the labor 58.1% were still birth and 9.3% died within 7 days of birth (Table 2).

Variables		No.	Percentage (%)	Variables		No.	Percentage (%)
ANC follow-up	Yes	34	39.5	Birth attendant	NTBA	44	51.2
	No	52	60.5		TBA	4	4.7
	Total	86	100		Nurse/midwife	18	20.9
	Two	6	17.6		Doctors	20	23.3
	Three	18	52.9	Birth outcome	Total	86	100
	Four or more	10	29.4		still birth	50	58.1
	Total	34	100		live birth	28	32.6
Place of delivery	Home	43	50		Died within 7 days	8	9.3
	Health centre	22	25.6		Total	86	100
	Hospital	21	24.4	Mode of delivery	Svd	53	61.6
	Total	86	100		C/S	5	5.8
Duration of labor	1 day	21	24.4		Instrumental delivery	28	32.6
	2 day	42	48.8	Parity	Nullipara	1	1.2
	3 and above days	23	26.7		Primipara	56	65.1
	Total	86	100		Multipara	29	33.7

Table 2: Distributions of women with obstetric fistula according to their ANC follow-up, Place of delivery, duration of labor at JUSTH, south west Ethiopia September 11, 2014 to September 10, 2015.

Discussion

This study shows that majority of fistula cases were from rural areas which is similarly to the finding of EDHS (Ethiopian Demographic and Health Survey) 2005. According to EDHS (2005), 75% of the women suffering from obstetric (fistula) reside in rural areas [1]. Additionally this study shows that 57.0% of the respondents were in age groups 18-24 years. This is different from the study conducted in Gondar public hospital which had shown that 50% of women with obstetric fistula were in age group 15-20 years [15]. This variation might be due to application of Ethiopian civil code for marriage of female and improvement of girls' educational status. About 65.1% of women with obstetric fistula were illiterate. It is almost similar with EDHS 2005 report which indicates that 50.9% of women with obstetric fistula had no formal education [16]. Similarly a study conducted in Zambia which had shown that 50% of women with obstetric fistula were illiterate [10]. According to the finding of this study, 69% of women with obstetric fistula were under 19 years when they were married. Similarly a study conducted in Zambia and Nigeria showed that 50-80% of women with obstetric fistula were under age of 20 year when they get married [17]. This indicates that the problem of early marriage is still present. Out of the total respondent 60.5% of women with obstetric fistula had no ANC follow-up which is almost similar with EDHS 2005 which indicate 55.6% fistula victims had no ANC follow-up [15].

This study revealed that 50% of women with obstetric fistula gave birth at home. In a conducted in Niger, most women with obstetric fistula give birth at home [8]. This is different from EDHS, 2005 which shows (86%) women with obstetric fistula gave birth at home [17]. This might be due to the awareness created by government and health sector about the importance of giving birth at health institution through media and health extension worker. Another study in Zambia on 259 women with obstetric fistula at Monze Mission hospital found that 67.5% women with obstetric fistula delivered at home [10]. This study also revealed that about 65% of the respondents were prim parous. Majorities of studies in Africa also showed that 50-80% of women with obstetric fistula were primiparous and this percentage is as high as 85% in Ethiopia and Sudan [18]. The proportion of prim parous who suffers from fistula in Asia varies from about 30% in some parts of India and 85% in Pakistan [15]. This might be due to immaturity of pelvic organ and presence of untested pelvis in primigravidas. Even though some operation which are used to terminate difficulty of labor may cause obstetric fistula, as many studies showed majority of them were caused by obstructed and prolonged labor [15,19]. This study showed that 61.6% of cases were caused by obstructed labor which was less when compared to study conducted in Addis Ababa Fistula Hospital in which reported 97.4% [11]. The rationale behind this might be the improvement of obstetric care and expansion of emergency obstetric care.

Ethical Consideration

A formal letter of permission was written by JU student research program to JUSH to get permission and support during data collection. The objectives of the study were briefed to administration of the hospital and Gynecology ward. None of the information on the cards was used for purpose other than the study mentioned. No personal identifiers were recorded during the review or data collection. After the questionnaires filled the cards were returned to their original place.

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