

ASSESSMENT OF OBSTETRIC FISTULA AND ITS CONTRIBUTING FACTORS AMONG WOMEN ADMITTED TO JIMMA UNIVERSITY SPECIALIZED TEACHING HOSPITAL GYNECOLOGY WARD, JIMMA TOWN, JIMMA ZONE, OROMIA REGIONAL STATE,SOUTH WEST ETHIOPIA.

BY: - GOSAYE BELACHEW

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JIMMA, ETHIOPIA.

JIMMA UNIVERSITY

COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCE

DEPARTMENT OF NURSING

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BY: - GOSAYE BELACHEW

ADVISORS 1. MR FEKADU YADASSA (BSC, MSC)

2. BOSENA TEBEJE (BSc, MSC/RH, Assist. Prof.)

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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 urine and Fecal incontinence or both. It remains a major public health problem in areas where unattended obstructed labor is common.

Objective: the main purpose of this study was to assess obstetric fistula and its contributing factors among women admitted to JUSH, Genecology ward.

Methods: Across sectional facility based descriptive study was concluded from February 1to April 30-2013 to assess obstetric fistula and its contributing factors among women admitted to JHSTH, Gynecology ward. The sampling technique was convenient sampling technique in which all mothers admitted to fistula unit during study period was included. Data was collected using pretested properly structured questionnaires by 3 trained data collectors and data was analyzed using electronic calculator.

Result: The total of 62 women were admitted to JUSTH gynecology ward fromFeb-Apr.2013.Out of the total respondent 56(90.32%) were developed VVF, 14(22.25%) were developed RVF and2 (3.2%)were developed RVVF.majority of the respondents were from the rural area and50% were in age group 20-24.66.12%of the respondents had no regular ANC follow-up. Among the respondents 87.09% were primiparous. About 56.45% of the case were caused by obstructed labor and 22.58% were caused prolonged labor.

Conclusion and recommendation

Generally prevention is better than cure .preventing and managing fistula will contribute to achieving improving maternal and child health.

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Acronyms

ANC- Antal care

AAFH- Addis Ababa Fistula Hospital

CPD- Cephalopelvic disproportion

OF-Obstetric fistula

RVF- Rectovaginal fistula

VVF- vesico vaginal fistula

WHO- world Health origination

UNFPA-United Nation Population find

JU- Jimma University

JUSTH- Jimma University specialized teaching hospital

GYN AND OB- Gynecology and obstetric

OL- Obstructed labor

EDHS - Ethiopian Demographic Health survey

NTBA- Non-Trained birth attendant

TBA-trained birth attendant

FGM- female genital mutilation

DEFINITION OF TERMS

1. Obstetric fistula a hole which is formed in the vaginal wall communicating in to the bladder or rectum/both/ as a result of pressure in the vaginal wall and less commonly operation to terminate difficult labor by for forceps
2. VVF-is a hole which is form in the vaginal wall communicating in to the bladder
3. RVF- is a hole which is formed between vagina and rectum
4. RVVF- the hole which is formed between vagina and bladder and vagina and rectum
5. CPD- the failure of the fetus to pass safely through the birth (anal for mechanical reason
6. OL-Failure of dependent of fetus in the birth canal for mechanical reason despite good uterine contraction
7. Prim par- Those who has given birth to one new born at or after 28wks of gestation or more
8. Multipara- Those who have given birth more than one
9. Nulligravida- No history of pregnancy at all
10. Insentience inability to retain urine and feces voluntary
11. Parity -number of children previously born
12. Early marriages- Marriage which take place during less than 18years

CHAPTER ONE

INTRODUCTION

1.1 Background information

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 The most frequently reported global prevalence of obstetric fistula shows that approximately 2 million women have untreated fistula and approximately 100,000 women developed fistula each year (1) .

Others estimate show that as many as 130,000 new cases of fistula are occurring annually in Africa(2) and globally up to 3.5 million women may believing with the condition(3).

In Ethiopia 9000 women develop fistula each year(4). There are only 1477 fistula repaired in the year 2010 in all treatment centers including the main hospital in Addis Ababa(5) obstetric fistula makes lives of many young women difficult in developing countries .It is widely know that there are physical problems and co morbidities associated with fistula. Obstetric fistula accounts for 8% of maternal death worldwide with millions more girls and women's living with shame, Isolation and poverty because of stigma related to their condition (6).

Although almost no population based surveys on fistula have not yet been under taken and data remains scarce (WHO 2006).

Estimate suggested that at least 3 million women in poor countries have untreated VVF and that 30,000-130.000 new cases develop each year in Africa alone (3) In Ethiopia alone an estimated 0.25% of total population of women suffer with untreated obstetric fistula the vast majority of obstetric fistula cases living in resources poor countries, and almost all of these injurers could have been avoided if timely and competent obstetric care was available, accessible and affordable (7). Obstetric fistula a devastating medical condition consisting of abnormal opening between vagina and bladder and vagina and rectum resulting from helpless obstructed labor and prolonged labor(6) .

In research limited setting women faces various barriers in accessing health care, lack of knowledge to recognize pregnancy and labor complication, powerlessness to seek care distance from facility lack of transport and unaffordable cost of transport low expectation of care they desire, serious shortage of medical supplies and equipments and particularly trained personnel further undermine the time line and quality care they receive as a result they often remains suffer from obstetric fistula for years or decades(8).

1.2 Statement of the problem

The world health organization estimates that there are at least 2 million women living with obstetric fistula and annual incidence of 50,000 to 100,000 cases in the world (3).

Obstetric fistula constitutes serious threat to the productive performance of women in Ethiopia the principle cause of obstetric fistula in developing countries like Ethiopia is prolonged obstructed labor beyond the reach of medical help (9). According to the work done by Dan so etal 2004 in kumas 150 out of 157449 delivers resulted in fistula due to obstetric complication of these 73.8% occurred because of prolonged obstructed labor and about25% was related to early marriage (age<18years) (10).

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(11).

Ethiopian MOH reported that 86.7% of the Ethiopian population has access to primary health care service (16). Despite the relatively better primary health service coverage available health service utilization rate is very low in Ethiopia hence the country has one of the lowest ANC (52.1%) postnatal care (16.4%) Coverage through progressive increasing every year (12).

A study conducted among 30,000 treated cases from Addis Ababa fistula hospital over 33 years indicated that 97.4% of the cases were caused by obstructed labor out of which 63% of them were during first child birth(13).

Another report from Ghana identified obstructed labor as cause of fistula in 91.5% case and difficult gynecological surgery in the remaining 8.5% of the cases (16).

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 wish death (11).

Structured interview of 639 fistula patients treated at AAFH between May-Jun 1999-2000 revealed that the mean age of fistula patients at presentation to hospital was 22.7 years, mean age at 1st marriage was 14.7 years (11).

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 (13). Women's family may refuse male doctors, but female doctors may be unavailable thus barring women from prenatal care(14).

Despite the AAFH and five outreach centers' dedication to treat women with fistula and massive community awareness activities from promoting treatment, there were only 1477 fistula cases repaired in the year 2010, only 16.4% of new patients(5) clearly many women are not seeking treatment as soon as they develop fistula. The reason for delay in seeking treatment is not well known (6). Therefore the purpose of this study will be to investigate obstetric fistula and its contributing factors.

1.3 Significance of the study

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 intranatal quality care.

The information identified by this study may also services as secondary data for subsequent research that deal with obstetric fistula.

CHAPTER TWO

2.1 Literature Review

Obstetric fistula is a medical condition in which a fistula (Hole) developed between either the rectum and vaginal or between the bladder and vagina after severe or failed child birth, when adequate medical care is not available (15). 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 (17).

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 even though disappearance of obstetric fistula in England Europe and USA by 1920 year(18). Nowadays obstetric fistula becomes a history in developed world. It used to be a health challenge in those nations late in the 19th and early 20th century (19). The improvement in the general obstetric care and universal access to emergency obstetric care helped to eliminate obstetric fistula from North America and Europe (20).

The majority of reports concerning fistula came from Africa where early marriage and child bearing are most common (11). In Africa a number of studies show that 50-80% of women are under the age of 20, with the youngest patients being 12 or 13 years old, when they are given in marriage(21) and they start bearing of child before physical development is complete this contribute to CPD(12 , 21).

In sub-Saharan Africa the incidence of obstetric fistula has been estimated to be about 124 cases per 100,000 deliveries in rural areas compared with virtually no cases in major cities (22).

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 (22).

Traditional practice of early marriage contributes to risk of obstetric fistula. In parts of sub-Saharan Africa and south Asia, where obstetric fistula is most common women are often marry as adolescent, sometimes as young as ten years of age and may become pregnant immediately before their pelvis are full developed for child bearing (23). In Ethiopia and Nigeria, for example over 25% of fistula patients had become pregnant before the age of 15 and over 50% had become pregnant before the age of 18 years (23).

Women with fistula are often small and short an indication for pelvic immaturity or CPP. They are also usually young, illiterate and poorly educated. Marriage and cursive pregnancy mostly occur before age of 20 years (24). In Zambia, a study of 259 women with obstetric fistula at Monza mission Hospital found that median age at marriage was 22 years. Delays in receiving emergency obstetric care were experienced at home (67.5%) and at clinics (49.4%) usually due to transport difficulties. About 89.1% of women delivered in health facilities, 50% did not complete primary education (24).

According to Ethiopian demographic health survey, 4% of the women aged 15-49 reported to have obstetric fistula(25). The analysis of 2005 EDHS data has also shown that the majority of women suffering from obstetric fistula (56.7%) are living in union, one third had obstetric fistula reaching at age. Of 24, more than 2/3 of the women suffering from obstetric fistula are residing in a rural area, 79.6% had their first intercourse before the age of 19 years; and the average age at first marriage among those women is 16.5 years. Additionally, it was indicated that 50.9% of them had no formal education Most of them (55.6%) had No ANC and 86% of them had delivered at home.

In short the analysis of EDHS.2005 has shown that there is significant association of fistula status with education of women, wealth index, and place of delivery place of residence and use of ANC (26).

A study conducted in Ethiopia, Gondar public health hospital (1999) showed that 50% of women were aged between 15-20 years and their marriage had been arranged by their parents at age as young as 5 years with mean marriage of 11.5 years (27).

Even though some operations which are used to terminate difficult of labor may cause obstetric fistula as many studies showed the majority of them are due to obstructed labor and prolonged labor (27. 28) which lead to damage to pelvic organ the immediate consequence of such damages are urine and fecal incontinence and excoriation of vulva from the constant leaking of urine and feces (12).

Age, parity and rape the most common cause of VVF in community given marriage at age before menarche the majority of study in Africa show that 50-80% of women suffering from fistula are primiparous and this percentage is as high as 85% in Sudan and Ethiopia (12,32) the proportion of primiparous who suffer from fistula in Asia varies from about 30% in some parts of India to as high as 85% in Pakistan(27).

Of the 18 obstetric fistula patients in Haile Asbaha study (1999), only six women had been delivered at hospital or clinic and this was only after prolonged obstructed labor only half of them had receive some advice from traditional birth attendant about pregnancy(27).

Harmful traditional practice is responsible for 6-13% of obstetric fistula including gishiricuting in Northern Nigeria (17)

CHAPTER THREE

OBJECTIVE

3.1 general objective

The main purpose of this study was to assess obstetric fistula and its contributing factors among women admitted to JUSTH Gynecology ward, Jimma town, south west Ethiopia.

3.2 Specific objectives

1. To assess factors that contributing to obstetric fistula
2. To make possible recommendation based on the study finding.

CHAPTER FOUR

METHOD AND MATERIALS

4.1 Study area

The study was conducted at Jimma University specialized teaching Hospital Gynecology ward, Jimma town located at 335km south west of Addis Ababa. It is a referral teaching hospital in which different health professionals perform clinical practice. The hospital has 8 departments and specialty unit. This includes surgical Medical, pediatric, obstetric and genealogy unit. This study was conducted in gynecology ward.

4.2 Study period

The study was conducted from February 1 to April 30, 2013.

4.3 Study design

Across-sectional facility based descriptive study was carried out to assess obstetric fistula and its contributing factors among women admitted to JUSTH, Gynecology ward.

4.4 populations

4.4.1 Source population

All women admitted to JUSTH gynecology ward during study period

4.4.2 Study population

All women who were admitted to fistula unit of gynecology ward in JUSTH.

4.4.3 Inclusion criteria

All women admitted to fistula unit of gynecology ward who were willing to participate in the study.

4.4.4 Exclusion criteria

Clients who were admitted to other gynecology unit except fistula in gynecology ward who were not willing, had mental problem and cannot communicate

4.5 Sample size and sampling technique

4.5.1 Since the total number of study population was manageable, all women admitted to gynecology ward (fistula unit) during the study period, no need of calculation for determining the size of study population.

4.5.2 Sampling technique

The sampling technique was convenient sampling technique in which all clients who was available during the study period was included.

4.6 Study variable

4.6.1 Dependent variable

Obstetric fistula

4.6.2 Independent variables

- Age
- Marital status
- Educational status
- Religion
- Monthly in come
- Parity

- ANC follow up
- Age at first marriage
- place of delivery
- Birth attendant
- duration of labor

4.7 Data collection and instrument

The data was collected using pretested structured questionnaires. Faces to face interviews and record review was conducted by using both closed and open ended questionnaires which were written in English and translated to local language by data collectors for more information. The data was collected by five trained year IV Nursing students.

4.8 Pre-test

Data collection instrument was pretested using 5% of study population to check its reliability and validity. Based on the finding the instrument was modified.

4.9 Data analysis

The collected data was checked for internal consistence and processed by using electronic calculator for compilation, summarization and comparison of data. Frequent counts and cross tabulations was used.

4.10 Data quality assurance

The quality of data collection process was monitored by giving clear instruction to the data collectors .The collected data was checked and rechecked by the principal investigator and necessary corrections was made each day. unclear question was briefly explained by using respondents native language during the actual data collection periods.

4.11 Ethical consideration

The objective of the study was explained to the respondents and officials permission request to undertake the study often securing a formal letters from school of Nursing. The respondents were clearly informed about the study and confidentiality was assured.

4.12 limitation of the study

There is scarcity of reliable data on obstetric fistula. National and local prevalence are not well known. Since the study was institutionalized, that might undermine generalization of the result to general population. The study was conducted in the hospital that does not represent a great majority of rural population (community).

Due to lack of complete recorded documents and shortage of time, it was impossible to perfume Retrospective study

CHAPTER FIVE

RESULTS

A total of 62 women were admitted to JUSTH gynecology ward from feb-apr.2013. Out of the total respondent 56(90.32%) were developed VVF, 14(22.25%) were developed RVF and 2 (3.2%) were developed RVVF.

As indicated in table 1 majority of the respondent (74.19%) were came from rural area .Also majority of the respondents were in the age group 20-24yrs (50%) followed by 25-29yrs (17.74%). The mean age of the women at the time of study was 26yrs .Among the total respondent 67.74% were Oromo in ethnicity followed by 20.96 % Amhara. Concerning their religion, 64.51% were Muslim followed by 30.64% orthodox. Regarding to economic status of the respondents, majority of them had no income (83.87%) and 6.45% of respondent got <18birr per day. The majority of the respondent was housewife (79.03%) followed by farmer which accounts 12.90 %.(**table 1**)

Table-1 Distribution of women with obstetric fistula by their socio demographic characteristic at JUSTH, Jimma town, Jimma Zone, Oromia regional states, south west Ethiopia May.2013

Variables		Number	Percent
Place of residence	Urban	16	25.80
	Rural	46	74.19
	Total	62	100
Age	15-19	6	9.67
	20-24	31	50.00
	25-29	11	17.74
	30-34	4	6.45
	35-39	2	3.22
	Total	62	100
Ethnicity	Oromo	42	67.74
	Amhara	13	20.96
	Guraghe	2	3.22
	Tiger	5	8.06
	Total	62	100
Religion	Orthodox	19	30.64
	Muslim	40	64.51
	Protestant	3	4.83
	Total	62	100
Monthly in come	<18birr	4	6.45
	180 -200 birr	3	4.83
	300-400birr	2	3.22
	>500bir	1	1.61
	No income	52	83.87
	Total	62	100
Number of children	0	27	43.54
	1	22	35.48
	2	20	32.25
	3-4	3	4.83
	Total	62	100
	Merchant	1	1.61
	Farmer	8	12.90
	Daily labor	4	6.45
	Total	62	100

The finding of this study had shown that 66.12% of the respondent had no ANC follow up. Among the respondent only 33.87% of them had ANC follow up out of this 76.19% women had one times visit. Among the respondent 69.35% women were give birth at home and the rest 30.64% were deliver at health institution.

About 75.80%were in labor for more than two days and 64.51% of the women were assisted by NTBA. Only 30.64% of the women were assisted by heath professionals. Regarding the outcome of the labor 77.41% were still birth.

(Table 2).

Table2. Distribution of women with obstetric fistula according to their ANC follow up Place of delivery, duration of labor at JUSTH, south west Ethiopia 20 May, 2013.

Variable		No	%
ANC follow up	YES	21	33.87
	NO	41	66.12
	Total	62	100
Number of ANC follow up	One	16	76.19
	Two	4	19.04
	Three	1	4.76
	Total	21	100
Place of delivery	Home	43	69.35
	Health center	12	19.35
	Hospital	7	11.29
	Total	62	100
Duration of labor	1day	15	24.19
	2day	35	56.45
	3and above days	12	19.35
	Total	62	100
Birth attendant	NTBA	40	64.51
	TBA	3	4.83
	nurse/midwife	12	19.35
	Doctors	7	11.29
	Total	62	100
Birth outcome	still birth	48	77.41
	live birth	14	22.58
	Total	62	100

As indicated in table 3 urine incontinence (87.09%) was the major problem of the respondent followed by fecal incontinence(25.8%).Among the respondent 90.32% had developed VVF,22.58%developed RVF

Table-3 Distribution of women with obstetric fistula by their clinical Sign of fistula and the types of obstetric fistula they had developed at JUSTH southwest Ethiopia, May, 2013.

Variable	Types of obstetric fistula	No	%
Urine incontinence	VVF	56	90.58
Fecal incontinence	RVF	4	6.45
Both urine and fecal incontinence	RVVF	2	3.22
Total		62	100

Regarding parity, 90.32% of the respondent were primiparous followed by multiparous (9.67%). Related to contributing factor 56.45% of the respondent had developed fistula due to obstructed labour followed by prolonged labour(19.35%).(Table 4)

Table-4 distribution of women with obstetric fistula JUSTH Gynecology ward south west Ethiopia, may 2013

Variable		No	Percent
Parity	Nullipara	2	3.22
	Primipara	56	90.32
	Multipara	6	9.67
	Total	62	100
Contributing factors	1 st sexual intercourse	1	1.61
	Rape	2	3.22
	Prolonged labor	12	19.35
	Obstructed labor	35	56.45
	CPD	6	9.67
	FGM	4	6.45
	Total	62	100

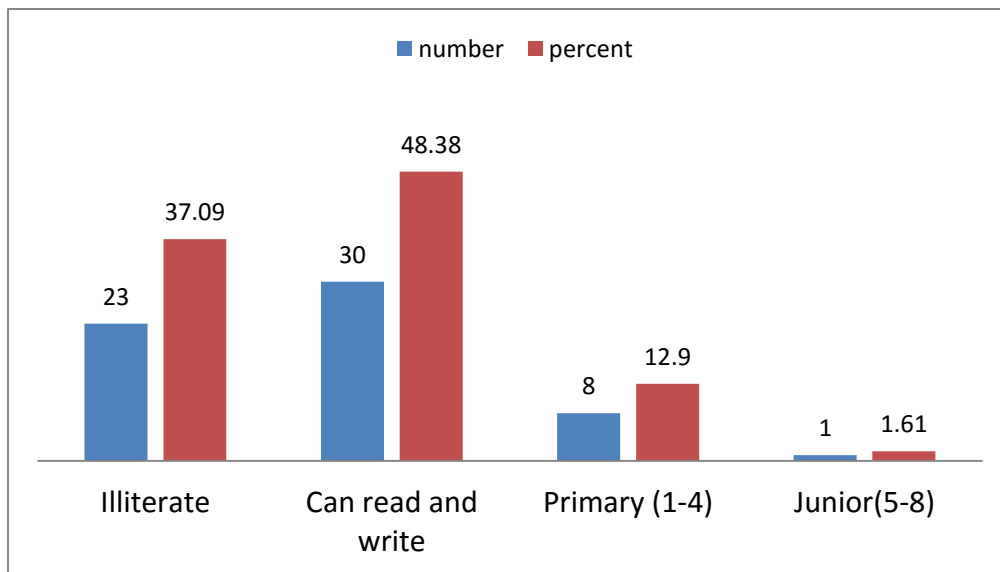


Figure 1 educational status of women with obstetric fistula at JUSTH southwest Ethiopia, May 2013.

This figure shows that majority of the respondent can read and write (48.38%) and 37.09% were illiterate

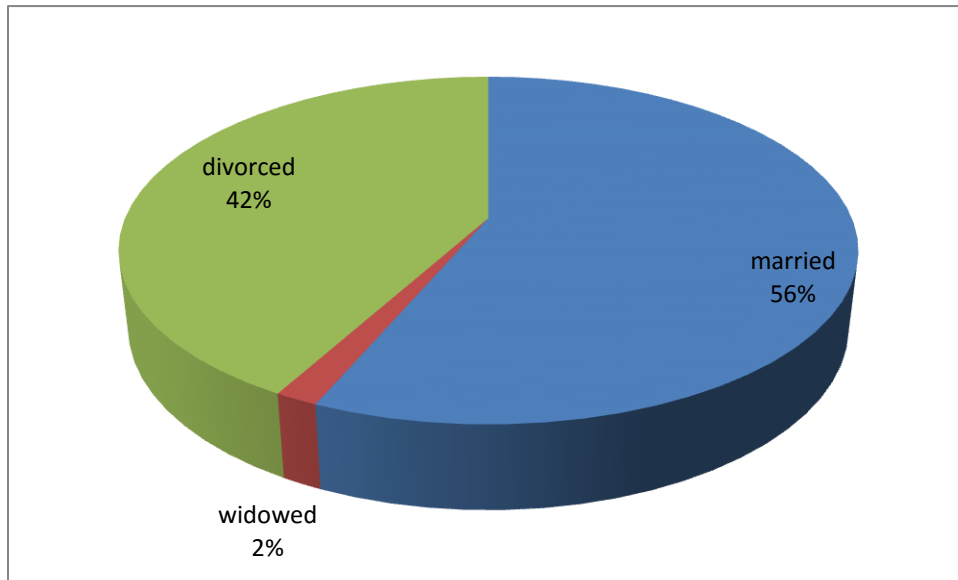


Figure2 marital status of women with obstetric fistula at JUSTH southwest Ethiopia, May 2013.

As indicated in figure 2 the majority of the respondent were married(56%)and 42%were divorced.

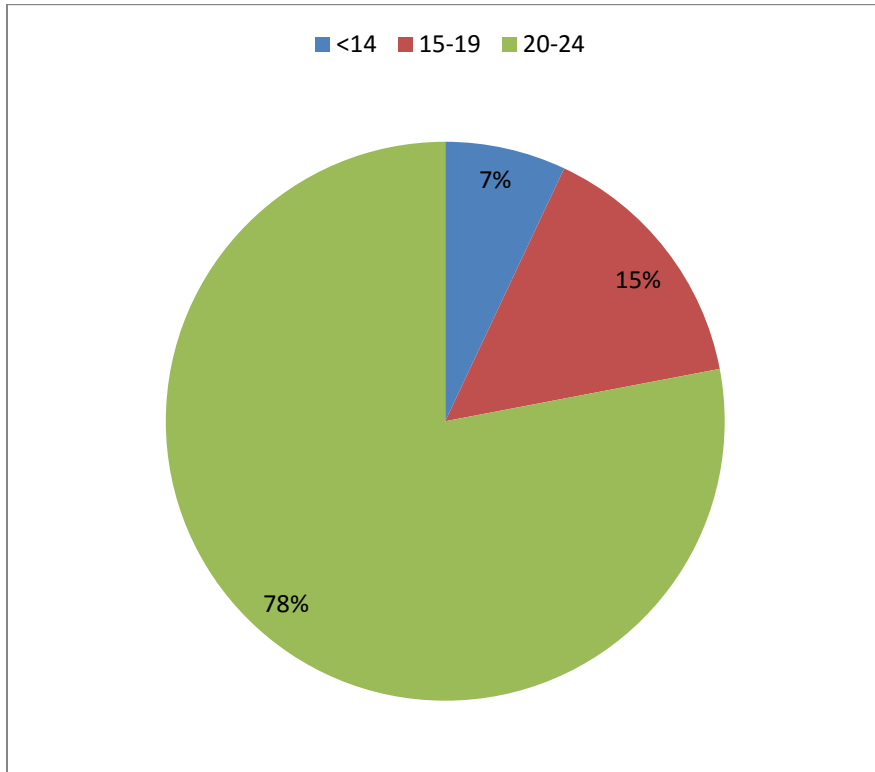


Figure 3: Age at first marriage of women with obstetric fistula at JUSTH Southwest Ethiopia may 2013.

As indicated in the above figure 78% of the respondents were married at age group 15-19 years.

CHAPTER SIX

DISCUSSION

This study showed that majority of study population fistula case were from rural areas which is similarly to the finding of EDHS 2005. According to EDHS (2005), 75% of the women suffering from obstetric (fistula) reside in rural areas (26). Additionally study showed that 50% of the respondents were in age group 20-24 years. This is different from the study conducted in Gonder public health hospital which had shown that 50% of women with obstetric fistula were in age group 15-20 years (27). This variation might be due to application of Ethiopian civil code for marriage of female and improvement of girls' educational status.

About 48.38% of women with obstetric fistula can read and write it is different from EDHS 2005 which indicates 50.9% of women with obstetric fistula had no formal education (25). It is different from the study conducted in Zambia which had shown that 50% of women with obstetric fistula were illiterate (24). This difference might occur due to variation of study period and the effort of government to achieve MDG (education for all). The study also reveals 83.87% of women with obstetric fistula had no income. This finding is similar with study conducted in AAFH (2006) which showed that 85.4% of women with obstetric fistula had no income. According to the finding of this study, 70.96% of women with obstetric fistula were under 20 years when they were married. Similarly the number study in Africa showed that 50-80% of women with obstetric fistula were under 20 years when they were married (21). This indicated that the problem of early marriage is still present. Out of the total respondents 66.12% of women with obstetric fistula had no ANC follow-up their certain variation with EDHS which indicates (55.6%) had no ANC follow-up (27).

This might occur due to size of study population and study period also it could due to lack of awareness about complication of pregnancy, lack transport and lack of satisfaction with quality and quantity of ANC service

Most of the women with obstetric fistula give birth at home (22). This study showed that 69.35% of women with obstetric fistula were delivered at home and 64.51% were assisted by NTBA. This is different from EDHS2005 (86%) women with obstetric fistula had delivered at home (25). This might be occurs due to awareness created by government about women with obstetric fistula importance of giving at health institution through media and health extension worker. Another study in Zambia, study of 259 women with obstetric fistula at monze mission hospital found that 67.5% women with obstetric fistula were delivered at home (24). This is almost similar with the finding of this study.

About 87.09% of the respondents were primiparous 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 (12, 32). The proportion of primiparous who suffer from fistula in Asia varies from about 30% in some parts of India and 85% in Pakistan (27). This might be due to immaturity of pelvic organ in primigravida.

Even though some operation which are used to terminate difficulty of labor may cause obstetric fistula, as many studies showed majority them were caused by obstructed and prolonged labor (27, 28). This study showed that 56.45% case were caused by obstructed labor which was less when compared to stud conducted in AAFH in which 97.4% of the case were caused by obstructed labor (13). The rational might be the improvement of obstetric care and expansion of emergency obstetric care.

CHAPTER: SEVEN

CONCLUSSION AND RECOMMENDATION

7.1 CONCLUSION

In general, the finding of this study revealed that:

- Majority of women with obstetric fistula were from rural areas
- Obstetric fistula occurs in high rate within low economical and educational status of women.
- Primiparous are mostly at risk to develop obstetric fistula.
- Most women developed obstetric fistula due to obstructed prolonged labour
- Age, parity, rape, CPD, and first sexual intercourse were the main contributing factors for obstetric fistula.
- Lack of many transport and access to emergency obstetric care increase the risk of developing obstetric fistula.
- VVF were the commonest type of obstetric fistula

7.2 RECOMMENDATION

With the above conclusion, the following recommendations were needed to be considered for the prevention and control of developing obstetric fistula

1. The women affair under Prime Minister Bureau should strictly follow the practical application of law for marriage in Ethiopian young female and struggle for the application of the law.
2. Training of most traditional birth attendants and mobilization of population towards antenatal care of all pregnant mothers is very important. So MOH should work hard toward this issue.
3. MOH needs to increase health education program in the health institution in order to reduce strong bias towards maternal and child health care, specially, on the consequence of fistula.
4. Government body who concern to women should establish governmental and nongovernmental organization the can help and support women who had obstetric fistula.
5. Health workers ,particularly, doctors ,nurses and midwives should recognize the importance of urgent referral of women in obstructed and prolonged labor.
6. Research on areas that expose women to risk of developing fistula such as early marriage, lack of education and poverty will be necessary to prevent obstetric fistula.

ANNEX I

REFERENCE

1. AAFH, (2006) Obstetric fistula in rural Ethiopia.
2. Holmen M. Breen, C. Macarthur (2007). Obstetric fistula a study of women managed at the Bonze mission Hospital.
3. Wall (2006). Obstetric fistula as international public health problem the lance, 368(942): 1201-1209.
4. Fistula foundation (2011) what is fistula? [HH//www.fistulafoundation.org](http://www.fistulafoundation.org) 04 (accessed 29 may 2011).
5. Hamlin fistula Ethiopia, (2010) .Hamlin fistula Ethiopia, annual report of 2010 report, Addis Ababa .3-13.
6. WHO Department of making pregnancy safer (2006). Obstetric fistula Guiding principle for clinical.
7. Uganda Bureau of statist and role macro (2006).
8. Hilton, P, (2003) VVF in developing countries international Journal of Gynecological and obstetric 82(3).
9. Muleta M. obstetric fistula retrospective study of 1210 cage at AAFH J obstetrics and Gynecology (2005) 17(1) 68-70).
Denso KA marty.Jo.Wall L.L,Elkins TE. The epidemiology of genitourinary fistula in Kumasi Ehana, 1997-2004.

10. WHO obstetric fistula A review of available information maternal health and safe Mather hood program WHO /MCM/MSM/91:5
11. AAFH , Ethiopian road Authority and World Bank Ethiopia, 2010.
12. Kelly,J : and kwast,B.E (2003) Epidemiological study of VVF in Ethiopia International urogynecological Journal 4 278-281.
13. R.J. cook, B.M.Oicken,J syed obstetric fistula The challenge to women rights international Journal oct 2004.
14. Creanga,AA; R.R genardy(NoV.2007)” obstetric fistula clinical review” international journal of gynecology and obstetric 99(supplement 1):540 vol .10.1016
15. MOH(2007) health and health related indicators planning and programming department Addis Ababa ,Ethiopia
16. Browning ,Andrew” obstetric fistula In sorian Nigeria” plos medicine 1.1 (2004): 022-024
17. Muleto M socio demographic potive and obstetric experiences of fistula patients manage at AAFH. Ethiopia Med Jo 2004.
18. Hamlin fistula international Fast facts and F AQs about obstetric fistula Addis Ababa Harmin fistula Hospital:2009
19. Dekidder D. BadlaniGH .Browning A. singh P. wall << fistula in developing countries Available from [http://www.icesoffice.org/publication/IcI4\(files-boof/comite-18-Pdf](http://www.icesoffice.org/publication/IcI4(files-boof/comite-18-Pdf)

20. Semere,2 and Nour,NM.(2008) obstetric fistula living with incontinence and shame Review of obst .and gyn.(4).
21. Woaldijik K. the immediate management of fresh obstetric fistula American Journal of obstetric and gynecology .2004, 1991:795-9.
22. wall L./L et al The obstetric vesciovaginal fistula in the developing world obstetric and Gynecological servey 2005 60: supplement 1.
23. Vagenderhuysen C. prual A, oudet Joud D. 2001 obsteric fistula incidence estmates for sub sharan Africa international Journal of gyn. obstetric 73(1) 65-66.
24. Holme, A, breen M macArthur C, 2007. obstetric fistula: A study of women managed at monze mission hospital ,Zambia BJOE 1114:1010-1017.
25. Ethiopian demographic health serve 2005.
26. Muleta M. fantahun M, TASFAYE B, Halmin EC, kennedy RC, obstetric fistula in rural Ethiopia. East African Med 2007: 84:552-33.
27. Asbaha haile fistula A. socio economic problem in Ethiopia medical Journal Viol 21 Nov to April 2004 ,PP 71-77.
28. “Epidemiological determinant of VVF” BJOG” An international Journal of obstetric and gynecology 90(5):387-39. May 2005.

ANNEX II

QUESTIONNAIRE

Jimma University college of public health and medical science

department of Nursing

I. General direction

1. The purpose of this study will be to assess obstetric fistula and its contributing factors in JUSTH and to give possible recommendation based on the finding
2. The format is used to record the patients identification socio economical status and medical status

Section -1

Questionnaire related to socio demographic characteristics.

S. No	Question	Coding classification
1	Residence	1. Urban 2. Rural
2	Age	
3	Religion?	1. Orthodox 2. Muslim 3. Catholic 4. Protestant 5. Others_____
4	Educational status	1. Illiterate 2. Can read and write 3. Primary 4. Junior 5. Secondary 6. College plus
5	Marital statuses	1. Single 2. Married 3. Divorced 4. Widowed 5. Others_____

6	Ethnicity?	<ol style="list-style-type: none"> 1. Oromo 2. Amhara 3. Tigre 4. Gurage 5. Others specify_____
7	Monthly Income	<ol style="list-style-type: none"> 1. <18 birr 2. 18-200 birr 3. 300-400birr 4. >500 birr 5. No income
8	Occupational status	<ol style="list-style-type: none"> 1. House wife 2. Merchant 3. Employed 4. Daly labor 5. Other specify_____
9	Age at first marriage?	<ol style="list-style-type: none"> 1. <10yers 2. 10-19 3. 20-29 4. 30-39 5. 40-39 6. 50+

Section II Question related to obstetric history and contributing factor of obstetric fistula

S.No	Question	Coding classification
1	Parity	<ol style="list-style-type: none"> 1. Nulli Para 2. Prime Para 3. Malt Para 4. Nulli gravid
2	Number of children alive ?	<ol style="list-style-type: none"> 1. Zero 2. One 3. Two 4. To four 5. Five and above
3	Do you have ANC follow up during your last frequency	<ol style="list-style-type: none"> 1. Yes 2. No
4	How many ANC visit did you have during your last pregnancy	<ol style="list-style-type: none"> 1. One 2. Two 3. Three 4. Four
5	Place of birth for current pregnancy	At home Health center Hospital Others_____
6	Birth attendant of your lasts birth ?	<ol style="list-style-type: none"> 1. NTBA 2. TBA 3. Nurse 4. Doctors
7	For how long you have been in labor	<ol style="list-style-type: none"> 1. One day 2. Two day 3. Three and more days
8	What was the mode of delivery	<ol style="list-style-type: none"> 1.SVO 2.C/S 3.Instrumental delivery
9	Is there any factors that lead you to develop	<ol style="list-style-type: none"> 1. 1st sexual intercourse 2. Obstructed labor 3. Rape

	obstetric fistula	<ul style="list-style-type: none"> 4. Caesarian section 5. CPD 6. FGM 7. Others
10	Which problem do you have?	<ul style="list-style-type: none"> 1. Urine insentience 2. Fecal incontinenes 3. Both 4. Others specify_____
11	Which type of obstetric fistula you develop?	<ul style="list-style-type: none"> 1. VVF 2. RVF 3. RVVF

Thank you for your attention