

THE FACTORS INFLUENCING OBSTETRIC FISTULA ON WOMEN OF CHILDBEARING AGE IN DAYNILE HOSPITAL MOGADISHU-SOMALIA

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Abstract

The Aim of the study explores factors influencing obstetric fistula on women of childbearing age at daynile hospital. The specific objectives are; to determine factors influencing obstetric fistula on women of childbearing age at daynile hospital, to determine the complications of obstetric fistula on women of childbearing age at daynile hospital, in addition to identify barriers preventing women from accessing fistula repair at daynile hospital. This study adopted desk review for medical records of 40 patients who underwent obstetric fistula repair campaign on December 2015 at Daynile hospital. Majority of the women were young under 20 years of age, with no education (53%). The major cause of Obstetric fistula for these patients was prolonged labor at the time of delivery had labored for at least (10-24) hours, 35% of these women assisted by traditional birth attendant during labor at home, in addition 68% of the patients had FGM type of circumcision. The majority of the patients were vesico-vaginal type of fistula with previous unsuccessful repair. 83% of the patients had urine incontinent, 13% stool incontinent for almost one yea. The reason of delaying their access to fistula repair was economic reason and lack of access to good obstetric care during pregnancy and labor. The study concludes that community health workers should provide awareness to pregnant women not to deliver at home and to improve the availability of good obstetric care at the district health centers in addition to provide training for local junior doctors to perform fistula repair

Keywords: Obstetric fistula on child bearing age, Somalia, cause, complication, barrier to fistula repair,

1.0 Background

UNFPA (2012) estimated that 2 to 3.5 million women are currently living with fistula worldwide, with at least 50,000 to 100,000 new cases occurring every year. The exact prevalence rates in Somalia are not known, but the estimated obstetric fistula incidence for Somalia extrapolated from figures for East Africa is 1-5/1,000 deliveries (UNFPA, 2005)

Obstructed labor is the result of a girl's pelvis being too small to deliver a fetus. The fetus's head passes into the vagina, but its shoulders cannot fit through the mother's pelvic bones. Without a cesarean section, the neonate dies, & the mother is fortunate if she survives. If sepsis or hemorrhage does not occur & the girl does survive, the tissue & bones of the neonate will eventually soften & the remains will pass through the vagina. Many times, obstructed labor leads to fistulas; the pressure of the fetal head on the vaginal wall causes tissue necrosis, & fistulas develop between the vagina & the bladder or rectum after the necrotic tissue sloughs. More than 2 million adolescents are living with fistulas, & fistulas develop in $\approx 100,000$ more each year. (Nawal *et al*, 2006)

Access to a health institution is a major problem for fistula patients, chiefly because of the long distances to reach care, poor transportation networks & lack of money because parturition is regarded as something that can be managed at home. A report from Ghana identified obstructed labor as a cause of fistula in 91.5% of cases & difficult of gynecological surgery in the remaining 8.5% of cases. Approximately 53% of these women were under 25 years of age, & 43% developed a fistula during their first delivery (Muleta, 2013).

Other causes of Obstetric fistula is early marriage, in some parts of sub-saharan Africa, many women become pregnant soon after menarche occurs, before a women's pelvic fully developed in childbearing (INFO, 2004). The reasons for not seeking skilled care at the time of pregnancy vary according to context such as educational level, socio-economic status, culture as well as accessibility to functioning health care facilities (Justus *et al*, 2014). In addition to that fistula was common for women who delivered at home assisted by traditional birth attendants because some of the family members did not allow them to go to health facility to delivery (Landr, 2013).

Women who develop obstetric fistula secondary to prolonged obstructed labor are affected by multiple devastating medical & psychosocial problems. Along with urinary and/or feces incontinence, they are also at risk for other disorders like urologic diseases such as renal failure, gynecologic disorder such as vaginal stenosis & infertility, as well as neurologic disorders. These women are subject to depression due to constant dribble of urine down their legs, they are physically isolated from rest of family, sometimes divorced and forced to leave their villages and become beggars these led some women to commit suicide (Semere *et al*, 2008).

The physical effects of the bad smell were even worse for those who leaked feces in addition to urine. They felt the situation of bad smell would drive away any body they encountered. They often took a much time cleaning themselves to reduce on the smell. One woman who leaked faces narrated her ordeal in delaying her husband every morning, as she would be in the toilet cleaning herself (Barageine *et al*, 2015).

Living with fistula interfered with women's daily lives, including the ability to attend community gatherings (85.3%), have sexual relations (85.2%), attend religious gatherings (83.6%), earn money (80.0%), work (72.1%), & eat with others (68.7%). Women who had lived with fistula for over a year were more likely to say that their condition interfered with their ability to work & earn money (Landry *et al*, 2013).

Transportation & its costs were repeatedly cited as a barrier to care. A majority of women living with fistula are from remote, rural areas, & most fistula services are in urban centers. Women report that transportation is costly or sometimes non-existent, Even when transportation is available or affordable, women may experience too much pain or discomfort to travel, or may be turned away from public transportation due to their condition (Bellows *et.al* 2014).

The specific objectives which guided this research were:

1. To determine the factors influencing Obstetric Fistula on women of childbearing age at Daynile hospital.
2. To determine the complications of Obstetric fistula on women of childbearing age at Daynile hospital.
3. To identify the barriers preventing women from accessing fistula repair on women of childbearing age at Daynile hospital

2.0 Methodology

2.1 Research design and Study Site

This study adopted both qualitative & quantitative cross sectional approach using desk review of secondary data from medical records for fistula repair conducted on December 2015 at daynile hospital. The study is carried at Daynile Hospital in daynile district of Mogadishu-Somalia. Daynile general hospital is referral hospital with CEMOC facility with 160 beds which conducts campaigns for fistula repair.

2.2 Sampling and data collection procedure

This was secondary data from medical records for fistula repair conducted on December 2015 at daynile hospital. The study data were reviewed during the period of May to July 2016.

The medical record library of daynile hospital were not kept the surgery forms who were filled before or during the patient undergone the surgery. We acknowledge the number of obstetric fistula patients undergone the surgery during this campaign period were 116 patients, but we received during our desk review only 40 surgery files.

Our study shows that the number of the cases we were expected were not 100% due to none availability of the surgery files at daynile hospital. For instance we tried to communicate few of the cases who undergone fistula repair residing Mogadishu & its surrounding. Those accepted our call, were invited at our university for interview after accepting the informed consent.

2.3 Data Collection Instrument

A questionnaire was used to collect data from the surgery files of the patient undergone fistula repair. Few of the patients who were invited at the university were interview.

2.4 Data analysis

The research collected was compiled & analyzed using Statistical Package for Social Science (SPSS). The data was presented in frequency tables & figures.

2.5 Ethical consideration

The research done in the way that no one can harm or suffer adverse consequences from research activities. A permission to access the surgery files were sought from the daynile hospital administrators & the medical record keeper. The research was conducted with respect to ethical values, confidentiality, & moral expectation. The Ethical approval was obtained from Ethical Review Committee of Jamhuriya University of Science & Technology (JUST). Informed consent was sought from the respondents who were invited for interview at the university.

2.6 Study Limitations

Security issues & poor transportation to Daynile hospital which is far from the city were challenges sometime, so we to hired a rent car to reach our destination. The data were extracted from medical records department of daynile hospital with variations in the level of completeness of documentation of the demographic and medical parameter described, however some of the surgery files were missing due to poor medical record keeping and insufficient human resource to keep all the records safe.

3.0 Results

3.1 Respondent based on time spend in labor during the occurrence of fistula

| Time spent in labor | Frequency | Percent % |
|---------------------|-----------|-----------|
| 10 - 24 Hours | 22 | 55 |
| 1 - 2 Days | 10 | 25 |
| > 2 Days | 8 | 20 |

Table 3.1: Respondents based on time spent on labor during the occurrence of fistula in daynile hospital, fistula repair campaign held on December 2015.

From Table 3.1: Nearly 55% of the respondents had prolonged labor at the onset of fistula spending 10-24 hours on labor, followed by 25% of respondents had labor on 1-2 days while only 20% of the respondents had labor of more than 2 days.

3.2 Respondent based type of leakage

| Type of incontinent | Frequency | Percent % |
|---------------------|-----------|-----------|
| Urine | 33 | 82.5 |
| Stool | 5 | 12.5 |
| Both | 2 | 5 |

Table 3.2: Respondents based on type of Incontinent in Daynile Hospital, fistula repair campaign held on December 2015

From Table 3.2: 83% of respondent were urine incontinent flowed by 13% were stool incontinent, while 5% were both urine and stool incontinent.

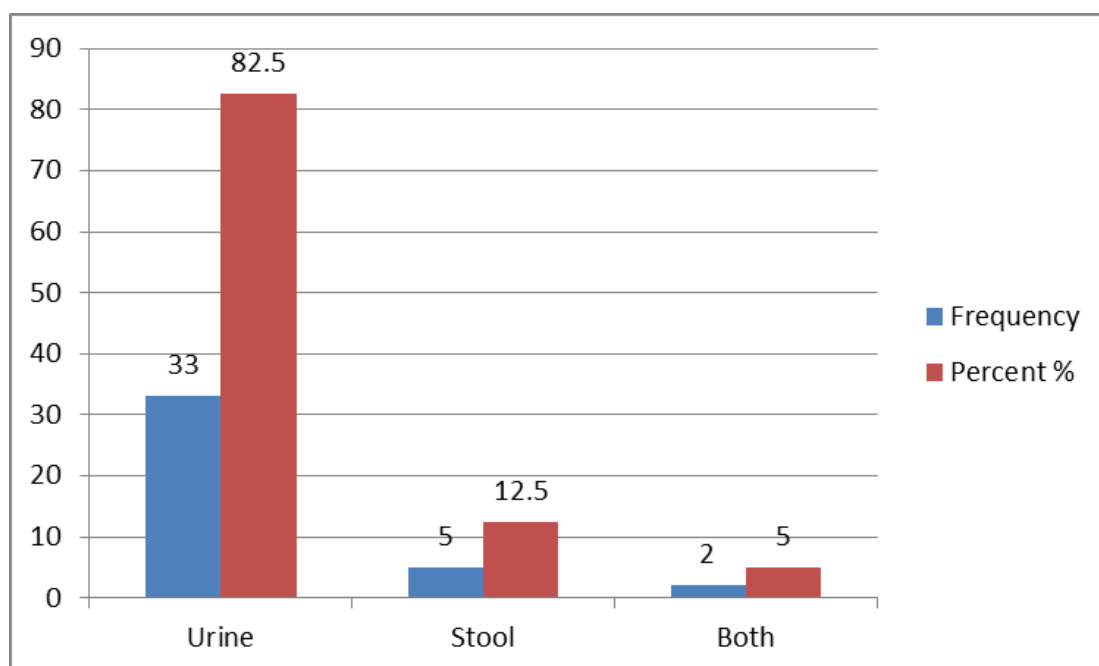


Figure 3.2: Respondents based on type of Incontinent in Daynile Hospital, fistula repair campaign held on December 2015

3.3 Respondent based on how long have been incontinent

| Duration of incontinent | Frequency | Percent % |
|-------------------------|-----------|-----------|
| less than 1 Months | 1 | 2.5 |
| 1 - 12 Months | 14 | 35 |
| 1 - 2 Years | 8 | 20 |
| 2 - 5 Years | 9 | 22.5 |
| > 5 Years | 8 | 20 |

Table 3.3 Respondent based on how long have been incontinent, daynile hospital, fistula repair campaign held on December 2015

From Table 3.3: Nearly 35 % of the respondents had incontinent for almost one year, and 23% had incontinent of 2-5 years.

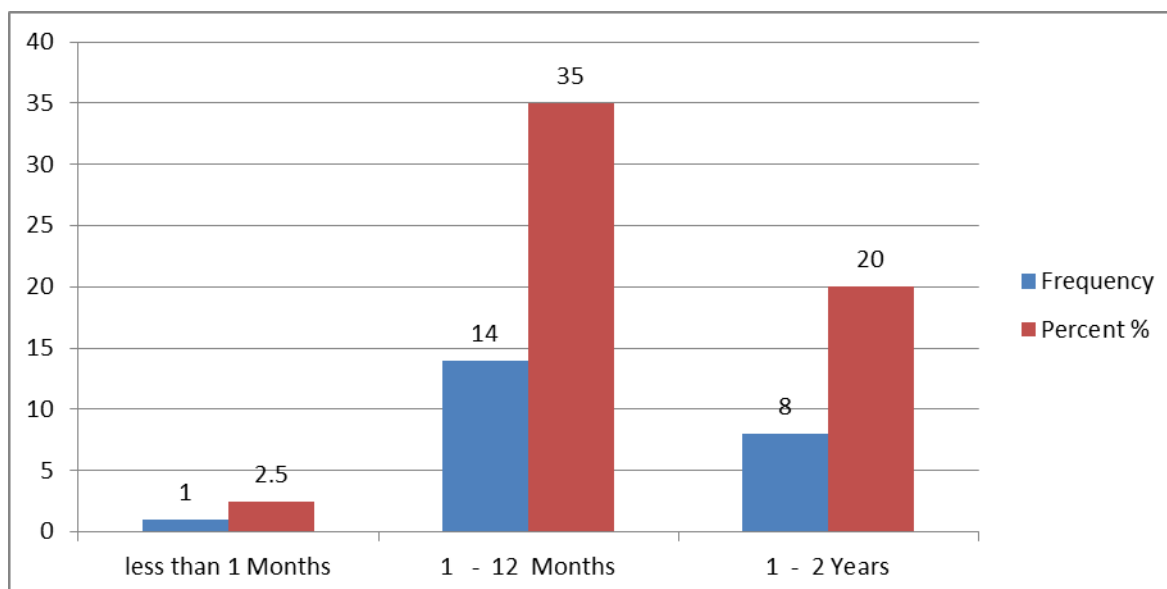


Figure 3.3 Respondent based on how long have you been incontinent, daynile hospital, fistula repair campaign held on December 2015

3.4 Respondent based on economic problem contributing incidence of obstetric fistula

| Economic problem | Frequency | Percent % |
|---------------------------|-----------|-----------|
| lack of c/s money | 20 | 50 |
| Lack Transportation money | 14 | 35 |
| Other | 6 | 15 |

Table 3.4 Respondent based on economic problem contributing incidence of obstetric fistula, Daynile Hospital, Fistula campaign held on December 2015

From Table 3.4: The Contributing factors to the incidence of Obstetric fistula were 50% lack of C/section money and 35 % lack of transportation money as the majority of the patients were from other regions of Somalia.

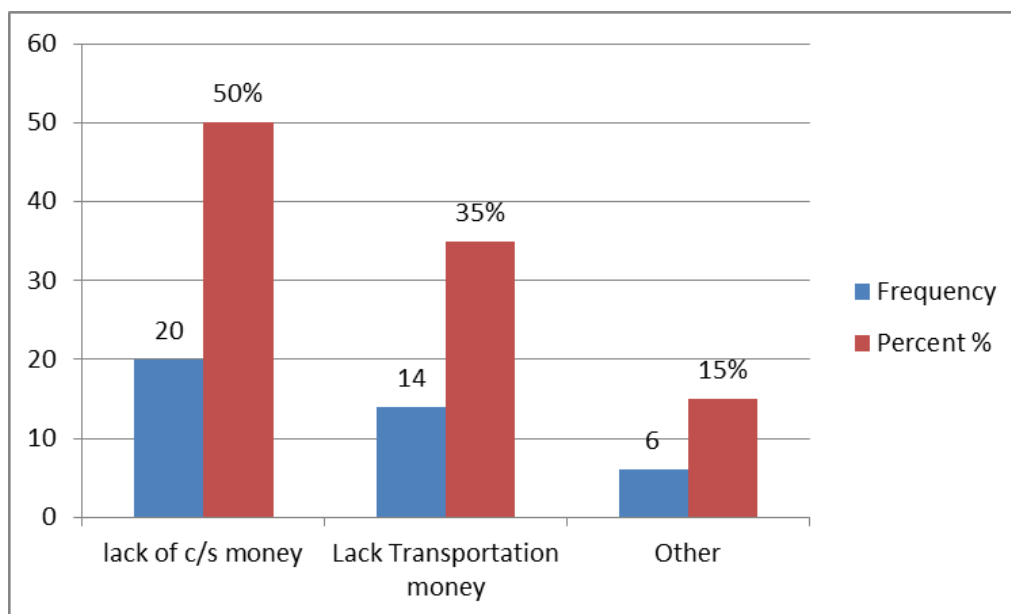


Figure 3.4 Respondent based on economic problem contributing incidence of obstetric fistula, Daynile Hospital, Fistula campaign held on December 2015

3.5 Respondent based on economical barrier to repair obstetric fistula

| Economic barrier | Frequency | Percent % |
|------------------|-----------|-----------|
| Yes | 22 | 55 |
| No | 18 | 45 |

Table 3.5 Respondents based on economical barrier to repair obstetric fistula, daynile hospital, fistula repair campaign, held on December 2015.

From Table 3.5: Nearly 55% of respondents have economical barrier, while 45% of respondents have no economical barrier to obstetric fistula.

4.0 Discussion

4.1 The factors influencing incidence of obstetric fistula

55% of the respondents were between 10-24 hours, followed 25% between 1-2 days of labor while only 20% of the respondents were above 2 days. were the major reasons that caused the obstetric fistula due to The soft tissues of the birth canal are compressed between the descending head of the fetus and the woman's pelvic bone. The lack of blood flow causes tissue to die, creating a whole (fistula) between the woman's vagina and bladder (vesico-vaginal fistula or VVF) or between the vagina and rectum (recto-vaginal fistula or RVF) or both. This

leaves the woman leaking urine and/or faces continuously from the vagina. . (Human Rights Watch. 2010)

35% of respondents delivered by TBA, flowed by 28% were doctor, while 13 % were nurses, midwives and other of relatives 68% of respondents were delivered at home of TBA, flowed 25% of respondents were health center, while only 8% delivered on the way. TBA practices, knowledge and beliefs showed high rates of dangerous vaginal cutting which can lead to fistula and lack of knowledge of when obstructed or dangerous labors should be referred to nearby health clinics, as well as low rates of referral in practice (Keri,2010)

4.2 Complications of obstetric fistula on women of childbearing age

83% of respondent were urine incontinent flowed by 13% were stool incontinent, while 5% were both urine and stool incontinent. As we mentioned before the physical effects of the bad smell were even worse for those who leaked feces in addition to urine. They felt the situation of bad smell would drive away any body they encountered. They often took a much time cleaning themselves to reduce on the smell. One woman who Leaked faces narrated her ordeal in delaying her husband every morning, as she would be in the toilet cleaning herself (Barageine *etal*,2015).

63% of respondent were stigmatized from society flowed by 27% were family stigma, while 10% have both society and family stigma. Obstetric fistula leads to sever socio cultural stigmatization for various reasons. For example, in Burkina Faso, most citizens do not believe obstetric fistula to be a medical condition but as divine punishment or a curse for disloyal or disrespectful behaviour (UNFPA, 2008).

4.3 Barriers preventing from accessing fistula repair

55% of respondents have economical delay, while 45% of respondents have no economical delay as we mentioned before About 80% to 90% of women with VVF can potentially be cured by simple vaginal surgery. However, transportation to surgical centers is physically tricky (what method of transportation would allow an incontinent woman in a vehicle?) and financially challenging. The cost of surgery for a poor woman or girl who has been abandoned by her village is nearly unattainable (Semere *etal*,2008).

5.0 Conclusion

Most of the women presented for fistula repair come from rural areas. Fistula was highly associated with low level of education and I increased duration of labor. The major issue of not

repairing fistula was economic barrier in addition with to lack of access to good obstetric care during pregnancy and labor as well as unavailability trained surgeons for obstetric fistula

REFERENCES

- Adler, A. J., Fox, S., Campbell, O. M. R., & Kuper, H. (2013). Obstetric fistula in Southern Sudan: situational analysis and Key Informant Method to estimate prevalence. *BMC Pregnancy and Childbirth*, 13, 64. <http://doi.org/10.1186/1471-2393-13-64>
- Adler, A. J., Ronsmans, C., Calvert, C., & Filippi, V. (2013). Estimating the prevalence of obstetric fistula: a systematic review and meta-analysis. *BMC Pregnancy and Childbirth*, 13, 246. <http://doi.org/10.1186/1471-2393-13-24>
- Arrowsmith, S. D., Ruminjo, J., & Landry, E. G. (2010). Current practices in treatment of female genital fistula: a cross sectional study. *BMC Pregnancy and Childbirth*, 10, 73. <http://doi.org/10.1186/1471-2393-10-73>
- Barageine, J. K., Tumwesigye, N. M., Byamugisha, J. K., Almroth, L., & Faxelid, E. (2014). Risk Factors for Obstetric Fistula in Western Uganda: A Case Control Study. *PLoS ONE*, 9(11), e112299. <http://doi.org/10.1371/journal.pone.0112299>
- Cowgill, K. D., Bishop, J., Norgaard, A. K., Rubens, C. E., & Gravett, M. G. (2015). Obstetric fistula in low-resource countries: an under-valued and under-studied problem – systematic review of its incidence, prevalence, and association with stillbirth. *BMC Pregnancy and Childbirth*, 15, 193. <http://doi.org/10.1186/s12884-015-0592-2>
- Gulati, B. K., Unisa, S., Pandey, A., Sahu, D., & Ganguly, S. (2011). Correlates of Occurrence of Obstetric Fistula among Women in Selected States of India: An Analysis of DLHS-3 Data. *Facts, Views & Vision in ObGyn*, 3(2), 121–128
- Kaso, M., & Addisse, M. (2014). Birth preparedness and complication readiness in Robe Woreda, Arsi Zone, Oromia Region, Central Ethiopia: a cross-sectional study. *Reproductive Health*, 11, 55. <http://doi.org/10.1186/1742-4755-11-55>
- Keri, L., Kaye, D., & Sibylle, K. (2010). Referral practices and perceived barriers to timely obstetric care among Ugandan traditional birth attendants (TBA). *African Health Sciences*, 10(1), 75–81.
- Landry, E., Vera, F., Ruminjo, J., Asimwe, F., Barry, T. H., Bello, A., ... Barone, M. A. (2013). Profiles and experiences of women undergoing genital fistula repair: Findings from five countries. *Global Public Health*, 8(8), 926–942. <http://doi.org/10.1080/17441692.2013.824018>
- 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, 82. <http://doi.org/10.1186/s12884-016-0871-6>
- Tunçalp, Ö., Isah, A., Landry, E., & Stanton, C. K. (2014). Community-based screening for obstetric fistula in Nigeria: a novel approach. *BMC Pregnancy and Childbirth*, 14, 44. <http://doi.org/10.1186/1471-2393-14-44>