

# Knowledge and Attitudes of Nursing Staff towards Obstetric Fistula at the Abeche University Hospital, Chad

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## Abstract

**Introduction:** Prevention of obstetric fistula (OF) remains a challenge in Chad where its incidence is 464 cases/year. The present study aims to determine the knowledge and attitudes of nursing staff towards obstetric fistula. **Patients and Method:** This was a cross-sectional, descriptive and analytical study including nursing staff at the Abéché University Hospital. The survey took place from March to May 2023 and the sampling was exhaustive. Data collection was done using a form including a questionnaire on sociodemographic parameters, knowledge and attitudes. Participation in the study was voluntary and individual. **Results:** Participation in the study was 76.11%. Emergency department staff were the most represented, followed by gynecology-obstetrics staff with 34.4% and 20.91% of cases respectively. Nurses represented 53.17% of participants followed by doctors (23.52%). An exact definition of obstetric fistula was reported by 7.84% of participants and it was partial in 80.39%. The level of knowledge of risk factors was considered good in 12.41%. Exact knowledge of clinical signs was reported by 74.5% of cases. Among the participants, 1.96% reported that the treatment of obstetric fistula is traditional. Knowledge about means of prevention was considered good by 13.72% (n = 21), and attitudes by 26.79%. Obstetric fistula knowledge was influenced by profession (doctor, p = 0.011) and attitudes by service (p = 0.004) and profession (doctor, p = 0.001). **Conclusion:** Obstetric fistula is a curable disease whose prevention remains possible and requires good knowledge of the disease and the promotion of safe motherhood. This study should serve as a basis for the establishment of the obstetric fistula module in the curriculum

of healthcare personnel and the promotion of continuing training for its eradication.

## Keywords

Obstetric Fistula, Knowledge, Attitudes, CHU-A, Abeche, Chad

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## 1. Introduction

Obstetric fistula (OF) is a public health problem and affects more than 2 million women worldwide and that 50,000 to 100,000 new women are affected each year [1]. The vast majority of cases occur in sub-Saharan Africa and South-East Asia [2] [3]. It is a disease that results from underdevelopment of the health system. The incidence of fistula cases is 464 cases/year in Chad and the victims are young women, living in remote areas, often divorced [4]. Its management, although surgical, must first be preventive. This prevention requires good knowledge of the disease, which is an essential element in promoting lower-risk motherhood. The present study aims to determine the knowledge and attitudes of nursing staff towards obstetric fistula.

## 2. Methodology

This was a cross-sectional, descriptive and analytical study aimed at determining the level of knowledge and attitudes of health personnel at CHU-A towards obstetric fistula. The survey took place from March to May 2023 and included healthcare personnel (doctors, midwives, nurses) with exhaustive sampling. Data were collected using a form containing a questionnaire on sociodemographic, clinical, aetiological and therapeutic parameters and staff attitudes to obstetric fistula. Data were collected and analysed using SPSS 26.0 software. Calculations were performed using proportions and mean, and statistical significance was considered with  $\alpha = 5\%$ . Authorisation for the research was granted by the Faculty of Health Sciences of UNABA and the University Hospital of Abeche. Participation in the study was voluntary and individual and the questionnaire was given to participants without interpretation.

## 3. Results

A total of 153 out of 201 healthcare staff took part in the study, representing a participation rate of 76.11%. Emergency department staff were the most represented, followed by gynaecology-obstetrics staff with 34.4% ( $n = 53$ ) and 20.91% ( $n = 32$ ) of cases respectively. Nurses represented 53.17% ( $n = 63$ ) of participants, followed by doctors 23.52% ( $n = 36$ ) (**Table 1**). An exact definition of FO was reported by 7.84% of participants ( $n = 12$ ) and was partial in 80.39% ( $n = 123$ ).

Knowledge of risk factors (short stature, immature pelvis, prolonged labour,

**Table 1.** Distribution of participants according to profession.

Statutes	not	%
Doctor	36	23.53
SFDE	19	12.42
Male nurse	63	41.18
Student	35	22.87
Total	153	100

**Table 2.** Distribution of healthcare workers according to level of knowledge of risk factors.

Level of knowledge	Number	Percentage (%)
Good	19	12.42
Fair	118	77.12
Insufficient	16	10.46
Total	153	100

delayed obstetric care, illiteracy) was considered good in 12.41% ( $n = 19$ ), average in 77.12% ( $n = 118$ ) and insufficient in 10.45% ( $n = 16$ ) (**Table 2**).

Accurate knowledge of the clinical signs of obstetric fistula, defined as the involuntary loss of urine and/or faeces, was reported by 114 patients 74.5% of cases. Of the participants, 95.42% ( $n = 146$ ) knew that obstetric fistula is treated surgically, while 1.96% ( $n = 3$ ) reported that obstetric fistula is treated traditionally. Knowledge of means of prevention in relation to obstetric fistula risk factors was judged to be good in 13.72% ( $n = 21$ ), average in 60.13% ( $n = 92$ ) and insufficient in 26.14% ( $n = 40$ ). Attitudes towards obstetric fistula were judged to be good in 26.79% ( $n = 41$ ), average in 52.28% ( $n = 80$ ) and insufficient in 20.91% ( $n = 32$ ). Knowledge of obstetric fistula was influenced by profession (doctor,  $p = 0.011$ ) and attitudes were influenced by department ( $p = 0.004$ ) and profession (doctor,  $p = 0.001$ ).

#### 4. Comments

During the survey, 76.11% of nursing staff took part in the study. This participation rate is representative of all staff working at CHU-A and corroborates that of UNFPA in Madagascar in 2007, which found 71.6% of paramedical providers [5]. Emergency and gynaecology-obstetrics staff were the most represented. Nurses were the most represented, followed by doctors. This participation rate is proportional to the number of staff and the interest shown in the study. An exact definition of obstetric fistula was reported by 7.84% of participants and was partial in 80.39%. The frequency of obstetric fistula and its psycho-somatic consequences should attract the attention of nursing staff.

However, they do not know enough about it. This is because general practitioners and nurses are not taught the obstetric fistula module during their train-

ing general practitioners and nurses. Tebeu also reports a low level of accurate knowledge of the definition of obstetric fistula (27.8%) in Cameroon in 2019 [6]. Indeed, it is during antenatal consultations that the prognosis of childbirth should be known and the place of delivery should be defined. However, only 12.41% of participants had a good level of knowledge of obstetric fistula risk factors, and were therefore able to give a reliable prognosis of delivery. Analysis of knowledge of obstetric fistula shows that the health personnel who should be on the front line of obstetric fistula prevention (midwives) do not have the necessary knowledge of the risk factors for the disease. This means that the notion of preventing obstetric fistula is not discussed during antenatal consultations.

In other words, not only is the obstetric fistula module not taught in medical training schools, but targeted training aimed at preventing obstetric fistula is also not organised to address the problem. Accurate knowledge of the clinical signs of obstetric fistula was reported by 74.5% of participants. This result is similar to that of the UNFPA in Madagascar in 2007, which found 80.2% [5]. Of the participants, 95.42% (n = 146) knew that obstetric fistula is treated surgically, while 1.96% (n = 3) reported that obstetric fistula is treated traditionally. Although this proportion is low, it could be the result of a lack of referral for some patients. Attitudes towards obstetric fistula were judged to be good in 26.79% of cases. These concerned the management of obstetric fistula, prevention of recurrence and the general population. These attitudes were influenced by department (p = 0.004) and profession (doctor, p = 0.001). This result shows that knowledge of good practice was acquired in obstetric fistula management departments and the physician's profession.

## 5. Conclusion

Obstetric fistula is a curable disease that can be prevented through good knowledge of the disease and the promotion of safe motherhood. This study should serve as a basis for the introduction of an obstetric fistula module in the curriculum of health personnel.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

## References

- [1] WHO (2006) *Obstetric Fistula: Guiding Principles for Clinical Management and Programme Development*.
- [2] Martin, S.S., Sali, B.B.A., Mabvouna, B.R., Douryang, M., Teikeu, T.V.V., *et al.* (2015) Etude des connaissances, attitudes et pratiques en matière de réintégration sociale des femmes victimes de fistule obstétricale: Région de l'Extrême-nord, Cameroun. *The Pan African Medical Journal*, **20**, Article 172. <https://doi.org/10.11604/pamj.2015.20.172.5959>
- [3] Sagna, M.L., Hoque, N. and Sunil, T. (2011) Are Some Women More at Risk of Ob-

stetric Fistula in Uganda Evidence from the Uganda Demographic and Health Survey. *Journal of Public Health in Africa*, **2**, 26.

<https://doi.org/10.4081/jphia.2011.e26>

- [4] Vadandi, V. (2020) Aspects cliniques et therapeutiques des fistules vesico-vaginales obstétricales A l'Hôpital Régional d'Abéché au Tchad. *Revue Africaine d'Urologie et d'Andrologie*, **2**, 1.
- [5] UNFPA-Madagascar. Analyse situation de base sur les lampleur et les impacts des fistules obstetricales a Madagascar.  
<https://www.scribd.com/document/48552787/Analyse-situation-de-base-sur-les-l-a-mpleur-et-les-impacts-des-fistules-obstetricales-a-Madagascar>
- [6] Tebeu, P.M., Ngameni, H., Nebardoum, D., Tseunwo, T.C.T., Fetse, T.T.G. and Rochat, C.H. (2019) Connaissances, Attitudes et Pratiques des Professionnels de Santé des Districts de Santé du Koung-Khi et De la Mifi à l'Ouest-Cameroun Vis-À-Vis des Fistules Obstétricales. *Health Sciences and Disease*, **20**.