Scientific Research Publishing

Open Journal of Obstetrics and Gynecology, 2026, 16(2), 320-328
https://www.scirp.org/journal/ojog
ISSN Online: 2160-8806
ISSN Print: 2160-8792

Knowledge, Attitudes and Practices of Midwives and Birth Attendants in the Kara Region/Togo regarding Obstetric Fistulas in 2025

Yendoubé Kambote[1*], Kossi Edem Logbo-Akey[1], Dédé Régine Diane Ajavon[1], Assiaham Tenete[2], Kofi Mawoulé Amewouho[1], Sougleman Lare[1], Mégnona Gbogbodjrame[1], Tibé Bantigre[1], Ligbièbe Lalle[1], Akoh Koffi[1], Aminata Bathyli[1], Tchilabalo Matchonna Kpatcha[3], Baguilane Douaguibe[4], Abdoul-Samadou Aboubakari[1]

[1]Department of Gynecology-Obstetrics, "Health-Sexuality-Reproduction (HSR)" Research Team, University of Kara, Kara, Togo
[2]SOS Mother-Child Hospital, Kara, Togo
[3]Department of Urology-Andrology, University of Kara, Kara, Togo
[4]Department of Gynecology and Obstetrics, University of Lomé, Lomé, Togo
Email: *pierrekambote@gmail.com

How to cite this paper: Kambote, Y., Logbo-Akey, K.E., Ajavon, D.R.D., Tenete, A., Amewouho, K.M., Lare, S., Gbogbodjrame, M., Bantigre, T., Lalle, L., Koffi, A., Bathyli, A., Kpatcha, T.M., Douaguibe, B. and Aboubakari, A.-S. (2026) Knowledge, Attitudes and Practices of Midwives and Birth Attendants in the Kara Region/Togo regarding Obstetric Fistulas in 2025. *Open Journal of Obstetrics and Gynecology*, **16**, 320-328.
https://doi.org/10.4236/ojog.2026.162032

Received: January 3, 2026
Accepted: February 7, 2026
Published: February 10, 2026

Copyright © 2026 by author(s) and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY 4.0).
http://creativecommons.org/licenses/by/4.0/

Open Access

Abstract

Introduction: Obstetric fistula is a major public health issue, particularly in West Africa where the prevalence is high (71 per 100,000 women). It is a disease of shame, with a significant psychosocial impact. **Objective:** To study the knowledge, attitudes and practices of midwives and obstetricians regarding obstetric fistulas. **Methodology:** This was a multicenter study conducted in the Kara region of northern Togo. It took place from September 1st to November 30th, 2025. A pre-test questionnaire was used, and the data were analyzed using Microsoft Word 2016 and Epi Info 7 software. The response rate was 50.5%. The majority of providers were between 31 and 35 years old (32.1%), with midwives predominating (75.5%). Most had less than 5 years of professional experience (67.9%). Among the 53 healthcare professionals surveyed, 90.4% had good knowledge, 39.6% had good attitudes, and 66% had good practices. **Conclusion:** Midwives and birth attendants in the Kara region of northern Togo have good knowledge but insufficient attitudes and practices regarding obstetric fistulas. This reflects the inadequate quality of maternal care. It is necessary to strengthen their capacity regarding obstetric fistulas in order to improve the quality of maternal care.

Keywords

Knowledge, Attitudes, Practices, Midwife, Obstetrician, Obstetric Fistula, Kara

1. Introduction

Obstetric fistula (OF) is defined as an abnormal connection between the vagina and the bladder or rectum, most often resulting from prolonged and obstructive labor, causing ischemic necrosis of the pelvic tissues [1] [2]. Beyond its clinical impact, obstetric fistula represents one of the leading causes of disability in women, potentially depriving them of the ability to lead a sexual life, reproduce, and participate in society. It reflects the absence, inadequacy, or inaccessibility of skilled obstetric care [3]-[6].

Despite global progress in maternal health, this pathology remains a major public health issue in many low-resource countries, particularly in West Africa [4] [7].

Worldwide, it is estimated that 2 to 3 million women suffer from obstetric fistula, indicating that 50,000 to 100,000 new women develop this condition each year [2]. This condition affects approximately 457,000 (95% CI 303,000 to 709,000) women aged 15 to 64 years and 386,000 (95% CI 256,000 to 599,000) women of reproductive age (15 to 49).

According to the World Health Organization (WHO), more than 2 million young women in Asia and sub-Saharan Africa are living with untreated obstetric fibrositis (OF) [2] [8]. This represents a significant psychological burden, as the condition is often considered a disease of shame.

In Africa, the figures are alarming: 74,000 cases in Ivory Coast in 2021, 16,080 cases in Burkina Faso, 17,000 cases in Cameroon in 2024 and 117 cases in the DRC in 2025. In Ghana, the incidence is 1.8 per 1000 deliveries [7].

The prevalence rate of obstetric fistula is almost twice as high in the sub-Saharan region (71 per 100,000 women) as in Asia (36 per 100,000 women) [8] [9].

The prevalence and incidence of obstetric fistula are not precisely known in Togo. However, its management is organized at the national level with the creation of a reference center responsible for coordinating and ensuring the control, prevention, and treatment [10]. This initiative demonstrates institutional commitment, but its success largely depends on the skills and practices of frontline maternal healthcare providers in our region, namely midwives and birth attendants. We therefore conducted this study, the objective of which is to assess the knowledge, attitudes, and practices of midwives and birth attendants in the Kara region regarding obstetric fistula in 2025.

2. Framework and Method of Study

2.1. Study Framework

We conducted a multicenter, cross-sectional, descriptive study of midwives and birth attendants in the Kara region in 2025.

2.2. Study Period

The study took place over a period from September 1st to November 30th, 2025.

2.3. Study Population

The target population consisted of midwives and birth attendants providing maternal care and practicing in the Kara region, totaling 105 providers. The Kara region has 10 SONU B (basic emergency obstetric and neonatal care) centers and 5 SONU C (comprehensive emergency obstetric and neonatal care) centers.

2.4. Inclusion Criteria

We included all state-certified midwives and obstetricians practicing in 2025 who agreed to participate in the study.

2.5. Exclusion Criteria

Maternity service providers not directly involved in frontline maternal health care (general practitioners, obstetrician-gynecologists, untrained nursing assistants and senior health technicians).

2.6. Sampling

The sampling was probabilistic, specifically random.

2.7. Techniques and Tools

The five interviewers underwent prior training, followed by data collection over three months after a pre-test questionnaire was administered. Daily monitoring was conducted throughout the survey. Practical procedures were evaluated as follows:

- Good: the step or task executed with great mastery, marked out of 2 points.
- Insufficient: does not perform the step or task according to the protocols or guidelines, marked out of 1 point.
- Not observed: step or task not executed, noted 0.

2.8. Data Analysis and Processing

Data entry, processing and analysis were done using Excel, Microsoft Word 2016 and Epi info 7 software.

2.9. Ethical and Professional Considerations

We obtained informed consent from the healthcare providers. The data was processed anonymously to ensure confidentiality.

2.10. Parameters Studied

These included socio-demographic characteristics, knowledge about obstetric fistulas, attitudes towards obstetric fistulas, and practices regarding obstetric fistulas.

3. Result

3.1. Participation Rate

Of the 105 providers (midwives and obstetricians) in the Kara region, 53 agreed

to participate in the survey, representing a response rate of 50.5%.

3.2. Socio-Demographic Characteristics of the Respondents

3.2.1. Professional Qualification

Midwives represented 75.5% and obstetricians 24.5%.

3.2.2. Place of Practice

They worked at the University Hospital/Regional Hospital (15.4%), in Peripheral Care Units (30.8%) and in medical-social centers (57.7%). Two midwives worked in private health centers (3.8%).

3.2.3. Age and Number of Years of Experience

The majority of respondents were between 31 and 35 years old (32.1%), followed by those between 21 and 25 years old (22.6%). Most had less than 5 years of professional experience (67.9%), as shown in Table 1.

Table 1. Distribution of service providers according to age and number of years of practice.

Age		
	n	**%**
[21 - 25]	12	22.6%
[26 - 30]	11	20.8%
[31 - 35]	17	32.1%
[36 - 40]	6	11.3%
[41 - 45]	5	9.4%
[51 - 55]	2	3.8%
Total	53	100%
Number of years in practice		
<5 years old	36	67.9%
5 - 9 years old	7	13.2%
10 - 14 years old	8	15.1%
15 - 19 years old	1	1.9%
≥20 years old	1	1.9%
Total	53	100%

3.3. Staff Knowledge, Attitudes and Practices regarding Obstetric Fistulas

3.3.1. Knowledge

1) Definition of obstetric fistula

The answers to the question of how obstetric fistula is defined are shown in Table 2.

In this survey, 62.3% had never encountered an obstetric fistula, compared to 37.7% who had. Among those who had never encountered one, midwives repre-

sented 72.7% and obstetricians 27.3%. The number of cases they encountered per year ranged from 5 to 10, according to them.

Table 2. Definition of obstetric fistula according to providers.

How do you define obstetric fistula?	n	%
No idea	1	1.9%
Abnormal communication between the female genital and urinary tracts, abnormal communication between the vagina and the urinary tract and/or rectum after childbirth, abnormal communication between the vagina and the bladder	1	1.9%
Abnormal communication between the female genital and urinary tracts, abnormal communication between the vagina and rectum	1	1.9%
Abnormal communication between the vagina and the rectum, abnormal communication between the vagina and the urinary tract and/or the rectum after childbirth	1	1.9%
Abnormal communication between the vagina and the rectum	2	3.8%
Abnormal communication between the vagina and the rectum, Abnormal communication between the vagina and the bladder	2	3.8%
Abnormal communication between the vagina and the bladder	4	7.5%
Abnormal communication between the female genital and urinary systems	8	15.1%
Abnormal communication between the vagina and the urinary tract and/or rectum after childbirth	20	37.7%
All of the above statements are correct	13	24.5%
Total	53	100%

2) Women at risk

According to the respondents, women at risk of obstetric fistulas are represented in Table 3.

Table 3. Distribution of service providers according to women at risk of obstetric fistula.

Women at risk of FO	n	%
All women who have given birth	29	54.7%
All women of childbearing age	7	13.2%
All women of childbearing age, all women who have given birth	1	1.9%
All pregnant women	13	24.5%
All pregnant women, all women who have given birth	2	3.8%
No idea	1	1.9%
Total	53	100%

3) Cause of the FO

The cause of FO is prolonged compression by the presentation being blocked in the pelvis according to 90.4% of providers (21.3% of obstetricians versus 78.7% of midwives) and 9.6% of providers did not know.

4) Symptoms of FO

Provider responses regarding FO symptoms are shown in Table 4.

Table 4. Distribution of service providers according to FO symptoms.

What are the symptoms of obstetric fistula?	n	%
Constant and involuntary bowel movements	1	2%
Constant and involuntary flow of stool and urine	12	22.6%
Constant and involuntary flow of urine	12	22.6%
All the statements are correct	28	52.8%
Total	**53**	**100%**

5) Prevention of obstetric fistula during dystocic delivery

According to the providers, 39.6% had no knowledge about the prevention of obstetric fistula. The providers' responses are shown in Table 5.

Table 5. Distribution of providers according to their response on the prevention of obstetric fistula.

Prevention of fetal distress during dystocic labor	n	%
No idea	21	39.6%
Insertion of a urinary catheter immediately after delivery for 10 to 15 days	11	20.7%
Repeated urinary catheterization during the day	10	18.9%
Insertion of an indwelling urinary catheter 30 minutes after delivery	8	15.1%
Antibiotic treatment	2	3.8%
Rest for women without an indwelling urinary catheter	1	1.9%
Total	**53**	**100%**

3.3.2. Attitudes and Practices

1) Training on obstetric fistulas

Overall, 84.3% of providers had not received training on obstetric fistulas before starting their duties, compared to 15.7% who had. During their employment, 94.3% had never received continuing education, compared to 5.7% who had.

2) Diagnostic attitudes of OF

In this study, 66% of providers reported knowing how to diagnose FO during physical examination using the methylene blue test. According to the providers, all stated that women with FO deserve therapeutic management, and the therapeutic options are as follows, shown in Table 6.

According to healthcare providers, 71.7% stated that a well-defined patient pathway exists for care in Togo, while 18.9% had no idea what the pathway was. The remaining 32.1% reported knowing of an institution or organization that treats obstetric fistula in Togo, citing non-governmental organizations (Aimes Afrique, GOZEN) and UNFPA (United Nations Population Fund).

Psychological support should be systematic according to 94.3% of providers.

Table 6. Distribution of providers according to therapeutic options.

Treatment of obstetric fistula is	n	%
Surgery	31	58.5%
Urinary expectoration monitoring or the surgery	11	20.7%
Expectant monitoring under urinary welding	8	15.1%
No idea	3	5.7%
Total	**53**	**100%**

4. Discussion

4.1. Socio-Demographic Characteristics of the Respondents

The majority of respondents were between 31 and 35 years old (32.1%). This result is consistent with those of Tebeu *et al.* in Cameroon and Mpia *et al.* in Congo-Brazzaville, who reported the majority age ranges as 33 - 42 and 30 - 35 years, respectively [11] [12]. The majority had less than 5 years of experience (67.9%). The midwives and birth attendants working in health facilities in the Kara region are young women, coming directly from paramedical training schools.

4.2. Knowledge of Service Providers

Providers correctly defined obstetric fistula (OF) in 37.7% of cases. Furthermore, 54.7% stated that all women giving birth are at risk of fistula, and 90.4% recognized that OF is caused by prolonged compression of the fetal presentation trapped in the pelvis. The majority of providers have a good understanding of obstetric fistula, as also reported by Alemu *et al.* in Ethiopia [13]. In contrast, Tebeu *et al.* observed a lower level of knowledge in their study [11].

The high level of knowledge observed in our study could be the result of increased awareness campaigns on maternal health and the integration of obstetric fistula courses into training curricula. These actions appear to have strengthened the theoretical knowledge of healthcare providers.

4.3. Attitudes and Practices of Service Providers

Thirty-nine point six percent of providers had no knowledge of obstetric fistula (OF) prevention measures. This result is understandable given that 84.3% of them had received no training on OF before starting their duties and 94.3% of them had never received continuing education in the course of their work. These shortcomings highlight the importance of strengthening pre-service and on-the-job training to equip providers with the practical skills needed to effectively prevent obstetric fistula. Integrating specific modules on obstetric complications, combined with regular training and capacity-building sessions for providers, could significantly improve the level of knowledge and, consequently, the quality of care provided to pregnant women.

Although 62.3% of providers reported never having encountered a case of obstetric fistula (OF), 66% stated they knew how to make the diagnosis. Furthermore, 58.5% acknowledged that the treatment for OF is surgical, and 94.3% believed that care should be systematic, including psychosocial support. This support must be inseparable from surgical treatment to ensure complete healing and the socio-professional reintegration of women with OF. Similar findings were reported by Marie *et al.* [11], suggesting that despite limited practical experience among providers, their theoretical knowledge remains relatively good.

5. Conclusion

Primary obstetric and neonatal care providers in the Kara region of northern Togo have good knowledge but insufficient attitudes and practices regarding obstetric fistulas. This reflects the inadequate quality of maternal care. It is necessary to strengthen their capacity regarding obstetric fistulas through training sessions to improve the quality of maternal care.

Conflicts of Interest

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

References

[1] Zheng, A.X. and Anderson, F.W.J. (2019) Obstetric Fistula: A Systematic Review of Etiology and Prevention. *International Urogynecology Journal*, **30**, 2019-2033.

[2] World Health Organization (WHO) (2018) Obstetric Fistula. https://www.who.int/news-room/facts-in-pictures/detail/10-facts-on-obstetric-fistula

[3] Emma-Echiegu, N., Okoye, U.O. and Odey, E.S. (2014) Knowledge of Causes of VVF and Discrimination Suffered by Patients in Ebonyi State, Nigeria: A Qualitative Study. *Social Work in Public Health*, **29**, 417-427. https://doi.org/10.1080/19371918.2013.853635

[4] Oluwasolaa, T.A.O. and Bello, O.O. (2020) Clinical and Psychosocial Outcomes of Obstetric Fistulae in Sub-Saharan Africa: A Review of Literature. *Journal of Basic and Clinical Reproductive Sciences*, **9**, 8-16.

[5] Woldegebriel, A.G., Gebrehiwot, G.G., Desta, A.A., Ajemu, K.F., Berhe, A.A., *et al.* (2023) Factors Associated with Obstetric Fistula among Reproductive Age Women in Ethiopia: A Community Based Case Control Study. *Reproductive Health*, **20**, Article No. 78. https://doi.org/10.1186/s12978-023-01622-y

[6] Halidou, M., Manzo, O., Lankoande, Z., Kodo, A., Adamou, H., Habou, O., *et al.* (2024) Obstetric Fistula: Epidemiological, Social and Therapeutic Aspects: Prospective Study of 196 Patients Admitted to the ZINDER Mother and Child Health Centre (CSME). *Open Journal of Urology*, **14**, 95-103. https://doi.org/10.4236/oju.2024.142010

[7] Asiedua, E., Maya, E., Ganle, J.K., Eliason, S., Ansah-Ofei, A.M., Senkyire, E.K., *et al.* (2023) Health-Seeking Experiences of Women with Obstetric Fistula: A Qualitative Study at Two Fistula Centres in Ghana. *BMJ Open*, **13**, e064830. https://doi.org/10.1136/bmjopen-2022-064830

[8] Ahmed, S., Genadry, R., Asiamah, B., Liang, M., Tripathi, V. and Anastasi, E. (2025) Global, Regional and National Estimates of Obstetric Fistula Prevalence. *BMJ Global Health*, **10**, e020877. https://doi.org/10.1136/bmjgh-2025-020877

[9] Whitcomb, K. (2024) Obstetric Fistulas in Sub-Saharan Africa. Ballard Brief. https://ballardbrief.byu.edu/issue-briefs/obstetric-fistulas-in-sub-saharan-africa

[10] Kpatcha, T.M., Wangala, P., Botcho, G., Tchandana, M., Nembuzu, D. and Aboubakari, A.S. (2020) Profil épidémiologique, anatomoclinique et thérapeutique des fistules urogénitales et rectovaginales au Togo. *Progrès en Urologie*, **30**, 597-603. https://doi.org/10.1016/j.purol.2020.06.008

[11] Marie, T.P., Herve, N., Derguedbé, N., Claudine, T.T., Gérard, F.T.T. and Charles-Henry, R. (2019) Knowledge, Attitudes and Practices of Health Professionals in the Koung-Khi and Mifi Health Districts of Western Cameroon regarding Obstetric Fistulas. *Health Sciences and Disease*, **20**. https://api.semanticscholar.org/CorpusID:86592557

[12] Mpia, N.S.B.P., Buambo, G.R.J., Ngambéké, M.T.L., Mokoko, J.C. and Itoua, C. (2025) Knowledge, Attitudes, and Practices of Midwives regarding Obstetric Fistulas in Brazzaville. *Open Journal of Obstetrics and Gynecology*, **15**, 972-981. https://doi.org/10.4236/ojog.2025.156079

[13] Alemu, S.S., Agago, M.T., Ukumo, E.Y. and Hadero, T.S. (2023) Knowledge and Practice of Obstetric Care Providers on Prevention of Obstetric Fistula 2023: An Institution-Based Cross-Sectional Study. *Frontiers in Global Women's Health*, **4**, Article 1234013. https://doi.org/10.3389/fgwh.2023.1234013