

## **Original Article**

# Obstetric Fistula Knowledge, Attitudes and Practices among the **Professionals of Communication in Yaounde (Cameroon)**

Connaissances, attitudes et pratiques des professionnels de la communication sur la fistule obstétricale à Yaoundé (Cameroun)

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# **ABSTRACT**

Introduction. The World Health Organization (WHO) estimated an annual incidence of 50,000-100,000 new cases of obstetric fistula. In Cameroon, it is estimated that about 19,000 women suffer from obstetric fistula. Affected women remain with anatomical, functional and social defects. This study aimed at analyzing knowledge, attitude and practice of professional of communication with regards to obstetric fistula. Methodology. This was a multicentric analytic KAP study conducted in twenty-three medias structures in Yaoundé from 10 January to 30 May 2016. Data were collected on knowledge, attitude and practice of communicators towards obstetric fistula. Data were analyzed using Epi Info Version 7.1.4.0. The mean and the frequencies were calculated, odds ratio with 95% confidence interval was used to quantify the strength of associations. A difference within two group was considered statistically significant if p value < 0,05. Results. Among 101/133 (75.94%) communicators who were informed, only 60/101 (45.11%) had satisfactory knowledge. This knowledge influenced positively the attitudes of public sector communicators towards obstetric fistula (OR=8.3[1.6-41.5]; p value = 0.01). The proportion of satisfactory attitudes of communicators with regards to obstetric fistula was 79/101 (78.22%) and the practices were 19/101 (18.81%). Knowledge and attitude did not influence the practice regardless of the working sector. Conclusion. The management of obstetric fistula in Cameroon suffers from little knowledge, attitude and practice of mass communicators. There is a need better involvement of communicator about challenges about obstetric `fistula

## RÉSUMÉ

Introduction. L'OMS estime à 50 000 - 100 000 nouveaux cas de fistules obstétricales (FO) par an dans le monde. Au Cameroun on estime que plus de 22 000 femmes souffrent de FO. Cette pathologie est responsable de complications anatomiques, fonctionnelles et sociales. Cette étude visait à analyser les connaissances, attitudes et pratiques des professionnels de la communication vis-à-vis des FO. Méthodologie. Il s'agissait d'une étude CAP analytique multicentrique dans vingt-trois structures médiatiques de Yaoundé en 2016. Les moyennes et les fréquences ont été calculées, le rapport de cote (Odds ratio) a été utilisé avec un intervalle de confiance de 95% pour quantifier la force des différentes influences. Une différence entre deux groupes était considérée comme statistiquement significative si la valeur p était < 0,05. **Résultats.** Parmi 101/133 communicateurs qui avaient été informés seuls 45,11% avaient des connaissances satisfaisantes. Ces connaissances influençaient les communicateurs du secteur public à adopter des attitudes satisfaisantes face aux fistules obstétricales (OR:8,3[1,6-41,5]; p = 0,01). La proportion des attitudes satisfaisantes des communicateurs face aux fistules obstétricales était de 78,22% et celle des pratiques était de 18,81%. Les connaissances n'avaient pas d'influence sur les pratiques quel que soit le secteur de pratique. Conclusion. La prise en charge des fistules obstétricales au Cameroun souffre des limites des connaissances, des attitudes et des pratiques des communicateurs de masse. Ceci justifie la nécessité d'impliquer les communicateurs formels dans l'éducation de la population pour un meilleur relais des messages de prévention et le traitement précoce des fistules obstétricales.

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#### INTRODUCTION

Obstetric fistula (OF) is a continuity between the urinary tract and the vagina (vesicovaginal fistula) or between the rectal tract and the vagina (rectovaginal fistula) (1). It usually occurs after a prolonged and difficult delivery in the absence of appropriate obstetric care (2-7). In both Cameroon and Ethiopia, some women acknowledge that they have considered suicide as a solution to their fistula problem (8-11). In 2004, WHO estimated that more than 2 million women were living with untreated fistula, and the annual incidence was estimated at 50,000-100,000 new cases worldwide (12).

Many developing countries have reported an incidence rate of 0.33 to 2 new cases of fistula per 1000 deliveries (13,14). Based on these figures, approximately 1000 (350 to 1500) new cases of obstetric fistula are expected each year. In the Far North regions of Cameroon (Adamaoua, North, Far North), a population survey conducted in 2004 identified 162 cases of obstetric fistula (15).

The results of this study were proof that obstetric fistula is a reality in Cameroon. According to the EDS-MICS 2004, the prevalence of genital fistula was 0.4% (400 / 100,000) women of reproductive age (16). Indeed, according to the 2011 EDS-MICS, there is low awareness of obstetric fistula among the female population, as only 23% of women aged 15-49 have heard of this disease (16).

The low accessibility of information through the media may be partly related to inadequate knowledge, attitudes and practices of communication professionals. However, we did not find any studies on obstetric fistula targeting communication professionals.

The objective of this study was to assess the knowledge, attitudes and practices of formal communicators about obstetric fistula in Yaounde.

#### **METHODS**

This was a prospective study, multicentric analytical KAP in twenty-three media structures from January 10 to May 30, 2016.

Communication professionals from the formal media structures in the city of Yaounde have been identified. We excluded communicators from the electronic press, those from non-news structures, those from the print media that do not have daily publications as well as those who refused to participate in the study. In total, information on 133 formal communicators was analyzed: 82 communicators from the private media and 51 from the public media.

The variables of interest included socio-demographic characteristics, knowledge about obstetric fistula, attitudes towards obstetric fistula, and practices towards obstetric fistula. Data collection was carried out using a predesigned and pre-tested questionnaire.

The collected data were entered into the computer using the Epi Info software version 7.1.4.0 for analysis. Averages and frequencies were calculated, and the odds ratio was used with a 95% confidence interval to assess the strength of the association between the different variables. The Fisher's exact test is used to compare two proportions when indicated. A difference between two groups was considered statistically significant if p<0.05.

#### **RESULTS**

## Knowledge

As for the characteristics of formal communicators, only 60/133 (45.11%) had satisfactory knowledge, compared to 41/133 (30.83%) with unsatisfactory knowledge and 32/133 (24.06%) who had never been informed. The three variables that distinguished communicators with prior information about obstetric fistula from those without knowledge of the subject were the age group under 30 years at 38/101 (37.62%) in the informed group versus 24/32 (75.0%) in the uninformed group; communicators of private media structure at 56/101 (55.45%) in the informed group versus 26/32 (81.25%) in the uninformed group and job tenure of less than 5 years at 35/101 (34.66%) in the informed group versus 25/32 (78.12%) in the uninformed group (Table 1).

Table 1. Distribution of socio-demographic and professional characteristics of the communicators surveyed

<b>P</b>	Information in advance			
	Yes	No	р	
	n=101(%)	n=32(%)		
Age (Years)				
20-30	38 (37.62)	24 (75.00)	0.00003	
31-40	35 (34.65)	6 (18.75)		
41-50	23 (22.77)	2 (6.25)		
51-55	5 (4.96)	0		
Sex				
Male	57 (56.44)	18 (56.25)	0.98	
Female	44 (43.56)	14 (43.75)		
Occupational categ	ory			
Health	7 (6.93)	0	0.2	
journalist				
General	90 (89.11)	30 (93.75)		
journalist				
Journalist other	4 (3.96)	2 (6.25)		
than in health				
Professional senior				
0 - 2	8 (7.92)	9 (28.12)		
3 - 5	27 (26.74)	16 (50.0)		
6 - 10	29 (28.71)	4 (12.5)	0.000053	
11 - 20	28 (27.72)	3 (9.38)		
21 - 30	9 (8.91)	0		
Media structures				
Public	45 (44.55)	6 (18.75)		
Private	56 (55.45)	26 (81.25)	0.011	

Among informed communicators, the two variables that distinguished public sector communicators from private sector communicators were age range 31-55 [OR=6.73 (2.56-17.63), p=0.00003]; and job seniority of more than 6 years [OR=6.98 (2.55-19.10), p=0.00005] (Table 2). With regard to the level of specific knowledge about risk factors and management, the majority of those with knowledge of obstetric fistula knew that obstetric fistula was preventable with good pregnancy follow-up 82/101 (81.19%), that it was curable 86/101 (85.19%), and that treatment required surgery 75/101 (74.26%).

#### Attitudes

The vast majority of communicators who had been previously informed about obstetric fistula suggested that they needed to attend seminars on obstetric fistula 84/101(83.17%), that there was a need to develop

programmes on health 86/101(85.15%), and that awareness raising led to a change in the population's behaviour 84/101(83.17%).

Table 2. Influence of socio-demographic and occupational characteristics on the types of structures

Communicators informed in advance					
	Total N=101(%)	Public Medias n=45(%)	Private Medias n=56(%)	OR (95% CI)	p
Age (Years)					
20 - 30	63 (100)	7 (18.42)	31 (81.58)	1	
31- 55	38 (100)	38 (60.32)	25 (39.68)	6.73 (2.56-17.63)	0.00004
Professional seniority (Y	ears)				
2 months - 5 ans	66 (100)	6(17.14)	29(51.79)	1	
6 - 30	35 (100)	39 (59.09)	27 (40.91)	6.98 (2.55-19.10)	0.00005
OR = Odds Ratio, p = p-value	e, CI= Confidence Interva	al.			

Table 3. Influence of the knowledge level of previously informed public sector communicators on their attitudes towards obstetric fistula.

Types of public media attitudes						
	Total N=45(%)	Satisfactory N=36(%)	Unsatisfactory N2=9(%)	Odds Ratio (95 % CI)	p	
Knowledge						
Unsatisfactory	13(100)	7(53.85)	6(46.15)	1		
Satisfactory	32(100)	29(90.63)	3(9.38)	8.3 (1.6-41.5)	0.01	

Table 4. Distribution of previously informed communicators by type of media structure					
Satisfactory	Total	Public Medias	Private Medias		р
practice	N=101(%)	n2=45(%)	n1=56(%)	Odds Ratio (95% CI)	
Yes	19 (18.8)	13 (28.9))	6 (10.7)	3.38 (1.16-9.81)	0.02
No	82 (81.2)	32 (71.1)	50 (89.3)	1	

Table 5. Influence of knowledge and type of attitudes of public media communicators on their fistula practices

		Practice medias level			
		Total N=45(%)	Satisfactory n1=13 (%)	Unsatisfactory n2=32 (%)	p*
Knowledge	e				
Un	satisfactory	13	1 (7.69)	12 (92.31)	
Sa	tisfactory	32(100)	12 (37.50)	20 (62.50)	0.07
Types of a	ttitude				
Un	satisfactory	9 (100)	0	9 (100.0)	
Sa	tisfactory	36 (100)	13 (36.11)	23 (63.89)	0.04
p*: for the	exact Fischer's test				

The proportion of satisfactory attitude was estimated at 79/101 (78.22%). Satisfactory attitudes were in the majority among public sector communicators 36/45(80%). In the public sector, knowledge was 8.3 times more likely to have satisfactory attitudes [OR =8.3 (1.6-41.5) p = .01] (Table 3). Satisfactory attitudes were also prevalent among private sector communicators 43/56 (76.79%) but no influence of knowledge on attitudes in this sector was found.

#### **Practices**

Of the 101 communicators previously informed about obstetric fistula, 86/101 (85.15%) had suggested broadcasting programmes on obstetric fistula. Few of the 23/101 communicators (22.77%) reported airing a topic on

obstetric fistula. On the other hand, only 16/101 (15.84%) had attended a seminar on obstetric fistula. The proportion of satisfactory practices was estimated at 19/101(18.81%). Satisfactory practices were 3.38 times higher among public sector communicators than private sector communicators [OR=3.38(1.16-9.81%), p=0.02] (Table 4). No influence of knowledge on practice was found in any sector of activity, but we did note an influence of attitudes on practice (Table 5).

#### DISCUSSION

We conducted an analytical KAP study to analyze communicators' knowledge, attitudes and practices about obstetric fistula. We recruited 133 communication professionals from the city of Yaoundé, from January 1 to

May 9, 2016. We found that the communicators ranged in age from 20 to 55 years old. The most represented age group was between 20 and 30 years old, representing a rate of 46.61% (62/133) of the communicators surveyed. Nindorera et al. in 2013, in a study on media auditing in Burundi reported that 69 of the 247 communicators were aged 30 and 35 (28%) or 69/247 (17). Among the communicators, 56.39% were male with a sex ratio of 1.29. Nindorera et al. in 2013 found male dominance at 62% of the 202 communicators with a sex ratio of 1.63(17). (17) We noted in this study that more than half, 78 (58.64%) communicators were from the private sector, compared to 55 (41.35%). Nindorera et al. in 2013 found a predominance of private media at 60% against 40% of public media. This could be explained by the growing interest of journalists to be autonomous (17). The majority of communicators were young in the profession with less than 5 years' professional seniority at 45.11% compared to 30.08% for those over 10 years old. Nindorera et al. in 2013 found a proportion of professional seniority of less than 5 years at 41% against only 27% for those over 10 years (17). The relatively young seniority in the profession of communicators could be explained by the growing interest of young graduates in the journalism profession. We found that 101/133 (74.94%) of communicators had

been informed versus 32/133 (24.06%) not informed. Among those who had been previously informed, the levels of knowledge were divided into satisfactory 60 /101 (59.41%) and unsatisfactory 41 (40.59%). In the literature we did not find comparable data on communicators' knowledge of obstetric fistula. However, compared to the general population, the previously informed communicators were higher than the 50% reported by hospital visitors in Maroua (Far North Cameroon), 23% and 23.2% reported in Far North Cameroon and Ethiopia (1, 16, 18). The information rate of 24.06% and the unsatisfactory level of knowledge among those informed (40.59%) may be considered inadequate inasmuch as several activities and studies have been conducted at several sites in Cameroon on various aspects of obstetric fistula (4, 19, 20). This result justifies the need to improve knowledge through information and education of communicators, especially those who had never heard of obstetric fistula.

The study also shows that among those who were informed, 32/45 (71.11%) of public sector communicators had satisfactory knowledge compared to 13 (28.89%) of unsatisfactory knowledge and 28/56 (50%) of private sector communicators had satisfactory knowledge. Public media communicators were more knowledgeable with a statistically significant analysis p=0.04 OR=2.46 (1.07-5.64). Data on the knowledge of public and private media communicators about obstetric fistula were not found in the literature.

Higher knowledge of the public media than of the private media could be explained by the priority position of the public media when a training seminar is organized by the Ministry of Public Health. This justifies the need to involve the private media in training sessions.

Regarding the influence of knowledge on attitudes, among communicators who had been informed, 78/101(78.22%)

had satisfactory attitudes. Among private sector communicators, knowledge influenced their attitudes (p=.01). In the private sector, knowledge did not appear to influence their attitudes with any value (p=0.2). We did not find data in the literature on communicators' attitudes towards obstetrical fistula. This discordance in the influence of knowledge on attitudes between the public and private sectors could be explained by the fact that the knowledge of communicators in the public sector is better than in the private sector. These observations justify the need to strengthen the information messages of private sector communicators.

In the evaluation of communicators' practices on obstetric fistula, we found that among communicators who were informed in advance, only 18.81% had satisfactory practices. Communicators in the public media had better practices than those in the private sector. In the literature we did not find comparable data on communicators' practices regarding obstetric fistula. However, the fact that the practices of public sector communicators were superior could be explained by the ease of access to public media coverage at certain events. This justifies the need to adopt strategies that facilitate access to private media in health event coverage.

With regard to the influence of knowledge and attitudes on communicators' practices, we found that, among communicators in the public and private sectors, knowledge did not influence the level of practice, unlike attitudes. We did not find comparable data on the influence of knowledge and attitudes on communicators. However, this finding supports the theory of reasoned action which states that "the achievement of a behaviour is jointly dependent on the individual's attitude toward that behaviour" (21-23). This observation could be explained by the existence of intermediate factors that would prevent the individual from adopting better practices despite better knowledge and attitudes. This justifies a search for these intermediate factors.

## CONCLUSION

Communication professionals in the city of Yaounde have insufficient knowledge about obstetric fistula. Communicators in the public media are better informed than those in the private media. Many communicators have satisfactory attitudes towards obstetric fistula. Few communicators have satisfactory practices on obstetric fistula. Knowledge influences attitudes in the public sector. Satisfactory knowledge does not influence the practices of communicators in any sector.

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## **AUTHORSHIP CONTRIBUTIONS**

CT designed the study, wrote the protocol and text and supervised the data analysis. SHW, JSA analysed the data and wrote the manuscript. CMO, PMT and CHR participated in the drafting of the protocol, data analysis and text writing. All authors have read and approved the manuscript.

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#### CONFLICTS OF INTEREST

Authors declare that they have no conflicts of interest.

#### RÉFÉRENCES

- (1) Tebeu PM, de BL, Boisrond L, Le DA, Mbassi AA, Rochat CH. [Knowledge, attitude and perception about obstetric fistula by Cameroonian women]. Prog Urol 2008 Jun;18(6):379-89.
- (2) Falandry L. La fistule vésico-vaginale en Afrique, 230 observations. Presse Med 1992;21(6):241-45.
- (3) Gueye SM, Diagne BA, Mensah A. Les fistules vesicovaginales, aspects etio-pathogeniques et therapeutiques au Senegal. Med Afr N 2008;39(8/9):559-63.
- (4) Zoung-Kanyi J, Sow M. [Focus on vesicovaginal fistulas at the Yaounde Central Hospital. Apropos of 111 cases seen in 10 years]. Ann Urol (Paris) 1990;24(6):457-61.
- (5) Browning A. Obstetric fistula: current practicalities and future concerns. Int Urogynecol J Pelvic Floor Dysfunct 2008 Mar;19(3):333-4.
- (6) Tebeu PM, Kemfang Ngowa JD, Noa Ndoua C, Ekono MR, Maninzou SD, Rochat CH. Causes of Obstetric Genito-urinary Fistula: an experience from the University Hospital, Yaounde, Cameroon. Int J Curr Res 2015;7(9):20589-93.
- (7) Tebeu PM, Fomulu JN, Khaddaj S, de BL, Delvaux T, Rochat CH. Risk factors for obstetric fistula: a clinical review. Int Urogynecol J 2012 Apr;23(4):387-94.
- (8) Tebeu PM, Rochat CH, Kasia JM, Delvaux T. Perception anf attitude of obstetric fistula patients about their condition:a report from the regional hospital of Maroua, Cameroon. Urogynaecologia 2010;24(e2):5-6.
- (9) Goh JTW, Sloane KM, Krause HG, Browning A, Akhter S. Mental health screening in women with genital tract fistulae. B J O G 2005;112:1328-30.
- (10) Nafiou I, Idrissa A, Ghaichatou AK, Roenneburg ML, Wheeless CR, Genadry RR. Obstetric vesico-vaginal fistulas at the National Hospital of Niamey, Niger. Int J Gynaecol Obstet 2007 Nov;99 Suppl 1:S71-4.
- (11) Moudouni S, Nouri M, Koutani A, Ibn AA, Hachimi M, Lakrissa A. [Obstetrical vesico-vaginal fistula. Report of 114 cases]. Prog Urol 2001 Feb;11(1):103-8.
- (12) UNFPA [homepage on the Internet]. New York: Campaign to end fistula.[Updated 2004; cited 02 November 2008]. Available from: http://www.endfistula.org/q\_a.htm 2008

- (13) Waaldijk K. The immediate surgical management of fresh obstetric fistulas with catheter and/or early closure. Int J Gynaecol Obstet 1994 Apr;45(1):11-6.
- (14) Sefrioui O, Aboulfalah A, Taarji HB, Matar N, el Mansouri A. Profil actuel des fistule svesicovaginales obstétricales à la maternité universitaire de Casablanca. Ann Urol (Paris) 2001 Sep;35(5):276-9.
- (15) UNFPA [homepage on the Internet]. Yaoundé: Minding the gap: ending fistula. [updated......; cited 2008 June 12]. Available from: <a href="http://cameroon">http://cameroon</a> unfpa org/docs/Flyer\_on\_Fistula pdf 2007
- (16) DHS cameroon 2011, Ngono G, Evina F. Enquete Demographique et de Sante et a Indicateurs Multiples du Cameroun. 133-4. 2011. Claverton, Maryland, USA: INS et ICF International. Connaissance et Prevalence de la Fistule Obstetricale. Ref Type: Edited Book
- (17) Nindordra W, Capitant, S, Ndarugirire, T. Rapport final-version final Audit des par les medias. 2013. 2016. Ref Type: Online Source
- (18) Biadgilign S, Lakew Y, Reda AA, Deribe K. A population based survey in Ethiopia using questionnaire as proxy to estimate obstetric fistula prevalence: results from demographic and health survey. Reprod Health 2013;10:14.
- (19) Tebeu PM, de BL, Doh AS, Rochat CH, Delvaux T. Risk factors for obstetric fistula in the Far North Province of Cameroon. Int J Gynaecol Obstet 2009 Oct;107(1):12-5.
- (20) Tebeu PM, Maninzou SD, Kengne FG, Jemea B, Fomulu JN, Rochat CH. Risk factors for obstetric vesicovaginal fistula at University Teaching Hospital, Yaounde, Cameroon. Int J Gynaecol Obstet 2012 Jun 20.
- (21) Laschinger HK, Goldenberg D. Attitudes of practicing nurses as predictors of intended care behavior with persons who are HIV positive: testing the Ajzen-Fishbein Theory of Reasoned Action. Res Nurs Health 1993 Dec;16(6):441-50.
- (22) Laschinger HK, Goldenberg D. Attitudes of practicing nurses as predictors of intended care behavior with persons who are HIV positive: testing the Ajzen-Fishbein Theory of Reasoned Action. Res Nurs Health 1993 Dec;16(6):441-50.
- (23) Thrasher RG, Andrew DP, Mahony DF. The efficacy of a modified Theory of Reasoned Action to explain gambling behavior in college students. J Gambl Stud 2011 Sep;27(3):499-516.

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