



Prognosis of Newborns of Parturient Who Have Suffered Female Genital Mutilation/Excision (FGM) in the Obstetrics Department of University Hospital Center (UHC) POINT G. BAMAKO/Mali

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**Received:** April 23, 2024

**Published:** May 27, 2024

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**DOI:** 10.31080/ASMS.2024.08.1833

### Abstract

**Aim:** To study the prognosis of newborns in parturients who have undergone female genital mutilation (FGM).

**Patients and Method:** Our study took place in the obstetrics department U.H.C Point G. It was a case / control study. The case being the excised woman and the witness, the non-excised woman. Our study lasted sixteen months, from 01/01/2019 to 04/30/2020. Were included, primiparas from 14 to 49 years old excised or not. The sample size was calculated based on the case / control sample. Data collection was done on individual questionnaires. The analysis and data processing were done on SPSS 12.0 and Word 2013. Statistical tests: Khi2. P < 0.05.

**Results:** during our study we included 266 women. The major age group was 14-19, or 51.1% in the cases and controls. The bambaras and sonrhais were the majority ethnic groups in the two cases with respectively 34.6% and 31.1% with P < 0.00. The illiterate and the secondary level were the majority in the cases and the controls respectively with 57.8% and 59.3% with P < 0.00. Type 3 circumcision accounted for 12%. In our study we had 43.75% of infibulates delivered vaginally we found a relationship with P < 0.05; 17.3% of the newborns of the cases had a bad Apgar against 0% in the controls and 02.3% of neonatal mortality in the excised women; Absence of neonatal mortality in women not excised.

**Conclusion:** FGM was a frequent practice in our countries and can be a source of neonatal and obstetrical complications. Measures must be taken to prevent and eradicate this scourge.

**Keywords:** Female Genital Mutilation; Obstetric Complications; Prognosis of Newborns

## Introduction

Female genital mutilation covers all interventions, including partial or total removal of the external genitals of a woman or any other injury to the female genitalia that is performed for non-medical reasons. These practices have no health benefits for girls and women. They can cause severe bleeding and urinary problems, and consequently cysts, infections and complications during childbirth, and increase the risk of newborn death. It is estimated that more than 200 million girls and women still alive have been victims of sexual mutilation in 30 countries in Africa, the Middle East and Asia where these practices are concentrated [1]. They are most often practiced on young girls between childhood and the age of 15. Female sexual mutilation is a violation of the rights of girls and women. The World Health Organization (WHO) condemns all forms of female sexual mutilation and is opposed to it being practiced by medical personnel (medicalization of women's sexual abuse [1,2]. The World Health Organization (WHO) classifies female genital mutilation into four distinct categories [3]. Type 1: Excision of the prepuce with or without partial or total ablation of the soft parts, Type 2: Exception of the foreskin, of the clitoris and partial and total removal of the small lips. Type 3: partial or total excision of the external genitals and suture/ narrowing of the vaginal orifice (infibulation). Type 4: unclassified interventions. MGF/E is a harmful procedure without any benefit to women's health and is well known as a procedure that violates a person's human rights and increases his/her risk of health complications [4]. Among all these complications we were interested in the prognosis of newborns [5-7]. In Mali, the prevalence of female genital mutilation is very high, approximately 89% and the prognosis of newborns is unknown, no studies have been done on this subject [8]. However, a few studies are available, and these have significant methodological limitations [9]. That is why we started this study with the aim of: To study the prognosis of newborns of women who have undergone female genital mutilation. (MGF).

## Patients and Method

Our study was carried out in the obstetrics department of CHU of the G Point of the District of Bamako. It was a case/witness study. The case was represented by the cut primipare and the witness, an uncut primipare. One case was paired with a witness according to the age and parity criteria that should be identical. Our study

lasted sixteen months, from 01/01/2019 to 30/04/2020. This study covers all women who came to give birth in U.H.C Point G's obstetric department during the survey period. Criteria for inclusion: Firstborns from 14 to 49 years old, either cut or not cut, with or without complications, who came to the said service to give birth during our study period. Non-inclusion criteria: All non-consent women and multi-pares. Sample size was calculated based on case/test sample size:

- Witness/case ratio: 1: 1
- Odds ratio interesting to detect: 0.1
- Exposure ratio among witnesses: 11.9%
- Power: 80%
- Confidence level: 95%
- Numbers of cases: 133
- Number of witnesses: 133
- Total: 266

The data was collected on the basis of identical individual questionnaires for the case and for the witness. The techniques we used during the investigation were interrogation, observation and physical examination. The variables that we were interested in are: Age, place of birth, marital status, ethnicity, level of literacy, parental profession, excision, not excised, the types of excision, birth pathway, Apgar of newborns, state of the newborn after birth. Data analysis and processing were done in Epi Info 12.0 and Word 2013. Different statistical tests were used: Khi2.  $P < 0,05$  is considered to be significant. This study was conducted in the public interest to publish the findings, to address problematic cases and to enable information, education, and health communication (IECS) of the population on FGM.

## Results

Smurfs were predominant among women who were not excised, or 33.1 per cent (44/133). The statistical test was significant with Khi2 : 40.61; ddl : 7;  $P < 0.00$ .

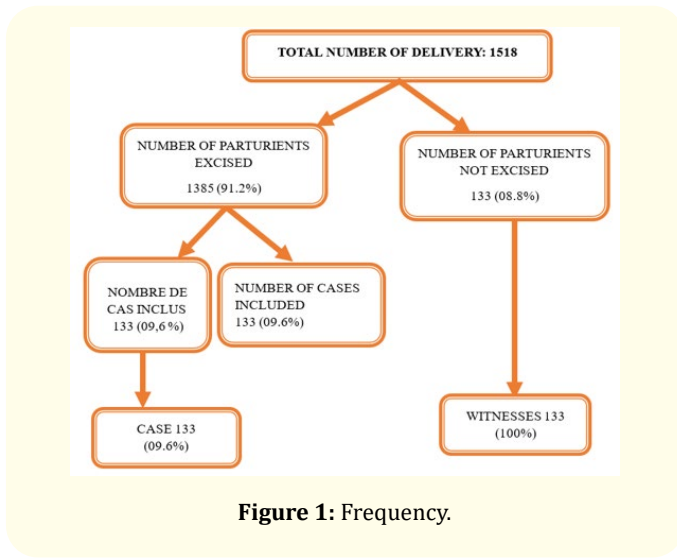


Figure 1: Frequency.

Excised		No Excised	
Literacy level	Effective	Percentage	Effective
Not literate	77	57.8	22
Primary level	21	15.7	15
Secondary level	18	13.5	79
Higher level	10	7.5	13
Koranic school	7	5.2	4
Total	133	100	133

Table 2: Educational level of mothers of women surveyed.

Illiterates predominated among excised mothers (57.8%: 77/133). The secondary level represented 59.3% (79/133) among non-excised mothers. Chi2: 98.07; df: 3; P<0.00. One hundred and one out of one hundred and thirty-three circumcised mothers, or 75.9%, were housewives, while 91/133 (68.4%) non-excised mothers were civil servants. Chi2: 92.76; df: 2; P < 0.00.

Ethnicities	Excised		No excised
	Effective	Percentage	Effective
Bamanan	46	34.6	34
Malinke	20	15	11
Peulh	20	15	15
Sarakole	14	10.3	8
Khassonke	12	9	3
Senoufo	7	5.3	5
Dogon	7	5.3	3
Sonrhaï	7	5.3	44
Bobo	0	0	10
Total	133	100	133

Table 1: Ethnic groups of women surveyed.

Bamanans were predominant among the excised (34.6% : 46/133)).

Most of our women, whether excised (47.4% : 63/133) or unexcised (57.1% : 76/133), were from Bamako. The statistical test was not significant.

Unmarried women were predominant among the excised (50.4 per cent) (67/133) while 64 per cent (85/133) of the unexcised women were married.

Types of excision	Effective	Percentage
Type1	32	24
Type 2	85	64
Type 3	16	12
Total	133	100

Table 3: The different types of excision.

Type 3 excision represented 12% (16/133) of our sample. 85.7% (114/133) of circumcised women did not know at what age they were circumcised. 3.7% (5/133) of our patients were excised by health personnel.

Mode of delivery	Excised		No Excised
	Effective	Percentage	Effective
Vaginal delivery	96	72.1	124
Forceps	24	18	3
Caesarean section	13	9.7	6
Total	133	100	133

Table 4: Mode of delivery of the women surveyed.

72.1% of excised women gave birth vaginally compared to 93.2% of non-excised women.

Excised			No excised
Apgar	Effective	Percentage	Effective
[7-10]	110	82.7	133
[0-6]	23	17.3	0
Total	133	100	133

**Table 5:** Apgar of newborns of the women surveyed.

We found 17.3% of newborns of circumcised women had a poor Apgar compared to 0% among controls. OD : 1.4; CI : 95%.

Excised			No excised
Number of neonatal deaths	Effectif	Pourcentage	Effectif
0	130	97.7	129
1	3	02.3	4
Total	133	100	133

**Table 6:** Number of early neonatal deaths of the women surveyed.

We have 02.3% neonatal mortality among excised women; Absence of neonatal mortality among non-excised women OD: 1.1 I There is 02.3% neonatal mortality among excised women; Absence of neonatal mortality in non-circumcised women OD: 1.1 CI: 95%.

### Comments and Discussion

During our study, which took place from 01/01/2019 to 30/04/2020 in the obstetric department of CHU of G Point Bamako/Mali, we encountered many difficulties, among others: refusal to participate in the survey, fear of the stigma of girls, fear to reveal their status to the public. During our study we linked 1518 pregnant mothers and 1385 pregnant women cut or a frequency of 91.2%, of which 133 pregnant girls included, or a rate of 09.6%; among the non-growing mothers all pregnant Mothers were included or 100% (Figure 1). In Saudi Arabia, 93.8% were aware of female genital mutilation [1]. In Africa the prevalence varies by country: Burkina is 72.5%; Gambia: 78.3%; Guinea-Conakry: 95.6%; Mali: 85.2%; Senegal: 20% and Somalia: 97.9% [9]. In our series, the 14-19-year-

old age range was the highest in cases and in the test, with 51.1% in both groups. Average age = 19.5 years. This was related to the type of study and the inclusion criteria. According to a study conducted in Ethiopia in 2017, the average age of women surveyed was 22 years [10]. In Mali according to EDSM VI: the largest age group was 15-19 years [8]. Bamanan were predominant in the cases (34.6%: 46/133). Smurfs were predominant among the witnesses or 33.1% (44/133) with P <0,00 according to our series (table 1). According to EDSM-VI in most regions, almost all women were excised, such as in Kayes (95%), Koulikoro (96%) or Sikasso and Ségou (96% and 92% respectively) or in the district of Bamako (91%) [8]. The region of Tombouctou has a lower prevalence. Finally, in regions such as Gao and Kidal, excision is a marginal practice (1% and <1% respectively). In the regions of Kayes, Koulikoro, Sikasso and Ségou, the bambaras are the majority and practice female genital mutilation, while in the areas of Tombouctou, Gao and Kidal it is the Sonrhaïs who are the predominant and do not practice the female Genital Mutilation which confirms our thesis. Single women were predominant among the excised or 50.4% (67/133) in our series. In our study, 64% (85/133) of non-excised women were married. Therefore, the excision is no longer justified, because one of the reasons mentioned for the execution is the preservation of virginity until marriage. Analphabets were predominant among the mothers of excised women (57.8%: 77/133). The secondary level was 59.3% (79/133) in the mothers of women not excised with P<0.00 in our study (table 2). 101/133 of the mothers of the excised women, or 75.9%, were housewives, while 91/133 (68.4%) of the unexcised mothers were civil servants with P < 0.00 in our series. According to EDSM-VI, the percentage of excised girls tends to increase with the educational level of the mother and with the level of economic well-being, from 10% when the mother has no education level to 17% when she has the secondary level or above and from 7% in the lowest economic quintile to 20% in the highest [8]. Type 3 excision accounted for 12% (16/133) of our sample (table 3). Infibulation is more common in Bamako (23%) than in other cities (7%) and in rural areas (10%). The most common form of excision is cutting and removing meat (41%). Furthermore, in 25 per cent of cases, women have had a simple infibulation and in 8 per cent, it has been infibulated. It should also be noted that 26% of women were unable to give an answer [8]. In our study, 85.7% (114/133) of female excisers did not know at what age they were excised. Results on age at the time of excision showed

that in approximately three-quarters of cases (76%) the excision occurred before the age of 5 years, including in early childhood. In addition, 16% of women were excised at the age of 5-9 years, 4% were between 10 and 14 years of age, and less than 1% of women had been excised at a later age, i.e. 15 years or older [8].

According to Andualet M. and all: the age of the girls, the level of education of the parents, the residence, the history of women's circumcision, culture, education were risk factors for the practice of female genital mutilation [11]. In our study, 3.7% (5/133) of our patients were excised by health professionals. 94% of girls aged 0-14 years and 89% of women aged 15-49 years have been excised by traditional excisers, but healthcare personnel also practice them (pornographic/pornografic: 3.72%; doctor: 0.48%; midwives: 1.02% and others: 1.14%) in 1.59% [8]. In our study we found that 72.1% of females cut off had low births compared to 93.2% of non-cut off females (Table 4); 43.75% of infibulates gave births low, there was a statistical relationship between low birth and types of cut off with  $P < 0.05$  (Table); 17.3% of newborns in cases had poor Apgar, compared with 0% of the test and 02,3% of neonatal mortality in women cut off; (table 6). Gayle C and all found a link between neonatal morbidity and FGM/E [12]. In the same order, according to Lawani L. and all: Women who had undergone FGM had a significantly higher risk of Caesarean birth, neonatal resuscitation, birth mortality/neonatal premature death [13]. On the other hand, Abdulkadir J and all found that he did not correlate the prognosis of newborns and MGF/E, but it was a comparative study between the different types of excision [14,15].

## Conclusion

Female genital mutilation is still a common practice in Mali, it is often associated with the adverse effects of childbirth, and efforts must be made to MDGs 3, 4 and 5.

## Conflict of Interest

The authors stated that there was no conflict of interest.

## Human Ethics

Every participant in this study has given their consent.

## Originality

This is an original article.

## Bibliography

1. Female Genital Mutilation/Cutting: a global concern UNICEF, New York, (2016).
2. UNICEF. Female genital mutilation (2019).
3. World Health Organization. Female Genital Mutilation (2016).
4. Donohoe M. "Female genital cutting: epidemiology, consequences and female empowerment as a means of cultural change". *Medscape Ob/Gyn* (2006): 11.
5. World Health Organization, Department of Reproductive Health and Research. World Health Organization, Department of Reproductive Health. WHO Press, World Health Organization, 20 Avenue Appia, 1211 Geneva 27, Switzerland: WHO. 2008. Eliminating female genital mutilation. An interagency statement. OHCHR, UNAIDS, UNDP, UNECA, UNESCO, UNFPA, UNHCR, UNICEF, UNIFEM, WHO (2019).
6. Female genital mutilation/cutting. "A statistical overview and exploration of the dynamics of change. United Nations Children's Fund". *Reproduction Health Matters* (2013): 184-190.
7. Akinsulure-Smith AM and Sicalides EI. "Female genital cutting in the United States: implications for mental health professionals". *The Professional Psychology: Research* 47 (2016): 356-362.
8. Enquête Démographique et de Santé du MALI (EDSM) (2018): 383-356.
9. Abdulkadir J., et al. "Sexual Anatomy and Function in Women With and Without Genital Mutilation: A Cross-Sectional Study". 13.2 (2016): 226-237.
10. Gudu W., et al. "Labor, delivery and postpartum complications in nulliparous women with female genital mutilation admitted to karamara hospital". *Ethiopian Medical Journal* 55.1 (2017): 11-17.
11. Andualet M., et al. "Determinants of female genital mutilation practices in east gojjam zone, western amhara, ethiopia". *Ethiopian Medical Journal* 54.3 (2016): 109-116.
12. Gayle C., et al. "Female genital mutilation and pregnancy: associated risks". *British Journal of Nursing* 25.17 (2016): 978-983.

13. Lawani L., *et al.* "Female genital mutilation and efforts to achieve Millennium Development Goals 3, 4, and 5 in southeast Nigeria". *International Journal of Gynecology and Obstetrics* 125.2 (2014): 125-128.
14. Abdulcadir J., *et al.* "Obstetric care of women with female genital mutilation attending a specialized clinic in a tertiary center". *International Journal of Gynecology and Obstetrics* 132.2 (2016): 174-178.
15. Anikwe C., *et al.* "Female genital mutilation and obstetric outcome: A cross-sectional comparative study in a tertiary hospital in Abakaliki South East Nigeria". *European Journal of Obstetrics and Gynecology and Reproductive Biology: X* 1 (2019): 100005.
16. Jungari SB. "Female Genital Mutilation Is a Violation of Reproductive Rights of Women: Implications for Health Workers". *Health and Social Work* 41.1 (2016): 25-31.