

# The effect of Female Genital Mutilation on perineal injuries among women in labour in Dodoma Region, Tanzania

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**Introduction:** Female Genital Mutilation (FGM) is widespread in Tanzania and poses a risk when women give birth.

**Objective:** To determine the association between FGM and perineal injury among women in labour in Dodoma

**Methods:** A matched case-control study of 364 randomly selected consenting women in labour was conducted in Dodoma Region between January 2017 and June 2018. Controls (no perineal injury) were matched to the cases (with perineal injury) based on maternal age at a ratio 2:1 making a sample of 243 controls and 121 cases. FGM and perineal injury was directly observed during labour using WHO guidelines. Data were analysed by using SPSS version 20 for Window (SPSS Inc., Chicago, IL, USA). Frequency tables were generated and bivariate analyses were conducted. The association between FGM and perineal injury was determined using chi-squared statistics.

**Results:** Of the 364 women were investigated 40.4% (n=147) were circumcised and 59.6% (n=217) were not. There was a significant association between FGM and perineal injury (p=0.001).

**Conclusion:** The FGM rate was high. FGM (total and Type II) was significantly associated with perineal injury.

**Key words:** Female genital mutilation, FGM/C, perineal injury, Tanzania.

## INTRODUCTION

Female genital mutilation (FGM) is a problem persisting in Tanzanian culture. <sup>[1]</sup> The United Nations estimates that over 200 million women in the world have been subjected to FGM/cutting (FGM/C) and 3 million girls are at risk every year. <sup>[2]</sup> In Tanzania FGM/C overall prevalence is around 15% in girls and women aged 15-49 years. <sup>[1]</sup> It is estimated that 7.9 million women and girls in the country have undergone FGM. <sup>[1]</sup> The prevalence of FGM in Dodoma was reported to be about 47% of women according to the last Demographic Health Survey report which dealt with this issue in 2011. <sup>[1]</sup> The consequences of FGM include: prolonged labour, obstructed labour, postpartum haemorrhage, prolonged postpartum recovery and stay in hospital, episiotomy and perineal injuries. <sup>[4]</sup>

Therefore, the objective of the study was to assess the association between FGM and perineal injury among women in labour in the Dodoma Region, Tanzania.

## METHOD

A matched case-control study of 364 randomly selected consenting labouring women was conducted in three District and one Regional hospital in Dodoma Region between January 2017 and June 2018. Controls (no perineal injury) were matched to the cases (with perineal injury) based on maternal age at a ratio 2:1 making a sample of 243 controls and 121 cases. FGM and perineal injury was directly observed during labour using WHO guidelines.

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Data were analysed by using SPSS version 20 for Window (SPSS Inc., Chicago, IL, USA). Frequency tables were generated and bivariate analyses were conducted. The association between FGM and perineal injury was determined using chi-squared statistics.

The University of Dodoma Research Committee approved the study and permission was received from the DRRH, Chamwino, Mpwapwa and Kondoa District Hospital.

## RESULTS

Table 1 shows the age, education, occupation, residence, marital status, religion, and tribe distribution of women with or without perineal injury.

**Table 1. Characteristics of participants with and without perineal injury**

Variables βhCG	Total n (%)	With perineal injury (N=121) n (%)	No perineal injury (N=243) n (%)
<b>Age –years</b>			
17-35	289 (79.4)	91 (75.2)	198 (81.5)
36-47	75 (20.6)	30 (24.8)	45 (18.5)
<b>Residence</b>			
Urban	74 (20.3)	16 (13.2)	58 (23.9)
Rural	290 (79.7)	105 (86.8)	185 (76.1)
<b>Education level</b>			
No education	166 (45.6)	58 (47.9)	108 (44.4)
Primary	115 (31.6)	38 (31.4)	77 (31.7)
Secondary	57 (15.7)	23 (19.0)	34 (14.0)
University	26 (7.1)	2 (1.7)	24 (9.9)
<b>Marital status</b>			
Single	56 (15.4)	29 (24.0)	27 (11.1)
Married	308 (84.1)	92 (76.0)	216 (88.9)
<b>Occupation</b>			
Employed	34 (9.3)	18 (14.9)	16 (6.6)
Unemployed	330 (90.7)	103 (85.1)	227 (93.4)
<b>Tribal</b>			
Gogo	209 (57.4)	64 (52.9)	145 (59.6)
Rangi	68 (18.7)	28 (23.1)	40 (16.5)
Others	87 (23.9)	29 (24.0)	58 (23.9)
<b>Religion</b>			
Christian	250 (68.7)	73 (60.3)	177 (72.8)
Muslim	114 (31.3)	48 (39.7)	66 (27.2)

Among the 121 women with perineal injury (cases) 75.2% (n=91) were aged 17 – 35 years. In the control group there were 81.5% (198) in the same age range. The proportion of women from rural areas among the cases was 86.8% (n=105) being higher than among the controls at 76.1% (n=185). The distribution of education levels was similar in both groups. The percentage of single women in the cases group was 24% which was more than double that among the controls (11%); 85.1 % (n= 103) of the cases were non-employed compared with 93.4% (n=227) of the controls.

Of the 364 participants, 40.4% (n=147) were circumcised and 59.6% (n=217) were not. Of the 147 circumcised women 18 were classified as FGM Type I and 73 as FGM Type II.

We found there was a significant association between FGM (all types grouped) and FGM Type II and perineal injury (P=0.001) – Table 2. This supports findings from other research and clinical practice worldwide.

## DISCUSSION

There were few differences between the characteristics of women with or without perineal injury except that single women were twice as likely to have an injury. This may be because single mothers are more likely to be primigravid and experience more perineal injuries even without FGM. Primigravid teenagers seem to be at a higher risk of complications during and after delivery.<sup>[5]</sup> There was little difference between the groups in terms of no education level - 47.7% among the cases and 44.4% among the controls.

Studies suggest that the most plausible pathway of effect between FGM and obstetric harm is inelastic scar tissue resulting into perineal injury.<sup>[4]</sup>

Our study showed a significant association between FGM particularly Type II and perineal injury which is similar to that found in The Gambia<sup>[5]</sup> and Sierra Leone.<sup>[6]</sup>

## CONCLUSION

It is recommended that episiotomy is considered in all cases where FGM has made the vulva or vagina inelastic. In the presence of severe damage Caesarean Section may be appropriate. The rationale for FGM is socially and culturally complex. Legislation alone cannot eradicate this deeply rooted practice. So, a combined approach is needed that includes legislation, education at all levels (in school, universities, mass media, obstetrics and gynaecology services and reproductive health clinics). More rural than urban women are being circumcised (see Table 1) so there should be a greater emphasis on rural campaigning. A greater awareness of the complications and consequences of this practice is essential.

**Table 2. Association between FGM and perineal injury among women in labour**

Variables	Cases (N=121) n (%)	Control (N=243) n (%)	Chi-square	p-value
<b>FGM</b>				
Yes	110 (74.8)	37 (25.2)	192.181	0.001
No	11 (5.1)	206 (94.9)		
<b>FGM Type:</b>				
Type I*: Clitoris only				
Yes	(44.4)	10 (55.6)	1.071	0.215
No	113 (32.7)	233 (67.3)		
Type II**: Clitoris and labia				
Yes	60 (82.2)	13 (17.8)	98.593	0.001
No	61 (61.0)	230 (79.0)		

\* Partial or total removal of the clitoris

\*\* Partial or total removal of the clitoris and the labia minor, with or without excision of the labia major

Web sites that deal with FGM in Tanzania (and other countries including South Sudan) include: 28TooMany Tanzania and Young Influencers in Tanzania to Boost Campaign to end Female Genital Mutilation

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**Competing interests:** The authors declare that they have no competing interests.

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