

*Original Article***Impact of Female Genital Mutilation on Second Stage of Labour in Primigravida at Omdurman Maternity Hospital, Sudan 2010.**

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Abstract:

Objective: To find out the impact of female genital mutilation (FGM) on the second stage of labour at Omdurman Maternity Hospital (OMH).

Methodology: A descriptive cross-sectional study, for primigravidae delivered vaginally in 2010. After an informed consent circumcised women, were included as study group and uncircumcised ladies as control group. Data was collected by trained registrars using a structured questionnaire to collect frequency of postpartum haemorrhage (PPH), perineal tear, birth asphyxia, neonatal death and hospital stay.

Results: A total of 1961 primigravidae, delivered in 2010 at OMH, 629(32.1%) were circumcised and 1332(67.9%) were uncircumcised. There was no significant difference in the mode of delivery and episiotomy.

Conclusion: FGM places women at a greater risk during childbirth, endangering their health and their babies compared to uncircumcised.

Key words: Female Genital Mutilation, second stage of labor, Sudan.

Female genital mutilation (FGM) or female circumcision (FC) referred to partial or total removal of the female external genitalia for cultural or non-therapeutic reasons¹. Clitoridectomy, removal of clitoral hood, is type I, excision of clitoris with partial or total excision of labia minora and or majora is type II and Infibulation, the most severe, including removal of external genitalia and stitching of the opening is type III¹. It is an old cultural tradition, not related to religion, practiced for many socio-cultural reasons, including eligibility for marriage, girls' honour and preserving virginity. Its early complications are, haemorrhage, pain, shock, urine retention, infection, damage to adjacent organs and psychological trauma.

The later complications include HIV, pelvic inflammatory disease (PID), inclusion cyst, vesical stone, chronic urinary tract infection, infertility, difficult first intercourse, dyspareunia, difficult or obstructed labour, perineal tear and vesico-vaginal fistula².

All over the world, an estimated, 135 million girls or women have undergone genital mutilation and at least two million a year are at risk of mutilation. It is practiced in more than 28 African countries including Sudan, some countries in the Middle East, Arab region, parts of Asia and among immigrants in North America and Europe³.

In Sudan, infibulation is still widely practiced; however, Sudan is the first African country to outlaw FGM since 1924, where type III was prohibited under the 1925 penal code, while less severe forms were allowed⁴. After 1970, awareness to fight FGM was increased due to governmental and civil societies' efforts to abolish FGM. There is limited literature on effect of FGM on 2nd stage of labour apart from study done by WHO collaborative group⁵ in six African countries in 2006. Available data in Sudan includes all age groups. No particular data on young generations and effects on 2nd stage of labour could be traced.

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Objectives:

to assess the impact of FGM on the 2nd stage of labour in young pregnant females.

Patients and Methods:

This is a descriptive cross-sectional study. All primigravidae with term, single pregnancy, delivered in Omdurman Maternity Hospital (OMH), were included after an informed consent. On admission to the labour ward, each woman was examined by a trained registrar, who determined the type of her circumcision, according to WHO classification¹. Vaginal examination was easily done during first and second stage of labour for all women under study. Patients were followed after delivery until discharged from the hospital.

Exclusion criteria: Primigravidae with multiple pregnancies, preterm or delivered by emergency C/S were excluded.

Data was collected by trained group of registrars in labor ward, using an interview, clinical examination and review of records after delivery. Data was analyzed using a SPSS program, version 18.

Results:

Population characteristics:

A total of 1961 primigravidae were included in the study. Circumcised women were 629(32.1%). They had 465 (73.9%) type II, 164(26.1%) type I FGM, but none were infibulated. Uncircumcised were 1332(67.9%). Teenagers were 294(15.0%), 20-30 years were 1314(66.0%), and those older than years were 353(18%). Urban residence comprised 1067(54.9%) with 885(45.1%) rural residence. The educational standards was 1490(76.0%) completed secondary school, 451 (23.0%) were university students or graduate and only 20(1.0%) were illiterate.

Second stage characteristics:

The characteristics of study and control groups duration of the second stage, instrumental delivery, perineal tears, episiotomy, post partum haemorrhage (PPH), birth asphyxia, neonatal death and hospital stay of more than 24 hours are depicted in table 1. In the study group: decircumcision (penning of the scar tissue resulting from

FGM) was done for 578(91.9%), second stage was more than two hours in 44(2.2%), instrumental delivery in 29(1.4%), perineal tear in 34(5.4%), PPH in 49(7.7%), birth asphyxia in 16(2.5%), neonatal death (NND) in 14(2.2%) and hospital stay for more than 24 hours in 72(11.4%) patients respectively.

In the control group: The second stage more than two hours in 18(0.9%), instrumental delivery in 30(1.5%), perineal tear in 34(2.5%), PPH in 44(3.3%), birth asphyxia in 12(0.9%), NND in 8(0.6%) and hospital stay for more than 24 hours in 62(4.6%) patients respectively. Episiotomy had been done for most of primigravidae being 606(96.0%) for circumcised and 1258(94.0%) for uncircumcised ladies.

There was significant statistical difference between the two groups in the duration of the second stage ($P = 0.0004$), PPH ($P = 0.0003$), perineal tear ($P = 0.002$), birth asphyxia ($P = 0.0006$), neonatal death ($P = 0.003$) and hospital stay after delivery for more than 24 hours ($P = 0.0005$). However, there was no significant difference in mode of delivery ($P = 0.018$) and performance of episiotomy ($P = 0.107$).

Discussion:

FGM is an important public, social and health problem, violating human and women rights, where it is practiced for girls, who cannot decide for themselves and even done without consent, of no benefits and may causes undue harms. In Sudan, numerous studies and reports have been done or published on this issue⁶⁻⁸; however no specific article had been published on its effects on second stage of labour.

This study showed that the frequency of FGM was 32.1%, mainly as type II and I. This rate is relatively low compared to reports of previous surveys, demographic health survey (DHS), safe motherhood survey (SMS) and Sudan house hold survey (SHHS), where the rate varies between 89- 98% and it was mainly infibulation⁹. However, the rate we encountered is consistent with a study done among medical students in Khartoum in 2003 as 75.3% among medical students and 48.1% among their sisters and only 21.1% were

infibulated¹⁰. A similar study done in Kilimangaro in Tanzania, among young educated women, found a prevalence of only 17% mainly clitoridectomy¹¹. Our findings of relatively low frequency of FGM and shifting from infibulation to types I and II, is due to

efforts of official and civil bodies acting for abolition of FGM. The reliability of the collected data is related to the current standards of literacy. Women education is high in this population, with low illiteracy i.e. only (1.0%).

Table1: Characteristics of study and control groups at the second stage of labour.

The variable	Study group n = 629	Control group n= 1332	Chi square	P.V.
2 nd SOL > 2 hours	044(02.2%)	018(00.9%)	42. 626	0.0004
Instrumental Delivery	029(01.4%)	030(01.5%)	5.599	0.018
Perineal tear	034(05.4%)	034(02.5%)	9.553	0.002
PPH	049(07.7%)	044(03.3%)	85.471	0.0003
Birth asphyxia	016(02.5%)	012(00.9%)	25.279	0.0006
NND	014(02.2%)	008(00.6%)	8.760	0.003
Hospital stay > 24 hours	072(11.4%)	062(04.6%)	29.902	0.0005
Episiotomy	606(96.0%)	1258(94.0%)	2.591	0.107

This may have an impact in the awareness towards abolition of FGM in Khartoum. In Sudan, FGM gained attention among political, religious leaders, health professionals, individuals, families, media and community societies since 1970.

Circumcised women may face number of difficulties during childbirth, especially if decircumcision is not done beforehand, and may result in severe tearing of infibulated area⁹. Scars forming around the wound can lead to prolonged labour, which may lead to foetal distress, still birth and vaginal bleeding following the extended episiotomy. A study conducted by WHO collaborative group in six African countries including Sudan, showed that women with FGM ran a greater risk of caesarean delivery, PPH, extended hospital stay, with greater risk of infants dying at birth, particularly when FGM is extensive⁵.

Our results of prolonged 2nd stage of labour, perineal tear, PPH, birth asphyxia or PND are consistent with WHO findings. Also, the WHO study demonstrated that mutilated

women had 66% chances of having babies who required resuscitation, 55% neonatal deaths and 5% stillbirths. In contrast, in our study there was no extensive FGM, which may explain few neonatal complications.

Our study showed that episiotomy was done routinely for all primigravidae whether circumcised or uncircumcised, this is higher than that reported by the WHO⁵ as 41% in uncircumcised and 88% in women with FGM type III.

In spite of our findings that circumcised women are at greater risk of complications of 2nd stage of labour, we didn't encounter mortality among our patients. This may be explained by the modified type of FGM or by the improved obstetric care in this hospital.

Conclusion:

Compared to the previous reports, the rate of FGM is decreasing particularly type III. The reduced complications of FGM, in presence of improved medical care may encourage medicalization of FGM.

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References:

1. World Health Organization. Female Genital Mutilation: Report of a WHO Technical Working Group. Geneva: World Health Organization 1995; pp. 9.
2. Lightfoot-Klien H. The sexual experiences and marital adjustment of genitally circumcised and infibulated females in Sudan. *Journal of Sex Research* 1989; 26(3): 375-392.
3. Kaine, R. Female genital mutilation: legal, cultural and medical issues. Jefferson, North Carolina, USA 2005: McFarland. ISBN 0-7864 -2167- 3.
4. Abdel Aziz MI. Changing policy for female genital mutilation and the cause of change: A consensus statement. *Sudanese Journal of Public Health*. 2009; 4 (2): 236-240.
5. WHO. Study group on; Female genital mutilation and obstetric outcome. WHO collaborative prospective study in six African countries. *Lancet* 2006; 367: 1835- 41.
6. Mustafa A Z. Female circumcision and infibulation in the Sudan. *BJOG* 1966; 73,(2): 302–306
7. Almroth L, Almroth-Berggren V, Hassanein OM, et al. A community based study on the change of practice of female genital mutilation in a Sudanese village. *International Journal of Gynaecology and Obstetrics* 2001; 74, 179-185.
8. Elsayed D M, Elamin R M, Sulaiman S M. Female Genital Mutilation and Ethical Issues. *Sudanese Journal of Public Health*; 2011; 6(2): 63-67.
9. Central Bureau of Statistics. Sudan national safe motherhood survey 1999. *Statistical yearbook* 2000. Khartoum; Sudan 149-153.
10. Umbeli T, Abu Salab MA. Female genital mutilation among medical students in Khartoum, Sudan. *JABMS* 2006: 8(1); 16-21.
11. Msuya SE, Mbizvo E, Hussain A et al. Female genital cutting in Kilimangaro, Tanzania: changing attitude. *Trop Med Int Health* 2002; 7 (2): 159- 65.