SOCIAL ISSUES IN REPRODUCTIVE HEALTH

The impact of female genital cutting on health of newly married women

A. Elnashar,⁎ R. Abdelhady

Department of Gynecology and Obstetrics, Benha University Hospital, Egypt

Department of Community, Environmental and Occupational Medicine, Benha University Hospital, Egypt

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Abstract

Objective: To detect the rate of female genital cutting among a sample of newly married women in Benha city, and make a comparison between circumcised and non-circumcised women regarding long-term health problems. Methods: Randomly selected (264) newly married women were the subjects of this work. Results: Circumcised group constitutes 75.8% of the sample. All non-circumcised women were living in an urban area. Dysmenorrhea was more common among circumcised rather than non-circumcised, with statistically significant difference (P<0.01). Marital problems (dyspareunia, loss of libido, failure of orgasm and husband's unsatisfaction) had statistically different levels of significance among circumcised women. Obstetric problems such as tears, episiotomy and consequently distressed babies were more events among circumcised mothers with statistical significance. Circumcised females had significant mental problems such as somatization, anxiety and phobia (P<0.001). Conclusion: Female genital cutting remains a widely practiced custom in our society. Grave complications of circumcision may last throughout women's life particularly the time of consummation of marriage and the time of childbirth.

KEYWORDS
Female circumcision; Egypt

1. Introduction

Female genital cutting (FGC) comprises any procedure where parts of the female genitals are removed without medical indication. The practice is also known as female genital mutilation (FGM) or female circumcision (FC). The World Health Organization has classified the forms of cutting into four types [1]. Type I: Excision of prepuce and part or all of clitoris. Type II: Excision of prepuce and clitoris together with partial or total excision of labia minora. Type III: Infibulation and excision of part or all of external genitalia. Type IV: Pricking, piercing, incision, stretching, scraping, or other harming procedures on clitoris. Labia FGC is one of the traditions still practiced in Egypt [2]. It is a custom related to morals. Statistics compiled in 1994 by Egypt's former ministry of population estimated that between 70% and 90% of Egyptian women were circumcised [3]. But a more recent survey puts the figure even higher, with 97% of women in both rural and urban areas having been circumcised. The

⁎ Corresponding author. 24 Gomhoria St., Mansura, Egypt. Fax: +20 2502331911. E-mail address: elnashar53@hotmail.com (A. Elnashar).

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FGC is a particularly harmful practice which is still causing much suffering to women and female children in most parts of Africa and the Middle East [1]. In recent years, FGC has aroused special concern in health circles due to abuse and suffering which are inflicted on the female child by a traumatizing operation, and because of its close association with physical and mental health hazards which may persist throughout adult life [4]. There are general health consequences of FGC throughout a woman's life, but there are two specific times when the results of the procedure cause special problems for the woman. These are the time of consummation of marriage and the time of childbirth. Benha city is located 48 km north of Cairo and about 20 km northeast of the Nile Dam. It has a population of approximately 115,701 residents and is the capital of the Qalyubiyah Governate. This study aimed to determine the rate of FGC among a sample of newly married females in Benha city (semi-urban), identify the socio-demographic features, gynecological and obstetric characteristics and detect the relation of circumcision with marital related problems and some psychological symptoms.

2. Materials and methods

2.1. Research setting

The study was conducted at Benha University Hospital, maternal and child health centers and some obstetric gynecological private clinics.

2.2. Subjects

Randomly selected, 264 newly married women (marriage duration not more than 5 years) were included in our study. Two hundred of them were circumcised, and 64 women were non-circumcised.

2.3. Technical design

Data were collected using the following tools: 1. interviewing questionnaire format which included: socio-demographic features of newly married females of both circumcised and non-circumcised groups. Gynecological and urinary problems of the studied groups. 2. Symptoms check list 90 (SCL 90) developed by Leonard et al. which was translated by El-Behery [5]. It was used to detect the relation of circumcision with marital related problems and some psychological symptoms.
for the identification of the incidence pattern of psychological illness namely, somatization, depression, anxiety, hostility and phobias among randomly selected sub-sample of circumcised (64) and all non-circumcised groups (64).

N.B.: Score for somatization assessment included 12 symptoms and ranging from 0 up to 48 points. Score for depression assessment included 13 symptoms and ranged from 0 up to 52 points. Score for anxiety assessment included 10 symptoms and ranged from 0 up to 40 points. Score for hostility assessment included 6 symptoms and ranged from 0 up to 24 points. Score for phobia included 7 symptoms and ranged from 0 up to 28 points.

2.4. Operational design

After explaining the purpose of the study, the questionnaire was handed to each newly married woman to be answered and was collected at the same day.

2.5. Administrative design

An official permission was taken from all the study settings administration.

3. Results

Randomly selected 264 newly married women were the subjects of this study; the circumcised group constitutes 75.8% of the women while 24.2% were non-circumcised.

3.1. Socio-demographic features

Table 1 shows that 49.5% of circumcised females married at the age group between twenty and twenty five years, while the majority of the non-circumcised group (60.9%) married between twenty five and thirty years.

No illiterates were found among the non-circumcised females and 67.2% were at university level or higher, while the majority of circumcised females (72.5%) were at

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Data about marital problems are illustrated in Table 3. It was revealed that 40.5% of circumcised women had dyspareunia while only 18.8% of non-circumcised women mentioned that, the difference was statistically significant ($P<0.01$). Loss of libido was the complaint of 28.5% and 15.6% of circumcised and non-circumcised women respectively; the difference was statistically significant ($P<0.05$).

Table 3 also shows that 17.5% of circumcised women feel their husband's unsatisfaction, compared with 4.7% of those non-circumcised with a highly significant difference ($P<0.001$). Regarding wife satisfaction 43% of circumcised women were unsatisfied compared with 10.9% of those non-circumcised, with statistical significance ($P<0.001$). There was a statistically significant difference regarding the pregnancy occurrence between the two studied groups ($P<0.05$) i.e. 15.5% and 26.6% of circumcised and non-circumcised women respectively had no previous or present pregnancy since their marriage.

### 3.4. Obstetric problems

Table 4 shows that 88.8% and 93.6% of the circumcised and non-circumcised women respectively delivered normally, the difference was insignificant, but 8.9% of those circumcised had a tear during their first delivery while 4.3% of those non-circumcised had it with a statistically significant difference ($P<0.001$). Consequently, babies were distressed (Apgar score $<7$) in 23.7% of circumcised mothers while in only 2.1% of those non-circumcised.

### 3.5. Psychological health problems

Data about mental health scores are illustrated in Table 5. It revealed that circumcised females had significant mental health problems compared to non-circumcised females.
problems regarding somatization, anxiety, and phobia (P < 0.001), but no statistically significant difference was detected regarding depression and hostility symptoms.

4. Discussion

Any of the three types of FGC procedures can create health complications for the young girl or woman, although excision and infibulation lead to more severe complications. There are both immediate health effects and long-term consequences for a woman’s health [6]. Statistics compiled in 1994 by Egypt’s former ministry of population estimated that between 70% and 90% of Egyptian women were circumcised [3]. A survey conducted by international group Macro puts the figure even higher, with 97% of women in both rural and urban areas reporting that they have been circumcised. The present study revealed that 75.8% of the studied sample was circumcised; this lower non-expected rate reflects the trend towards rejection of circumcision particularly in some classes. In this study no illiterate were found among the non-circumcised females and the majority of them (67.2%) were at university level or higher, furthermore, the majority was working (76.6%). Also, all non-circumcised women were living in urban residential areas. Tosson reported that FC was more common among illiterates and women of low-education level [7]. Rural residence was the main variable influencing the continuation of FGC [8]. These observations clear that education changes the attitude and practice of some traditional acts like circumcision.

4.1. Gynecological and urinary problems

In this study, the age of menarche of the two studied groups was not different statistically but the circumcised women showed more irregularity of the cycle and more dysmenorrhea. Dysmenorrhea can result from chronic pelvic infection and is also caused by pelvic congestion. Menstrual flow may be retained due to tiny vaginal opening. Scaring can be the cause of genital infection and disturbances of menstruation. FGC is traditionally performed by non-medical people using unsterilized knives and razors causing many complications. Late complications are recurrent cystitis, vaginitis and chronic pelvic inflammatory disease [9]. Cut women were significantly more likely than uncut women to report symptoms such as yellowish and bad-smelling vaginal discharge, white vaginal discharge and lower-abdominal pain [10].

The present study revealed that there were no significant differences between circumcised and non-circumcised women regarding urinary tract problems such as burning and involuntary micturation in spite of higher-percentages among circumcised women. This finding is not accepted by Nahid [11], who reported that a woman who has undergone infibulation may have difficulty with urination because of scar tissues around the urinary outlet which gradually contracts and restricts the opening. This situation can cause serious problems including stricture formation, increase of residual urine, retrograde reflux and ascending retrograde infection. In Lower Egypt the procedure done is only circumferential excision of clitoral prepuce ("sunna" circumcision) or removal of the glans clitoridis or even the clitoris itself together with adjacent parts of labia minora. This is performed mostly in rural areas. Pharaonic circumcision (total removal of the clitoris and labia) is performed mostly in Upper Egypt and Nubia [4].

Table 4 Childbirth problems of first delivery according to state of circumcision

<table>
<thead>
<tr>
<th>Type of 1st delivery</th>
<th>Circumcised (169)</th>
<th>Non-circumcised (47)</th>
<th>Total (216)</th>
<th>χ²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>150</td>
<td>88.8</td>
<td>44</td>
<td>93.6</td>
<td>194</td>
</tr>
<tr>
<td>Cesarean</td>
<td>10</td>
<td>5.9</td>
<td>3</td>
<td>6.4</td>
<td>13</td>
</tr>
<tr>
<td>Others</td>
<td>9</td>
<td>5.3</td>
<td>–</td>
<td>0.0</td>
<td>9</td>
</tr>
</tbody>
</table>

Problems during 1st delivery

<table>
<thead>
<tr>
<th>Problems during 1st delivery</th>
<th>Circumcised (169)</th>
<th>Non-circumcised (47)</th>
<th>Total (216)</th>
<th>χ²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Episiotomy</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Episiotomy</td>
<td>150</td>
<td>88.8</td>
<td>33</td>
<td>70.2</td>
<td>183</td>
</tr>
<tr>
<td>Tear</td>
<td>15</td>
<td>8.9</td>
<td>2</td>
<td>4.3</td>
<td>17</td>
</tr>
<tr>
<td>No problems</td>
<td>4</td>
<td>2.4</td>
<td>12</td>
<td>25.5</td>
<td>16</td>
</tr>
</tbody>
</table>

Consequent babies

<table>
<thead>
<tr>
<th>Consequent babies</th>
<th>Circumcised (169)</th>
<th>Non-circumcised (47)</th>
<th>Total (216)</th>
<th>χ²</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>No</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Normal</td>
<td>120</td>
<td>71.0</td>
<td>46</td>
<td>97.9</td>
<td>166</td>
</tr>
<tr>
<td>Distressed</td>
<td>40</td>
<td>23.7</td>
<td>1</td>
<td>2.1</td>
<td>41</td>
</tr>
<tr>
<td>Died</td>
<td>9</td>
<td>5.3</td>
<td>–</td>
<td>0.0</td>
<td>9</td>
</tr>
</tbody>
</table>

Table 5 Mean and standard deviation of scores of mental health symptoms of both groups

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Circumcised (64)</th>
<th>Non-circumcised (64)</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Somatization</td>
<td>33.2±10.2</td>
<td>21.7±6.92</td>
<td>10.177</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Depression</td>
<td>30.1±7.31</td>
<td>29.9±4.63</td>
<td>0.257</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Anxiety</td>
<td>31.5±6.7</td>
<td>22.3±3.79</td>
<td>20.535</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Hostility</td>
<td>18.7±7.34</td>
<td>16.9±6.23</td>
<td>1.923</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Phobia</td>
<td>22.5±5.37</td>
<td>15.3±4.66</td>
<td>10.171</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

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4.2. Marital problems

Circumcision has a negative impact on a woman's sexual life. Marital problems were significantly higher among circumcised women. In a study done by El-Defrawi et al., circumcised women complained more significantly of dysmenorrhea (80.5%), vaginal dryness during intercourse (48.5%), lack of sexual desire (45%), being less pleased by sex (49%), being less orgasmic (39%), and less frequency of orgasm (25%), and having difficulty reaching orgasm (60.5%) than the uncircumcised women [12]. Dyspareunia did not reach statistical significance. Dyspareunia results from the scar tissue over the vulva after excision [4]. Verzin added that cliterotomy involves the sectioning of the clitoral nerves and destroys the specific receptors, later the area becomes insensitive [13]. But pain can be caused by friction during intercourse because of the formation of neuroma (scarring of nervous tissues) at the site of amputation.

Women can experience two kinds of orgasm, clitoral and vaginal. Thus, female circumcision reduces the capacity of women to reach orgasm and has a definite though less effect in reducing sexual desire [14]. Cut women were less likely to cite the clitoris, and more likely to identify their breasts, as their most sensitive body part. Genital cutting does not eliminate a woman's sexual sensation, but instead "shift[s]... the point of maximal sexual stimulation from the clitoris...or labia to the breasts" [10].

4.3. Obstetric problems

In Egypt, both the number of deliveries that took place in health-care facilities and assistance by skilled birth attendants increased by about 50% between 1992–93 and 2000 (27% and 40.7% and 49% and 60.9%, respectively) [15]. The study showed no statistical significance regarding the type of first delivery among the two studied groups but episiotomy and tears were common obstetric problems among the circumcised groups. Babies of circumcised mothers were more distressed. These results are in agreement with Hakim [16] who demonstrated a significant negative impact of FGM on obstetric outcome. More complications in terms of prolonged second stage, episiotomy, perineal tears, bleeding, incontinence, low Apgar score and febrile illnesses were registered for the FGM, but the perinatal mortality rates were quite similar. The WHO study found that deliveries to women who have undergone FGM are significantly more likely to be complicated by cesarean section, postpartum hemorrhage, episiotomy, extended maternal hospital stay, resuscitation of the infant, and inpatient perinatal death, than deliveries to women who have not had FGM [17]. There was no significant association between FGM and the risk of having a low-weight infant. The mechanism by which FGM might cause adverse obstetric outcomes is unclear. Although practices vary from country to country, FGM is generally done in girls younger than 10 years and leads to varying amounts of scar formation. The presence of this scar tissue, which is less elastic than the perineal tissue would normally be, might cause differing degrees of obstruction and tears or epistotomy [18]. A long second stage of labor, along with direct effects on the perineum, could underlie the findings of an increased risk of perineal injury, postpartum hemorrhage, resuscitation of the infant, and fresh stillbirth associated with FGM.

4.4. Psychological health problems

This study revealed that some health problems such as somatization, anxiety and phobia were more common among circumcised females with a significant value. Genital mutilation may leave a lasting mark on the life and mind of the women who has undergone it. The circumcised women showed a significantly higher prevalence of posttraumatic stress disorder (PTSD) (30.4%) and other psychiatric syndromes (47.9%) than the uncircumcised women [19]. PTSD was accompanied by memory problems. The psychological complications may be submerged deep in the child's subconscious and may trigger behavioral disturbances. Women may suffer feelings of incompleteness, anxiety, depression, chronic irritability and frigidity. Many girls and women, traumatized by their experience but with no acceptable means of expressing their fears, suffer in silence [4].

This study concluded that female circumcision is still a prevalent traditional act in our society particularly, among rural, illiterates, low-educated and non-working women. Female circumcision has definitely many long-term health problems, and the circumcised women are more exposed to gynecological, marital, obstetric and psychological problems. Thus, women's organization, hospitals, health centers, ministries of health and mosques are responsible for making sure the message reaches every family through different means including mass media against evil that impairs the health of girls and women and puts their lives in danger, as well as their babies lives. In Egypt, about 60% of the procedures were performed by physicians and about 80% were done under anesthesia at home [8]. The enforcement of the WHO legislation against medicalization of this practice is advocated [20].

References


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