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ORIGINAL PAPER

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# The Awareness Regarding the Episiotomy Procedure Among Women in Saudi Arabia

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## ABSTRACT

**Introduction:** Episiotomy is an intended incision made through the perineal body to enlarge the vaginal orifice during the second stage of labor to ease the parturition. A cross sectional study in Jeddah, Saudi Arabia, showed that 35% of the females in 2012 had an episiotomy, this slightly increased in 2015 to (36.4%). Given the increase rates of episiotomy and the significance of patients' awareness, there were very limited data on the awareness of episiotomy among women. **Aim:** Aim of this study is to estimate the extent of the awareness regarding the episiotomy procedure among women in Saudi Arabia. **Material and Methods:** Participants aged 15 and above filled a questionnaire distributed online to different regions of Saudi Arabia. Descriptive statistics were used. **Results:** a total of 626 women participated in this study with a mean age 34.7 years. The majority (63.6%) of women reported being informed about the procedure. Still, only (40%) of them were able to describe the procedure correctly. Only age, parity and history of previous episiotomy were predictors for episiotomy awareness. Women aged 35 or less were more aware of episiotomy than those aged more than 35 with a p-value (< 0.001). However, the multigravida were more aware of episiotomy than primigravida with a p-value (< 0.001). **Conclusion:** The awareness of episiotomy is still not accomplish in Saudi Arabia, which poses the need for further modalities to educate women and increase their awareness regarding selective episiotomy rather than the old method of routine episiotomy.

**Keywords:** Saudi Arabia, pregnancy, episiotomy, parity, labor, surveys and questionnaires.

## 1. INTRODUCTION

Episiotomy is a perineal region surgical incision to increase the size of the end part of the birth canal, further facilitating the fetal head

expulsion (1). There are different types of episiotomies, among them, three types are commonly used. The Medial episiotomy is a midline incision of the perineum down to near the anus. Mediolateral episiotomy incision is between 40 and 60 degrees in the left or right of the anal canal. Lateral episiotomy incision at either 4–5 or 7–8 o'clock at an angle away from the midline of 40–60 degrees (2).

Many obstetricians consider episiotomy as a controversial procedure (3), especially because of its wide variety of indications among them primiparity, shoulder dystocia, assisted delivery with vacuum, fetal weight more than 4 kg and fetal distress, previous history of complicated perineal tear, increased labor 2nd stage and subjectively choosing episiotomy with no specific cause contribute to justify episiotomy needs (4). Although many literatures indicates that episiotomy should be selectively rather than routinely performed (5). because of its complications as it could increase the rate of infections, perineal pain, dyspareunia, blood loss and of course perineal 3<sup>rd</sup> degree and 4<sup>th</sup> degree tears (3).

Episiotomy to all women in labor has been a routine practice to avoid 3<sup>rd</sup> and 4<sup>th</sup> degree perineal tears in many developing countries (6). Despite the published new recommendations of the American College of Obstetricians and Gynecologists in 2013, recommended that the use of episiotomy should be restricted in clinical practice due to high rates of injury (5). In addition, the World Health Organization (WHO) has clear guidelines stating that routine use of episiotomy did not reduce the rates of perineal tears (7), Yet it remains high in several countries from different parts of the world.

In Oman, the rate of episiotomies was (66%) (8). Where is in Turkey was (56.3%) (9). Meanwhile, in Saudi Arabia, two studies were con-

ducted, with an episiotomy rate of (51.20%) in Buraidah at 2014 (10). Other recent study done at King Abdulaziz University Hospital in Jeddah, Saudi Arabia at 2015, showed that the rate of episiotomy has from 2012 (35%) to (36.4%) in 2015, and that we were still away from following the new ACOG guidelines to decrease the rate of episiotomies (11). While in France between 2004 and 2009, they observed a dramatic decline of the episiotomy rates from (55.7%) to (13.3%) after adaptation to the restrictive politics of the French Guidelines on episiotomy in 2005 by the French National College of Gynecologists and Obstetricians (CNGOF) (12).

In Queensland, a survey conducted from 3,542 women for the extent of the involving and the informing in decisions regarding birth procedures, the result showed (34%) of women were unconsulted regarding episiotomy. In addition, (26%) of the women with past episiotomy experienced reported being neither informed nor consulted (13). Another study of the knowledge of Canadian women approaching childbirth for the first time was conducted in 2011, concluded that the advantage and disadvantage of episiotomies was not clearly understood by many women (14).

Given the increase rates of episiotomy and the significance of patients awareness and participation in decision making, there were very limited data on the awareness of episiotomy among women, especially in our country.

**2. AIM**

Our aim of this study is to estimate the extent of the awareness regarding the episiotomy procedure among women in Saudi Arabia.

**3. MATERIAL AND METHODS**

**Study design**

This study was conducted cross sectionally from November 2017 till December 2017. The total number of women included in this study was 626 women from different regions in Saudi Arabia. Subjects being invited responded voluntarily to a questionnaire distributed online. The purpose and the method of filling the questionnaire of the study was provided to each participant. All participants completed the informed consent of the King Abdulaziz University Hospital's local Ethical Review board's protocol.

**Study participants**

Inclusion criteria: all female aged 15 and above, regardless of the nationality or parity status. Moreover, female aged less than 15 were excluded.

**Data collection**

Data collection process accomplished by the main investigators. Using data collection sheet reviewed and approved by the ethical review board. The questionnaire separated into sections. Section 1 collects information on sociodemographic variables and parity status. They include information about age, nationality, region, educational status. Section 2 contain 8 items analyzing the knowledge of episiotomy, source of the information, description of the procedure, What do they think the indications for episiotomy, if they think episiotomy should be performed for all women, and if they think the procedure should be done under anesthesia. The 3<sup>rd</sup> section in structured for women

with previous history of episiotomy containing 5 main questions about their experience, including the indications, complications, if they were counselled before the procedure and the duration before repairing the episiotomy.

**Statistical analysis**

Descriptive statistics used to describe the characteristics of participants. Mean (standard deviations, SD) used for continuous variables. Frequencies with proportions used for categorical variables. Pearson Chi squares test done to examine the association between age, educational level, parity, previous episiotomy experience and knowledge. To predictors of episiotomy knowledge, a logistic regression analysis performed. Statistical significance  $p \leq 0.05$  was set.

Analyses performed using Statistical Package for the Social Sciences (SPSS) version 23 (IBM Corp, New York, USA).

**4. RESULTS**

A total of 626 participated in the study with a mean age 34.7 (standard deviation  $\pm 10$ ) years. (Table 1) shows the general characteristics of the participants.

Variable	N (%)
Age, years Mean (Standard deviation)	34.7 (10)
Age Groups	
15-24	119 (19)
25-34	207 (33.1)
35-44	175 (28)
$\geq 45$	125 (20)
Nationality	
Saudi	573 (91.5)
Non- Saudi	53 (8.5)
Region	
Western	427 (68.2)
Central	72 (11.5)
Eastern	70 (11.2)
Northern	45 (7.2)
Southern	12 (1.9)
Education	
Collage and above	470 (75.1)
Secondary school and below	156 (24.9)
Parity	
None	145 (23.2)
1-4	351 (56.1)
$\geq 5$	130 (20.7)

Table 1. Characteristics of participants, n = 626

The majority (63.6%) of women said they were aware about episiotomy, but only (40%) were able to describe the procedure correctly. (56.5%) believed that it should not performed for all women (Table 2).

(Figure 1 and 2) illustrate the different indications thought to be the cause for performing the episiotomy and previous experienced episiotomy indications. The most commonly thought indication was for facilitation and acceleration of delivery for both thought (46.8%) and from previous experienced episiotomy (46.9%).

(Table 3) shows that 271 (43.2%) had a history of previous episiotomy. The highest complication rate from a previous episiotomy was perineal pain (67.9%) followed by dyspareunia (22.5%) and infection (19.6%).

Women aged less than 35 were more aware of episiotomy than those aged more than 35 with Odd ratio and a 95% con-

Variable	N (%)
<b>Awareness</b>	
Yes	398 (63.6)
No	228 (36.4)
<b>Source of information</b>	
Friends/relatives	173 (27.7)
Health personnel	110 (17.6)
Newspaper/magazine	27 (4.3)
Television	17 (2.7)
Radio	1 (0.2)
Others	297 (47.5)
<b>Description of procedure</b>	
Surgical incision	250 (40)
Tear	209 (33.4)
Operation	21 (3.4)
Don't know	145 (23.2)
<b>Is episiotomy for all women?</b>	
Yes	79 (12.6)
No	353 (56.5)
Don't know	193 (30.9)
<b>Anesthesia before episiotomy</b>	
Yes	270 (43.1)
No	115 (18.4)
Don't know	241 (38.5)

Table 2 Knowledge about episiotomy, n = 626

Variable	N (%)
<b>Previous episiotomy</b>	
Yes	271 (43.2)
No	122 (25.3)
Don't know	89 (18.5)
<b>Consultation</b>	
Yes	43 (15.9)
No	210 (77.5)
Can't remember	18 (6.6)
<b>Complications</b>	
Perineal pain	184 (67.9)
Dyspareunia	61 (22.5)
Infection	53 (19.6)
Incontinence	27 (10)
<b>Episiotomy breakdown</b>	26 (9.6)
Bleeding	6 (2.2)
Fistula	3 (1.5)
None	56 (20.7)
<b>Duration before repair</b>	
< 1 Hour	227 (83.8)
≥ 1 Hour	44 (16.2)
<b>Anesthesia before episiotomy</b>	
Yes	138 (51.3)
No	44 (16.4)
Don't know	87 (32.3)

Table 3 Previous episiotomy experience, n = 271

fidence limit of 0.554 (0.398-0.770) and a p value (<0.001). However, the multigravida were more aware of episiotomy than primigravida with an Odd ratio and 95% confidence limit of 1.908 (1.308-2.782) with a p value (< 0.001). Further, women with a previous history of episiotomy were 6 times more aware about episiotomy than women with no history of previous episiotomy (OR 6, 95% CI: 3.51-10.41), p < .001 (Table 4).

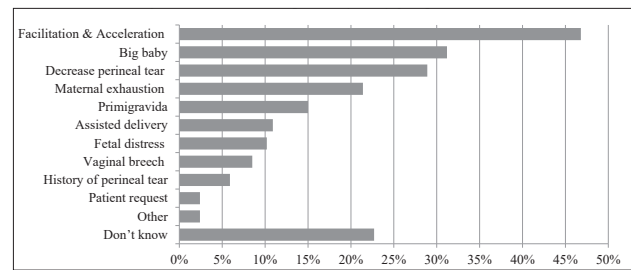


Figure 1. Indication for episiotomy study group understand

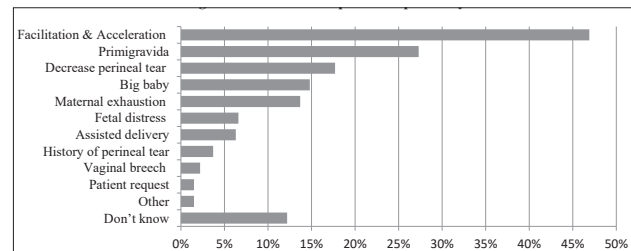


Figure 2. Indication for previous episiotomy

Factor (N=626)	Not aware (N=228)	Aware (N=398)	Odds ratio 95% (cl)	P value
<b>Age</b>				
<35 (357)	109	248	0.554(0.398-0.770)	0.001
>35 (269)	119	150		
<b>Parity</b>				
Primigravida (145)	70	75	1.908(1.308-2.782)	0.001
Multigravida (481)	158	323		
<b>Educational status</b>				
School(156)	59	97	1.083 (0.745-1.575)	0.070
Collage (470)	169	301		
<b>Nationality</b>				
Saudi (574)	211	363	1.197(0.654-2.189)	0.103
Non-Saudi (52)	17	35		
<b>History of Previous episiotomy (271)</b>	30	241	6 (3.51-10.41)	0.001

Table 4 Comparison of the two group the people not aware of episiotomy with those a aware

### 5. DISCUSSION

Many campaigns been done in Saudi Arabia in hospitals as well as public centers to increase the awareness and advocate for selective episiotomy and to abandon the routine episiotomy uses, which subsequently can reduce the possible complications of episiotomy, in addition to a better control of perineal pain in the postpartum period (3). Our aim of this study was to estimate the extent of the awareness regarding the episiotomy procedure among Women in Saudi Arabia.

We found considerable variability across the knowledge. The majority (63.6%) of women reported been informed about the episiotomy procedure. However, only a smaller proportion (40%) of them including the multiparous women were actually able to describe the procedure correctly as a surgical incision in the perineum, which shows the magnitude of the deficiency in their knowledge. Moreover, about (36.4%) reported to never heard about episiotomy before. Only (17.6%) of women reported hearing about the procedure from a Health personnel. In relation to (27.7%) of them, where Friends and relatives were the source of the information. Making the personal experience and opinions of relatives or friends a major factor affecting women decision regarding performing episiotomy. Consequently, affecting their health. Especially women who takes these

opinions from their relatives or friends seriously and apply it on themselves rather than taken the healthcare provider's real personalized based consultation.

Around half of the women stated that episiotomy should not perform routinely for all women. The most commonly thought indication for performing episiotomy was for facilitation and acceleration of delivery (46.8%), even (46.9%) of women reported it as there indication for undergoing episiotomy previously. In addition, around (27.3%) of those with past episiotomy experience, told they were doing it because they were primigravida. None of these is an actual indication of episiotomy, this shows that the health care providers are still not following the new ACOG guidelines on episiotomy (3), and (22.7%) did not know about the indication of the procedure, this shows the magnitude of insufficient communication between the health care providers and the patients. Almost close to the finding of the Canadian study, that found many women exceeded (15%) reported uncertainty about the benefits and risks episiotomies (14). these Reported patterns illustrate the marked lack of knowledge and the ability to participate in the decision making process. Furthermore, their capability to give an informed verbal consent. This put them on the risk of over utilization. In fact, a large number of women with history of previous episiotomy (77.5%) reported not been consulted nor informed about the procedure prior performing. In comparison to Queensland, where (34%) of women were unconsulted and (26%) of the women with past episiotomy experience were neither informed nor consulted (13). Later on dealing with the consequences of the procedure, which made them suffer more physically and even psychologically. The highest complication rate from a previous episiotomy was a perineal pain (67.9%) followed by dyspareunia (22.5%) and infection (19.6%).

The result showed that only Age, parity, and history of the previous episiotomy were predictors for the knowledge about episiotomy. The majority of the study group who were less than 35 were more aware of episiotomy than those who aged more than 35 with Odd ratio and a 95% confidence limit of 0.554 (0.398-0.770) and a p-value (<0.001). However, the multigravida were more aware of episiotomy than primigravida with an Odd ratio and 95% confidence limit of 1.908 (1.308-2.782) with a p-value (<0.001). Further, women with a previous history of episiotomy were 6 times more aware of episiotomy than women with no history of previous episiotomy (OR 6, 95% CI: 3.51-10.41), p-value (<0.001). Nationality and educational status did not affect the awareness.

A few limitations of this study falsify discussion. First, the reliability of these findings might afflicted by the intermediate survey response rate. Moreover, it is important to note that the young patients were most significantly represented within our respondent sample and the under represented patients were (e.g., patients from a minority ethnicity, cultural group, small towns, southern and northern regions of Saudi Arabia) suggesting that this regulation is likely resulted in overrate the true population awareness.

Second, the data collection method we used limited this survey to only those who have and able to use phones, internet, and a Social media programs. However, the limited

ability to reach a large part of the population strained us to use this approach.

Third, the credibility of these findings depends on the accuracy of participants' understanding of the term (episiotomy), as different regions use different terms. Moreover, the ability to recall their maternity care experiences processes, making it more under subjective utilization.

Nevertheless, the limitations mentioned above. This study afford new valuable prove of the current state of awareness about episiotomy procedure in Saudi Arabia, and draw the attention to the need of informing women about this highly used procedure.

## 6. CONCLUSION

Given the increase rates of episiotomy, in addition to the wrong practice and utilization of episiotomy indications, it is important to provide women with the knowledge that permit them to be involved significantly in intrapartum decision- determining. In conclusion, the awareness of episiotomy is still not accomplish in Saudi Arabia. Moreover, with the increased use of the routine episiotomy in Saudi Arabia, this study accentuate and stress the need for further modalities to educate women and increase their awareness regarding selective episiotomy rather than the old method of routine episiotomy.

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- **Conflict of interest:** none declared.

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