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Knowledge, Attitude and Experience of Episiotomy Use among Health Care Providers in Jos University Teaching Hospital Labour Ward

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ABSTRACT

Episiotomy is essentially a surgical procedure but it is often relegated to the least experienced members of the obstetric team with possible untoward consequences to the mother. This study set out to access the knowledge, attitude and experience of episiotomy use among obstetricians and midwives in Jos University Teaching Hosppital. It was a descriptive cross-sectional study which assessed the knowledge, attitude and experience of episiotomy use among obstetricians and midwives in Jos University Teaching Hospital. Both doctors and midwives 73(60.8%) had good knowledge of episiotomy. 85(70.8%) of responders had a formal training on episiotomy. 99(82.5%) of responders had a positive attitude towards episiotomy while 21(17.5%) had negative attitude towards episiotomy.There was no significant difference between obstetricians and midwives in their years of experience delivering maternity care with 60 (41%) <5 year's experience, 50 (34%) having 5 to 10 years experience and 38 (26%) with over 10 years experience.There was no statistical significant relationship between knowledge and experience of episiotomy among doctors and nurses (p=0.59). The study reveals that a significant majority of both doctors and midwives at JUTH posses good knowledge of episiotomy. Furthermore, majority of respondents have received a formal training in the procedure underscoring the importance of continued education and skill development in this area. The positive attitude towards episiotomy suggest a general acceptance and willingness to perform the procedure when clinically indicated. However, the 17.5% with a negative attitude emphasizes the importance of enhancing training programs and fostering positive attitudes towards evidenced –based practices in episiotomy to improve maternal and neonatal outcomes.

Keywords: Attitude; Episiotomy; Knowledge; Midwives; Obstetrician

Introduction

Episiotomy is a surgically planned incision on the perineum and the posterior vaginal wall during the second stage of labour[1]. It is in fact an inflicted second-degree perineal injury[1]. It is the most common obstetric operation performed[1].The practice of episiotomy has undergone a lot of reviews starting from the 1920s when routine episiotomy was advocated to the 1980s when restrictive use of episiotomy became the recommended practice[1].

The incidence of episiotomy ranges from 20% to 62.5% worldwide, in Nigeria, the incidence of episiotomy ranges from 20.8% to 54.9%.[2] WHO recommends episiotomy of less than 10 % in JUTH, there was a general decrease of the rate from 28.4% in 1998 to 20.8% in 2003.[3]

Internationally, the American College of Obstetricians and Gynecologists recommended against routine episiotomy in 2006. The National Quality Forum regarded the use of restrictive episiotomy as an important way to ensure safety of patients in 2008.[12] The rate of episiotomy recommended by the WHO is under 10%, and is only used during complicated vaginal deliveries (breech, shoulder dystocia, forceps or vacuum extraction), scarring from female genital mutilation or poorly healed obstetrical anal sphincter injuries, and fetal distress.[12] The Royal College of Obstetricians and Gynaecologists recommended operative vaginal birth as the only indication. The French National College of Gynecologists and Obstetricians (CNGOF) did not recommend routine episiotomy in specific obstetric situations.[12]The clinical guidelines for operative vaginal delivery (2016) by the Obstetrics Group, Obstetrics and Gynecology Society, Chinese Medical Association recommended restrictive episiotomy in 2016. Another study also suggested that episiotomy is used only if there was an indistinct indication of imminent tearing.[12]

Episiotomy remains a common, or even routine, surgical procedure at childbirth in many centers for example, the episiotomy rate reported for Thailand in 2005 was 91% and for the Philippines was 64% compared with contemporaneous rates for Australia (17%) and the United states (25%).[4] High rates in South-East Asian countries persist despite randomized controlled trials which suggest that there are maternal benefits for using of selective episiotomy (when medically indicated) rather than routine use of the procedure .[4]

Common indications for episiotomy includes: in elastic (rigid) perineum causing arrest or delay in descent of the presenting part as in elderly Primigravidae, anticipating perineal tear as in big baby, face to pubis delivery breech delivery and shoulder dystocia[1]. Others include operative delivery, previous perineal surgery[1].

The timing of performing the episiotomy requires judgment, if done early, the blood loss will be more and if done late, it fails to prevent the invisible lacerations of the perineal body and thereby fails to protect the pelvic floor – the very purpose of the episiotomy is thus defeated[1]. Bulging thinned perineum during contraction just prior to crowning (when 3–4 cm of head is visible) is the ideal time[1]. During forceps delivery, it is made after the application of blades.[1]There are various types of episiotomy and this includes:

- **Mediolateral**: The incision is made downwards and outwards from the midpoint of the fourchette either to the right or to the left, it is directed diagonally in a straight line which runs about 2.5 cm away from the anus (midpoint between anus and ischial tuberosity)[1]. The Median episiotomy where the incision commences from the center of the fourchette and extends posteriorly along the midline for about 2.5 cm[1].
- **The Lateral Episiotomy**: This where the incision starts from about 1 cm away from the center of the

fourchette and extends laterally[1]. It has got many drawbacks including chance of injury to the Bartholin's duct and is totallycondemned.[1]The'J' shaped episiotomy where the incision begins in the center of the fourchette and is directed posteriorly along the midline for about 1.5 cm and then directed downwards and outwards along 5 or 7 O'clock position to avoid the anal sphincter[1].

- **Aposition**: Aposition is not perfect and the repaired wound tends to be puckered. This is also not done widely. Thus, only mediolateral or median episiotomy is done commonly because they are associated with less complications.[1]

Despite the benefits such as reductions of severe perineal laceration, fetal trauma, urinary stress incontinence and improved wound healing; the procedure is not without complications, some of which include perineal pain, haemorrhage, local anaesthetic toxicity, wound infection, wound breakdown and also interference with the mother's comfort during the postpartum period. [5]

In practice, women are not necessarily informed of the specific risks and benefits associated with performing episiotomy, and rarely is written consent obtained, somehow abrogating the standard set for every other surgical procedure. [5]

This study seeks to examine the Knowledge, attitude and experience of obstetricians and midwives in JUTH on the use of this very important surgical procedure and compare it with other parts of the country and the world at large.

The study seeks to justify the need for training and continuous retraining on this simple yet life saving procedure. Episiotomy reduces caesarean section rates, but the reverse is the case if this procedure is not properly done. It is therefore very important that all those who attend to women in labour have the right knowledge, attitude and experience towards this simple and very important procedure.

Materials and Methods

Design

The study was be carried out in the department obstetrics and gynaecology of Jos University Teaching Hospital, a tertiary health institution situated in Lamingo, Jos-North Local Government Area of plateau state, Nigeria. It is a 600-bed capacity hospital that serves patients from the state and also serves as a referral centre to neighbouring Nasarawa, Bauchi, Benue, Gombe and Taraba states in central and North-eastern Nigeria.This location was chosen because of the large number of deliveries being conducted there (2000 per year)

It was a descriptive cross-sectional study. Participants were doctors and midwives who attended to women in labour. Sample size was gotten using the following formula:

$N = Z^2pq/d^2$ which gave a total of 120.

Approval for the study was obtained from the JUTH Ethical committee. Informed consent from participants and permission from the department of obstetrics and gynaecology was also obtained. Consultants, senior registrars, registrars and midwives, intents with at least two months' experience in the labour ward were involved in the study.

Participants

Intents doctors and nurses with less than two months' experience in the labour room were excluded from the study.

Data

A structured pre-tested questionnaire was administered to doctors and midwives during the period of study which lasted one month. The respondents knowledge on episiotomy was assessed based on; types of episiotomy, right timing of episiotomy, indications for episiotomy and complications of episiotomy. To assess their knowledge regarding episiotomy,4 questions were used. Respondents were instructed to tick the correct answers. Each right response was scored 0.5mark while wrong or "don't know" responses were given a score of zero. A total of 7.5 scores was obtain and converted to percentage, using the formula: Percentage score= obtained score/total score x100.

Attitude related to episiotomy was assessed based on the following indices; How often respondents give episiotomy on the primigravida, how often the respondents give episiotomy on the multipara, which type of episiotomy the respondents preferred and the willingness of the respondents to give an episiotomy when indicated. 1 mark was allocated for the right response and zero for the wrong response. A total of 7 score was obtained and converted to percentage.

This was assessed using questions on whether respondents have received episiotomy, whether respondents have received formal training on episiotomy, there experience on episiotomy, a total of 3 scores was obtained and converted to percentage.

Data Analysis

The data was analyzed with the statistical software package IBM SPSS Statistic version 24.0. Descriptive statistics such as frequencies, percentages, range and mean were be used to present the data.The quantitative variables with normal distribution was compared between the groups using an independent T-test, and the Chi-square test will be used to compare the categorical variables.

Results

One hundred and twenty clinicians completed the questionnaire including 69 (80%) of 79 doctors (65.4%) and 41 midwives(34.6). The average age of respondents was 33.84. There was no significant difference between doctors and midwives in their knowledge and years of experience delivering maternity care with 60 (41%) <5 year's experience, 50 (34%) having 5 to 10 years experience and 38 (26%) with over 10 years experience. No clinician had more than 35 years experience. Both doctors and midwives

had good knowledge of timing (84.2%) and complications of episiotomy.

All (90%) respondents reported that they performed episiotomies and used the mediolateral (93.3) approach. Ninety nine percent of midwives reported performing episiotomies on nulliparous women over 90% of the time, compared with 83% of obstetricians. Similarly among multiparas, obstetricians performed episiotomies less frequently with 25% of obstetricians performing episiotomy less than 60% of the time compared with only 3 (3.8%).

Aiming to reduce 3rd-4th degree perineal tears was the most commonly identified reason for performing an episiotomy by both obstetricians and midwives (95.8%) . The second most frequent main reason for performing episiotomies reported by both obstetricians and midwives was operative delivery (60.8%). Other reasons for performing episiotomy are previous perineal scars (53.3) and foetal distress(44.2%) .82.5% of respondents reported mediolateral episiotomy to be their preferred type while 1.7% had no preferred type of episiotomy.

SECTION A:

BACKGROUND INFORMATION OF RESPONDENTS

TABLE 1: BACKGROUND INFORMATION OF RESPONDENTS (N=120)

Variable	Frequency (n)	Percentage (%)
Age(years)		
Mean age: 33.84		
Age group		
20−29	27	22.5
30−39	78	60.0
40−49	13	10.8
≥50	2	1.7
Qualification		
School of nursing	16	13.3
BSCN	25	20.8
House officer	20	16.7
Registrar	36	30
Senior Registrar	21	17.5
Fellow/Consultant	2	1.7
Religion		
Christianity	110	91.7
Islam	10	8.3

FIGURE 1: Bar Chart Showing Grading Of Respondents Knowledge On Episiotomy

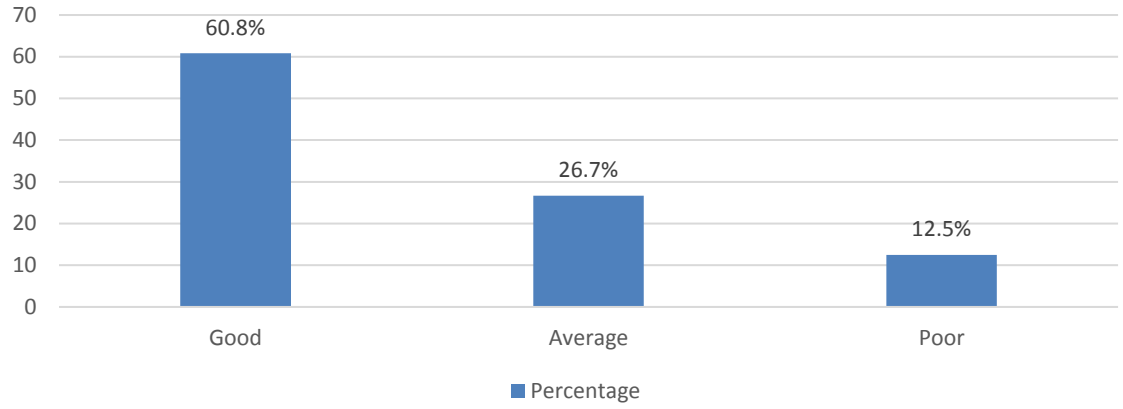


Table 2: Attitudes of Respondents towards Giving Episiotomy

Variable	As indicated Frequency (%)	Almost always Frequency (%)	Routine Frequency (%)	Never Frequency (%)
How often do you give an episiotomy?	**89 (74.2)**	**8 (6.7)**	**21 (17.5)**	**2 (1.7)**
How often do you give an episiotomy on the primigravida?	**35 (29.2)**	**71 (59.2)**	**14 (11.7)**	**0 (0.0)**
How often do you give an episiotomy on the multigravida?	**115 (95.8)**	**3 (2.5)**	**2 (1.7)**	**0 (0.0)**

Figure 2: Bar Chart Showing Grading Of Respondents Attitude towards Episiotomy

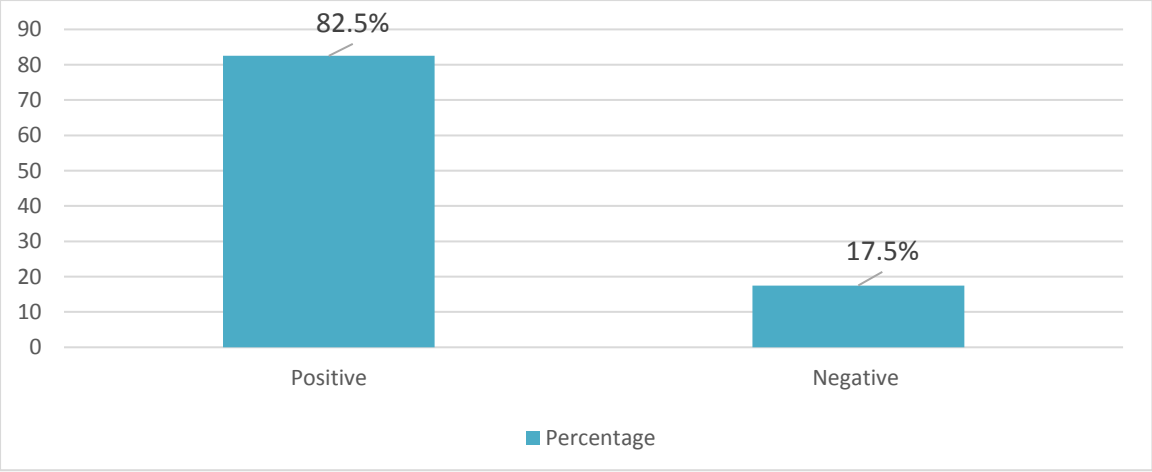
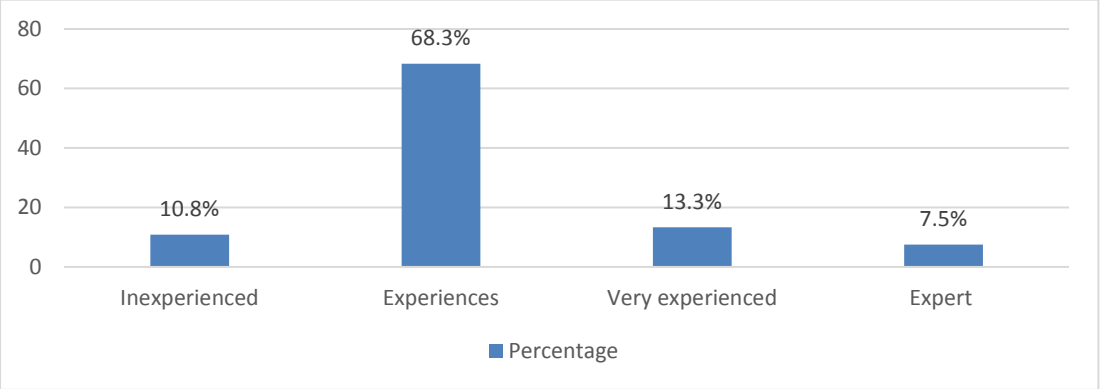


Figure 3: Bar Chart Showing Experience of Respondents on Episiotomy



Discussion

The intent of giving episiotomy during delivery is to widen the diameter of the vulva outlet, which is believed by many to prevent maternal soft tissue damage such as spontaneous perineal tear, and fetal damage.[1] The review of clinical and surgical practices in every clinical unit is desirable so that aberrant practices could be detected and efforts made to correct them in the overall interest of the patients whom we serve.[1] This survey is the first of its kind in JUTH. The study showed obstetricians and midwives differ in their use of, and attitudes towards, episiotomy. Obstetricians have slightly less frequent use of episiotomy and are more likely to think the existing rate is too high. However, obstetricians and midwives have similar knowledge of the outcomes associated with episiotomy. The respondents generally had a good knowledge on episiotomy (60.8%). The commonest (95.8%) indication was a version of third and fourth perineal tear. There was statistical significant relationship between doctors' and nurses' knowledge on episiotomy (p=0.02). Fifty Eight (58%) of doctors had good knowledge compared to 15% of nurses.

There was no statistical significant relationship between knowledge and experience of episiotomy among doctors and nurses (p=0.59) A recent Canadian study suggests that obstetric training impacts on attitudes as younger obstetricians were more likely (91%) to consider routine episiotomy did more harm than good compared with older obstetricians (79%). [11]

Anecdotal reports about clinicians' fear of severe perineal trauma were confirmed in this study, even though the current 3rd–4th degree tear rate in the hospital (based on internal audit) was incredibly low at 0.03% in 2012. This is in comparison with rates of 1-4% that are typically reported internationally. If 3rd-4th degree tears are considered an indicator of poor quality of care [19-21], this may have resulted in under-reporting in medical records. Of greater concern is that severe perineal trauma goes unrecognised and unrepaired.[12,16]

There was no statistical significant relationship between doctors' and nurses' experience on episiotomy (p=0.392). This finding is similar to that by Yang et al in 2020 study published in BMJ. Only 4% of obstetricians and 18% of midwives

felt that women expected to have an episiotomy and as such, differences between professionals' own views and what they believe are the views of their patients is not an obstacle to practice change. The high percentage of obstetricians and midwives who stated that they performed an episiotomy over 90% of the time for nulliparous women (83% and 99% respectively) gives an indication of the potential difficulty in instigating change, not only because of the high episiotomy rate for each individual clinician, but also because the majority of their peers do the same. In a secondary analysis of one of the episiotomy trials, Klein et al. demonstrated the difficulty of behaviour change among obstetricians with strong beliefs about episiotomy.[11,17,21]

It is worth noting that in this study, while routine episiotomy for multipara was considered appropriate by only 9% of obstetricians and 13% of midwives, 28% of both obstetricians and midwives reported that they would perform an episiotomy for this group over 90% of the time. With lower rates and different beliefs about appropriateness of episiotomy, clinicians may be more amenable to change for multiparous women. It remains unclear what rate of episiotomy JUTH would give the greatest benefits for the least harm. Many high income countries report episiotomy rates below 20% .[13,14,17] However, it is noteworthy that implementation of an intensive national intervention in Norway that reduced the 3rd-4th degree rate by 44% (from 4.1% to 2.3% of vaginal deliveries) was accompanied by a small increase in the episiotomy rate from 17.8% to 19.1% (2004–2010) [18]. Delivery unit clinical staffs were involved in a multi-pronged education program that included techniques for conducting selective mediolateral episiotomies with emphasis given to the correct angle of incision, manual support of the perineum with good visualisation and good communication between the accoucheur and the labouring woman.

Conclusion

The study reveals that a significant majority of both doctors and midwives at JUTH posses good knowledge of episiotomy. Furthermore, majority of respondents have received a formal training in the procedure underscoring the importance of continued education and skill development in this area. The positive attitude towards episiotomy suggest a general acceptance and willingness to perform the procedure when clinically indicated.

However, the 17.5% with a negative attitude emphasizes the importance of enhancing training programs and fostering positive attitudes towards evidenced –based practices in episiotomy to improve maternal and neonatal outcomes

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