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## Research Article

# Semi-Experimental Study for Decreasing Perineal Trauma through Communication between Midwife and Saudi Woman

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## Abstract

**Background and Objective:** Perineal trauma is one of the serious outcomes of childbirth. Part of the midwives' role is to reduce the trauma through several measures among which is the use of effective communication and providing valid and clear information. To measure the effect of effective midwife-woman communication during childbirth before administering training and compare the difference of midwives behaviour and attitude to post-training in reducing Perineal trauma. **Materials and Methods:** A semi-experimental study (pre-test/post-test) was used as 25 midwives were observed during the process of childbirth by using an observational checklist. Followed by intensive three-day simulation training/five hours a day regarding effective communication in reducing Perineal trauma. Followed by observational documentation of the midwife's behaviour, attitude and communication during childbirth to validate the difference. **Results:** The results showed that there were significant changes in the midwives behaviour, attitudes and communication with women during childbirth. Perineal trauma cases decreased, along with a decrease in the number of Episiotomy cases. The presence of bleeding during birth decreased significantly ( $p = 0.012$ ) and the average pain scale also decreased from 7.48-6.96 post-training. **Conclusion:** Communication and health education during birth can help in reducing Perineal trauma. However, further specific and similar studies at different populations and areas need to be conducted in this regard.

**Key words:** Midwife communication, health education, normal childbirth, Perineal trauma, episiotomy, midwives training, oxytocin

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**Competing Interest:** The authors have declared that no competing interest exists.

**Data Availability:** All relevant data are within the paper and its supporting information files.

## **INTRODUCTION**

Perineal trauma can be a serious adverse outcome of vaginal childbirth<sup>1-3</sup>. Global studies showed that Perineal trauma ranges from 0.1-10.3% of normal childbirths mainly in developing countries, where Episiotomy was the main reason for women experiencing their first birth<sup>4-6</sup>. Saadia<sup>7</sup> conducted a study in Buraidah, Saudi Arabia and found that all women experiencing their first birth went through Episiotomy. Episiotomy is considered one of the risk factors for Perineal trauma among other risk factors (marital age, parity, infant weight and precipitous birth)<sup>8</sup>. However, it was found that it can cause more harm than its intended benefits and refraining or limiting the use of this procedure might be of great effect on decreasing Perineal trauma and reducing women's long and short-term morbidity<sup>9</sup>.

Perineal trauma during birth might lead to several consecutive health problems for women. The degree of morbidity is highly related to the extent of the genital tract trauma<sup>10-12</sup>. Immediately following birth, women might experience blood loss, suturing needs and complaints of severe pain that can affect the mother's functionality with taking care of her baby and return to her normal stage. However, this pain might continue for up to 8 weeks post-birth and some women, many years<sup>1</sup>. Perianal muscles might be weakened following genital tract lacerations, which in its turn will affect bowel, urinary and sexual function<sup>13</sup>. Moreover, the effect of Perineal trauma on mother's experiencing first birth was linked in a review study with post-traumatic stress disorder and deteriorating the psychological aspects of mothers postnatal<sup>14</sup>. Therefore, effective management of the genitalia is one of the highest priorities for midwives during childbirth<sup>15</sup>.

Midwives could play an important role in reducing the risk of severe tears by decreasing the opportunity of instrumental deliveries and supporting the normal birth through their important advocacy role by choosing the appropriate timing for medical staff involvement that should come after exhausting every technique encouraging normality<sup>15,16</sup>. Other roles include providing informative and comprehensive health education during antenatal care for massaging the perineum and educating women during birth for avoiding epidural anaesthesia<sup>17</sup>. In addition to effective support for the women<sup>18</sup>, encouraging childbirth environment that is conducive to the birth process<sup>19</sup>, which aims to reduce stress, which in its turn can encourage oxytocin release and ensures women's control of birth. Adding to that using warm-compresses during the active phase of the second stage of birth was also found to be effective<sup>20</sup>.

In Saudi Arabia, foreign midwives still dominate the workforce in all hospitals as in the Ministry of Health close to 40% and in the Armed Forces Hospitals nearly 100%<sup>21</sup>. One study conducted in several hospitals in Jeddah, including military and public hospitals in Saudi Arabia, found that among childbirth cases, 22.4% were cesarean section and there were unnecessary routinely Episiotomy procedures<sup>22</sup>. Another study conducted in Jeddah has also found that 54.6% of birth cases had an Episiotomy and 29.6% had third to fourth Perineal lacerations<sup>3</sup>.

Birth tradition and religious rituals play an important role in Saudi mothers' beliefs and behaviours during the process of childbirth, among which (prayers, special traditional food and some physical activities). In Saudi Arabia, most hospitals prohibit husbands from attending their child's birth and many hospitals do not even accept the presence of female members of the family to attend the birth. In addition, birth education is not part of antenatal care as health care providers usually refrain from providing necessary education since they believe they might not be perceived well by the family members<sup>22-23</sup>.

In Saudi Arabia, there is a scarcity of studies about the effect of communication between women and midwives, particularly about involving women in reducing Perineal trauma. Therefore, the objective of this study is to assess the midwives communication process during childbirth and its effect on reducing Perineal trauma before and after administering intensive training on the communication process during childbirth.

## **MATERIALS AND METHODS**

**Study design:** A semi-experimental study (pre-test and post-test) research was used as a convenient sample of 25 midwives (available total number) were observed during the process of birth (from early-stage until the third stage of the birth process) by using an observational checklist after consent was obtained. None of the midwives refused to participate in the study as the head nurse advice all of them to participate and to take the training. Later, a standardized simulation training focusing on the role of midwives in reducing the Perineal trauma through the use of effective communication skills during the process of childbirth was given to the same midwives. After the training, a second observation was conducted for each midwife by the researcher to check for the differences in midwives behaviour, attitudes and Perineal trauma cases. The study took place from March-July, 2019.

**Study tool:** A semi-structured observational guide (adopted from Maputle<sup>24</sup>) was used to observe each of the midwives' communication aspects with women during delivery, informational support and health education provided, emotional support activities and supportive care activities during the childbirth process. A pre-test was conducted on three Saudi midwifery students to check for the need for any modification. The tool was clear and suitable and no further modifications were applied.

The Female Nursing Institute prepared a training booklet for the midwives then it was approved by each of the Nursing and Midwifery Continuing Education departments in the hospital, the Academic Affairs and then it was accredited by the hospital Quality Assurance department. The training booklet contains the objectives of each session and the main training contents, Fig. 1 shows the detailed training content. It is also worth adding that important language (Arabic) words that are necessary for the midwives to clarify the process of birth were added to the training, such as the Arabic words of pushing, taking a breath etc. The booklet was pretested on a special training conducted for midwifery high diploma students, to check if there is a need for any modification in each of the contents and tools of training, where we found the booklet to be clear and no further modifications were needed. The training was conducted in a high participatory manner, using simulation techniques for the process of birth and role-play for three consecutive days, 5 hrs a day.

**Settings:** The study took place at the King Faisal Armed Forces Hospital in the Southern Region of Saudi Arabia (KFAFHSR) in the Labour and Delivery Ward (L and D). This hospital was chosen because it receives patients from the whole southern region of Saudi Arabia, with high-quality standards facilities and staff accredited by The Joint Commission International (JCI) and The Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI). The L and D ward, on average has 150 daily deliveries and 360 daily visits to the antenatal clinic.

**Statistical analysis:** The statistical analysis of data was done by using SPSS statistical package for social science version 22 (Armonk, NY: IBM Corp). The description of the data was done in form of Mean  $\pm$  SD for quantitative data, where frequency and proportion were used for qualitative data. The analysis of the data was done to test statistically significant differences between groups. For quantitative data, independent sample tests were used, cross-tabulation and CHI SQUARE test was used for the quantitative variable, P is significant if  $\leq 0.05$  at 95% confidence interval.

### Participants

**Sample:** Convenient sample includes the available number of midwives (25 midwives) from different nationalities and educational backgrounds. The majority were South African midwives (n = 14) holding a midwifery diploma certificate.

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#### Day one

Introduction, the goals statements  
Communication tips, styles, importance and effectiveness during childbirth  
Barriers to effective communication  
Verbal and non-verbal communication differences, problems in interpretation and influencing factors focusing on cultural perspectives (role-play and practicing)  
Skills in communication (questioning, active listening, dialogue and encouraging participation)  
Practicing through problem-solving and group discussion  
Summing up and questions

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#### Day two

Normal childbirth process (simulation techniques) and midwives communication are important during each stage  
Evidence-based measures to reduce Perineal trauma  
Episiotomy review (indication, right timing, complications and care)  
Emotional support during childbirth and other relieving behaviours  
Practicing and role play  
Summing up and questions

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#### Day three

Health education during the three stages of delivery and Episiotomy in specific. That included (information given, answering questions, being responsive and consistent)  
Role-play participation and simulation training during childbirth  
Culture and tradition of Saudi women during childbirth  
Special training on accepted Arabic words by the Saudi culture and necessary to deliver the messages during health education  
Role-play and exercises  
Summing up, evaluation for the training and closing up

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Fig. 1: Training program on communication skills during childbirth for midwives

**Ethical consideration:** The Research Ethical Committee at the Armed Forces Hospital in the Southern Region, before the research being conducted, approved the study (Code number: AFHSREC/2019/FEMALE NURSING INSTITUTES/340. Dated March 26, 2019). Furthermore, all midwives who participated in the study gave their consent, which included the purpose of the study and ensured anonymity and privacy. The Women also consented to accept the presence of the researcher during the birth process as well as to participate in the study.

## RESULTS

**Sociodemographic characteristics of the midwives:** The data in Table 1 shows that more than half of the midwives were South African and 24% were Malaysian. Two third of them were certified as midwifery diplomas based on South African and Malaysian midwifery educational programs, 28% hold advanced midwifery diplomas and the majority had more than ten years of experience. However, the hospital employment requirement rule for midwives is to have a minimum experience of 3 years.

**Communication, empowerment, advocacy and respect values:** The data in Table 2 shows significant changes in midwives communication regarding woman empowerment after training, particularly in allowing the mother to make suggestions regarding her care and in discussing any advice given to the mother ( $p = 0.000$  for both).

Midwives also showed a significant improvement in terms of enabling the woman to feel comfortable and relaxed, particularly by communicating in an appropriate language ( $p = 0.000$ ).

The data in Table 2 shows that there is little improvement regarding the advocacy behaviour of midwives after

training. On the other hand, the vaginal examination is done only when necessary showed significant improvement ( $p = 0.000$ ).

The data in Table 3 presents data regarding midwives respecting cultural and religious needs for the women during birth which was significantly improved after the training, particularly allowing women to drink herbs that are culturally accepted when necessary and not contradicted with women's health or birth progress. In addition, there was some improvement regarding keeping women well informed during birth in terms of the mother's health condition and the fetus's condition.

**Health education provided for women:** The data in Table 4 shows the health education needs and the steps to providing health education during the stages of birth. The result shows that answering women's questions and concerns during birth were significantly improved ( $p = 0.001$ ). Additionally, necessary health education during the first stage of birth was also significantly improved.

Health education necessary for the second stage of birth was also significantly improved. For example, teaching the mother the proper way of breathing between contraction, encouraging the women to bear down and discussing with the women the indication for Episiotomy ( $p = 0.001, 0.001, 0.000$ , respectively).

Health education during the second stage showed a significant relationship with the number of Episiotomy cases as it decreased from 11-5 cases post-training out of 25 women. In addition, health education had a significant improvement in regards to the first and second-degree tears as the number of women with first-degree tears decreased from 18-12 cases. Additionally, none of the observed cases had second-degree tear post-training

Table 1: Sociodemographic characteristics of the midwives

Characteristics	Numbers	Percentages
<b>Nationality</b>		
South African	14	56
Malaysian	6	24
Indian	2	8
Filipinos	2	24
<b>Level of education</b>		
Diploma in midwifery	16	64
Advanced diploma in midwifery	7	28
BSN in nursing including midwifery (pilipino curriculum)	2	8
<b>Years of experience</b>		
3-5	2	8
5-10	9	36
11-20	10	40
>21	4	16

Table 2: Crosstab of the observation of midwives communication with women before introducing training and after the training (n = 25)

Observed communication during birth	Pre-training (n= 25) (%)	Post-training (n= 25) (%)	p-value*
Empowering women by reinforcing acceptable behaviour during labour	22 (80)	25 (100)	0.074
Empowering women during birth by reinforcing the expected physiological changes that take place	22 (80)	25 (100)	0.074
Offer women an opportunity to make suggestions and	4 (16)	24 (96)	0.000
Extend advices and encouragements	3 (12)	23 (93)	0.000
<b>Enabling the women to feel comfortable and relaxed by</b>			
The approach used when meeting the woman and introducing herself appropriately	0 (0.0)	8 (32)	0.040
Calm and low tone voice	24 (96)	25 (100)	0.312
Addressing the woman by the name	2 (8)	9 (36)	0.028
Consent form taken	18 (72)	25 (100)	0.004
Communicating in with woman's appropriate language	5 (20)	23 (93)	0.000
<b>Advocacy role</b>			
Be the woman advocate when the doctor talks with the women through explaining any vague or misunderstanding issues	0 (0.0)	1 (4)	0.074
Call the Dr. only when necessary and not expose the woman to many invasive assessments	22 (88)	25 (100)	0.074
Call for Episiotomy only when needed after exhausting all other procedures	19 (76)	23 (92)	0.123
Conduct per vagina (PV) examination only when necessary	17 (68)	24 (96)	0.010
<b>Cultural respect</b>			
<b>Accept and respect woman's culture, religion and personal preferences such as:</b>			
Praying	16 (64)	25 (100)	0.001
Listening to the Holy Book	11 (44)	23 (92)	0.000
Eating or drinking herbs when appropriate and not contraindicated	7 (28)	23 (92)	0.000
<b>Keeping women well informed</b>			
<b>Continuous monitoring of the maternal and fetal condition and up-date women on the progress of birth on:</b>			
Maternal vital signs to labour	24 (96)	25 (100)	0.312
The contractions frequency, duration, strength and regularity	24 (96)	25 (100)	0.312
Cervical dilation	24 (96)	25 (100)	0.312
Fetal heart (acceleration, deceleration)	24 (96)	25 (100)	0.312

\*p-value significant at <0.005

Table 3: Information support and health education observed pre and post-training (n = 25)

Health education	Pre-training (%)	Post-training (%)	p-value
Answer all questions and allow the woman to ask questions	10 (40)	23 (92)	0.001
Obtain permission and explain before conducting any procedure	14 (56)	24 (96)	0.003
Guide the woman throughout the childbirth process and assist with the birth	25 (100)	25 (100)	-
<b>Health education during the first stage of labour</b>			
Explain to the woman the admission procedure	3 (12)	22 (88)	0.000
Encourage the woman to use the restroom	21 (84)	25 (100)	0.000
Explain to the woman the signs of the onset of birth	2 (8)	16 (64)	0.002
Explain to the woman her baby condition and her condition	6 (24)	24 (96)	0.123
Encourage the mother to walk	3 (12)	13 (52)	0.074
Inform the woman of the correct positions she should take	19 (76)	23 (92)	0.000
Discuss the birth plan	25 (100)	25 (100)	0.704
Discuss the available methods of analgesia and facilitating choice i.e., warm water bath	0 (0.0)	3 (12)	0.000
Teach the woman a relaxing breathing technique	8 (32)	23 (92)	0.009
Explain to the woman the method and the reasons for rupture of membranes	0 (0.0)	6 (24)	0.009
<b>Health education in the second stage of labour</b>			
Support women with providing emotional support	3 (12)	23 (92)	0
Support the client in choosing a position in which to give birth	3 (12)	21 (84)	0
Teach the mother how she can take deep breaths between contractions	17 (68)	25 (100)	0.002
Teach the mother how she can take deep breaths between contractions	1 (4)	6 (24)	0.042
Discuss with the mother the process and method of delivery	15 (45)	24 (96)	0.001
Encourage the mother to bear down	1 (4)	12 (48)	0.000
Explain to the mother the indication for Episiotomy and when and	1 (4)	8 (32)	0.010
How to perform it	1 (4)	7 (28)	0.021
<b>Health education in the third stage</b>			
Technique for the expulsion of the placenta			
Discuss the Episiotomy or laceration and the technique for sutures			

Table 3: Continue

Health education		
<b>Health education points provided and Episiotomy cases</b>		
Health education provided	Epis. cases pre-training	Epis. cases post-training
All given	0 (0.0)	0 (0.0)
1 point missing	0 (0.0)	1 (20)
2 points missing	1 (10)	1 (20)
3 and more points missing points	10 (44)	3 (60)
<b>Health education provided</b>	Degree Perineal tear per-training	Degree Perineal tear post-training
All given	1st degree	1st degree
1 point missing	0	1 (8.3%)
2 points missing	0	3 (25%)
3 and more missing points	0	2 (16.7%)
	18 (81.8) 1st degree	6 (50%) 1st degree
	3 (13.6) 2nd degree	

Table 4: Emotional support, supportive care and communication to reduce Perineal tear pre-and post-training (n = 25)

Emotional support	Pre-training (%)	Post-training (%)	p-value
<b>Be understanding, friendly and reassuring to the woman by</b>			
Being professional and approachable	8 (32)	25 (100)	0.000
Help the mother to relax and deep breathing after contraction	11 (44)	25 (100)	0.001
<b>Encourage the integration of cultural/personal preferences in midwifery care by</b>			
Maintaining privacy at all level	23 (92)	25 (100)	0.149
Support spiritual consideration	23 (92)	25 (100)	0.149
<b>Supportive care</b>			
<b>Provision of physical comfort measures, for example, touch and assisting by fulfilling specific requests specifically observed for</b>			
A warm wet cloth or a gentle massage on the lower back can relieve labour pain	0 (0.0)	1 (4)	0.312
Massage between contractions, especially on the feet or back, warm compression for the genitalia during the second stage	0 (0.0)	1 (4)	0.312
Encourage her to urinate at least every 2 hrs	20 (80)	25 (100)	0.062
<b>Midwife care for more than one woman at the same time</b>	0 (0.0)	1 (4)	0.312
<b>Communication to reduce Perineal trauma</b>			
The proper position for delivery	17 (68)	24 (96)	0.030
Proper communication with the patient about Episiotomy	0 (0.0)	11 (44)	0.001
Injection of lidocaine (local anaesthesia)	4 (16)	16 (64)	0.001
Cut the Episiotomy at the correct time	10 (40)	12 (48)	0.062
Good support of the perineum with warm compression	14 (56)	25 (100)	0.001

compared to three cases pre-training when given incomplete health education that is missing three points or more (Table 5).

Health education during the third stage of childbirth was not effective before the training but it did show little improvement post-training as only seven midwives have changed their behavior.

**Supportive activities during birth:** Emotional support was significantly improved post-training as almost all midwives were given proper emotional support during childbirth (Table 4).

Post-training, only one observed midwife gave gentle massage for the lower back to relieve the pain. Additionally, one midwife provided warm compresses and gentle massage

to the Perineal area post-training. However, there was a significant increase in encouraging women to urinate every 2 hrs (Table 4).

**Perineal trauma and assessment:** The results show that there were significant changes in using effective communication and activities necessary to reduce Perineal trauma, particularly in providing proper position, Episiotomy well-informed and injections of lidocaine. However, cutting Episiotomy in the right timing did not show a big difference before and after training as still half of the midwives did not follow the training recommendations (Table 5).

Overall, trauma and Episiotomy was decreased post-training and was also decreased by most midwives (from 56% of midwives to 80%). The degree of trauma was also

Table 5: Perineal assessment during childbirth (pre and post-test, n = 25)

Midwives action observed	Pre-test	Post-test	p-value
<b>Episiotomy site</b>			
Right	10 (40%)	5 (20%)	0.078
Left	1 (4%)	0 (0.0%)	
None	14 (56%)	20 (80%)	
<b>Type of trauma</b>			
First	18 (72%)	12 (48%)	0.001
Second	3 (12%)	0 (0.0%)	
None	4 (16%)	13 (52%)	
<b>Presence of bleeding</b>			
Yes	9 (36%)	1 (4%)	0.012
No	6 (24%)	12 (48%)	
Minimal	10 (40%)	12 (48%)	
<b>Length of suture</b>			
Mean	3.88 cm	1.62 cm	0.000
<b>Pain score</b>			
Mean	7.48	6.96	0.279

decreased, especially the second degree, which was minimized to 0%, whereas half of the observed deliveries resulted in no trauma at all. In terms of bleeding during birth, it was significantly decreased post-training. Suture line average length was also decreased from 3.88-1.62 cm. Post-training, pain scale measurement was reported to be decreased as well (Table 5).

## DISCUSSION

The study gives a clear idea that in general, midwives were lacking effective communication skills with women during the process of birth. However, this problem was relatively corrected after training as the midwives in the present study showed some improvement. Effective communication between midwives and women during childbirth with evidence in improving the health outcomes and a healthy birth as well as improving patient's satisfaction<sup>25</sup>. Katebi *et al.*<sup>26</sup>, who conducted their study in Iran, has focused on the importance of proper midwives-women communication in increasing women's mental health level and developing better birth outcomes.

Looking to the fact that midwives have a different educational background, coming from different cultural perspectives, in addition to having language limitations, midwives might have difficulty in communication using proper messages with the women during birth<sup>27,28</sup>. This study shows that, after training, midwives had improved their language explanation when talking to the women using appropriate wording. They also showed significant improvement regarding giving the women opportunities to participate effectively in the birth process by allowing them to give suggestions or express their thoughts. This put the

women in a role of participatory rather than the recipient of the health care. Overall, when the woman knew that they are a part of the care provided to them and allowed to express their feelings, their opportunity to learn and to cooperate during the stage of bearing down will be more effective and their pain distraction will be focused on her health matter rather than on the pain itself<sup>29</sup>. Wiech and Tracey<sup>30</sup> discussed that the pain process could be highly influenced when women are engaged in the process of health care. Manary *et al.*<sup>30</sup> discussed the positive correlation of a patient's engagement in their health care and their overall health outcomes<sup>29</sup>.

In this study, training caused an effective improvement in midwives' level of communication as well as in delivering proper health education. The same effect was also shown in a study that was conducted in Iran<sup>31</sup> where similar training was also conducted and they found similar results. In their semi-experimental study, a two-session training workshop was organized for 40 midwives regarding communication skills that enhance women's satisfaction during childbirth. Later, women satisfaction were tested before and after the training and they found that mothers' satisfaction had significantly increased post-training ( $p = 0.003$ ), whereas, midwives' communication level and behaviour was also significantly improved post-training ( $p = 0.002$ ). Continuous training for midwives can increase women's satisfaction from the childbirth process as well as improve health outcomes<sup>31</sup>.

We found that there was an improvement regarding Perineal tear caused by midwives' training and communication skills development as the Perineal tear was significantly decreased. After training, 52% of women had no type of trauma compared to only 36% before training. Several communication measures showed significant improvement after training, such as informed health education during the



stages of birth, as well as informing the women regarding the need and the process of Episiotomy. Women were also well informed regarding the process of birth, exact timing to bear down and the strategies to facilitate the process of birth. This communication level and process were recommended by the WHO<sup>32</sup>. Lindgren<sup>33</sup> suggested as well that effective communication between midwives and women could help in decreasing genital tears and trauma.

Health education after the training of midwives showed significant changes as providing essential health education for midwives, especially for the first and the second stage of childbirth influenced decreasing the Perineal trauma and women's bleeding and pain. Health education mainly focused on the breathing exercise in the first stage and on the timing to bear down in the second stage. Lemos *et al.*<sup>34</sup> have concluded in their review study that there is no clear effect of timing nor the duration of pushing on reducing Perineal laceration. On the other hand, Dieb *et al.*<sup>35</sup> in a very recent study found that health education during the process of birth, as well as antenatal education, could help in reducing Perineal complications for women above the age of 35.

Episiotomy in some hospitals is routine management for women experiencing first childbirth as one study in Saudi Arabia have found that half of the women had to go through Episiotomy<sup>3</sup>. However, Episiotomy could increase postpartum morbidity in terms of postpartum pain and discomfort as well as maternal mortality. Therefore, Gün *et al.*<sup>36</sup> in their meta-analysis study suggested restrictive rather than routine Episiotomy. In the present study, we found that the number of episiotomies was decreased after the training and the reason might be that midwives did not find it very urgent and might have delayed the Episiotomy to adopt other measures such as massaging, supporting the premium, proper pushing, communication with the woman and providing a relaxing environment. Although the hospital where our study was conducted as a routine measurement of Episiotomy for all women experiencing their first birth, midwives still worked hard to advocate for the women in that matter. However, some midwives did not follow the training recommendations since they felt that might be less confrontational with the hospital policy. The result of this was less Perineal trauma and fewer complications. This goes with the WHO Episiotomy recommendations<sup>32</sup>.

Massaging the lower back to relieve the pain wasn't done properly even post-training. Therefore, this issue was discussed individually with the midwives and we found that they refrain from doing it because they might offend the cultural privacy of the Saudi women and this action might not be socially accepted. A similar explanation was also noted in one review study by Alshammari and Guilhermino<sup>23</sup>.

To the use of Perineal warm-compresses, only one midwife had done that post-training. It was found that midwives were not convinced about its effect on reducing Perineal trauma. When it was discussed with the midwives, most of them said that they did not have it in their curriculum study of midwifery. However, many recent studies showed a great effect of warm-compress on maintaining the intact of the perineum and reducing the need for Episiotomy<sup>37,38</sup>.

Poor communication and ineffective methods of verbal and nonverbal communication among midwives and mothers during childbirth have been observed in several other studies regardless of the midwives' backgrounds, being from different nationalities or having a language barrier<sup>23,39</sup>. The same problem was found in this study as the majority of midwives had a problem in communication before the training but later after the training, midwives had improved their communication levels such as focusing on more effective and goal-directed communication and health education. Therefore, communication skills need to be enhanced in the midwifery programs as well as in the continuous assessment and in-service training.

This study faced some limitations, for example, after the training, the midwives might be influenced by social desirability bias as to please the researcher following training rather than a real change in behaviour or attitude. The language barrier and cultural diversity of midwives were also concerns during the training and communication with women.

Effective communication between midwives and women during normal childbirth as well as the advocacy role in using Episiotomy only when necessary rather than following it as a routine activity should be encouraged through midwifery teaching programs and curriculum. Future studies by taking different study groups are recommended which might help in further understanding of the influence of communication and women involvement in decreasing Perineal trauma.

## **CONCLUSION**

Effective communication, using appropriate language and informative health education during the process of childbirth might decrease Perineal trauma. Midwives advocacy role and calling for Episiotomy when necessary can decrease the long term effect of Perineal trauma and morbidity. Women's participation in the process of delivery through effective health information and education could decrease Perineal trauma and might decrease the level of pain during normal childbirth.

### SIGNIFICANCE STATEMENT

This study explores the importance of Empowerment of women during childbirth by midwives can minimize Episiotomy needs. In addition to the importance of direct communication between midwives and women with relation to the process of delivery could play a role in decreasing Perineal trauma and pain. Moreover, midwives usage of standardized communication (health education) with women during birth could help women to be more involved, cooperative and decisive. This modifying communication strategy of midwives would among other measures help in improving the overall women health outcomes.

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