

Access this article online
Quick Response Code:

Website: <a href="http://www.jehp.net">www.jehp.net</a>
DOI: 10.4103/jehp.jehp_1_19

# Effect of workshop training along with simulation and support of labor practitioners on their attitude and performance in conducting routine episiotomy

Mitra Eftekhari Yazdi, Mostafa Rad<sup>1</sup>, Marzie Torkmannejad Sabzevari<sup>2</sup>

## Abstract:

**INTRODUCTION:** Routine episiotomy is a common procedure to shorten the second stage of labor. The attitude of individuals is an important factor in episiotomy, which is often carried out without an indication. Therefore, this study aimed to determine the effect of education and support of labor practitioners on their attitude and performance in conducting routine episiotomy.

**MATERIALS AND METHODS:** This was a quasi-experimental study. A sample of 66 midwives, physicians, and midwifery faculty members were selected through the convenience sampling method. The data collection instrument was the questionnaire of personnel's attitude toward episiotomy. This questionnaire was completed by the participants before and 3 months after the intervention. A 16-h workshop about the education of natural childbirth for 2 days was performed on the experimental group. Data analysis was performed using paired *t*-test and Pearson's correlation test.

**RESULTS:** The findings showed that mean attitude of the participants toward episiotomy was  $50.5 \pm 1.58$  before the intervention, which changed to  $61.18 \pm 2.5$  after the intervention, demonstrating a significant difference between the attitude of the participants before and after the intervention using paired *t*-test ( $P < 0.001$ ). In terms of the performance of the midwives, participating in the research, there was a significant decrease in the number of deliveries without episiotomy.

**CONCLUSIONS:** According to the results of the study, education and support of midwifery personnel can change the attitude and performance of these individuals in conducting a routine episiotomy, thereby reducing the number of child deliveries without episiotomy.

## Keywords:

Attitude, episiotomy, support, training, work performances

## Introduction

Episiotomy is a surgical incision of the perineum and the posterior vaginal wall to shorten the second stage of labor and facilitate childbirth. One of the goals for the application of episiotomy was improving maternal and neonatal outcomes.<sup>[1]</sup> This small surgical incision was quickly recognized and used as a substitute for irregular perineal

tears in primiparous births. The general belief was that episiotomy repair would be simpler, better, and faster.<sup>[2]</sup> Meanwhile, Sooklim *et al.*, quoted by Larson, stated that pain and healing of episiotomy were not significantly different from that of spontaneous rupture, and several studies showed that episiotomy does not protect the perineum but increases deep perineal pain and damage.<sup>[3]</sup> Nonetheless, this process became a routine act for midwives,

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: [reprints@medknow.com](mailto:reprints@medknow.com)

**How to cite this article:** Eftekhari Yazdi M, Rad M, Torkmannejad Sabzevari M. Effect of workshop training along with simulation and support of labor practitioners on their attitude and performance in conducting routine episiotomy. *J Edu Health Promot* 2019;8:121.

Department of Obstetrics and Gynecology, Faculty of Medicine, Sabzevar University of Medical Sciences, <sup>1</sup>Iranian Research Center on Healthy Aging, Department of Nursing, Nursing School, Sabzevar University of Medical Sciences, <sup>2</sup>Department of Midwifery, Mobini Hospital, Sabzevar University of Medical Sciences, Sabzevar, Iran

## Address for correspondence:

Mrs. Marzie Torkmannejad Sabzevari, Department of Midwifery, Mobini Hospital, Sabzevar University of Medical Sciences, Sabzevar, Iran. E-mail: [mts1489@yahoo.com](mailto:mts1489@yahoo.com)

Received: 06-01-2019

Accepted: 07-03-2019

physicians, and students after many years of application. In fact, the mean use of episiotomy was reported to be 41.5% in various countries of Asia, which is a statistic significantly higher than the standard set by the World Health Organization. It seems that an unwritten contract resulting from fear of more complications and the atmosphere prevailing on maternity blocks has led to excessive use of episiotomy.<sup>[4,5]</sup> In the current era, the rate of episiotomy in primiparous women of Australia and The Netherlands was 17% and 8%, respectively.

Obviously, the attitude of people toward episiotomy is the most important factor affecting their performance, which determines whether they perform this procedure or not.<sup>[6]</sup> Despite numerous articles on the use of selective episiotomy against routine episiotomy, this approach is still considered the most common gynecological surgery. In a research entitled "the view of delivery by practitioners in routine episiotomy: a qualitative study," Kaviani *et al.* reported the main reasons for using episiotomy by midwives to be fear and concern with maternal and fetal damages and clients' complaints from personnel. Moreover, most midwives consider episiotomy to be a safe approach for reducing complications.<sup>[7]</sup>

According to Trinh *et al.*, lack of proper education on child delivery without episiotomy was the main cause of excessive use of this procedure.<sup>[8]</sup> In addition, Wu *et al.* (2013) conducted a research to determine the factors involved in decision-making of midwives for using episiotomy, indicating that lack of education and fear of maternal and neonatal damage and distress of being blamed by the health-care system were the main causes of using episiotomy in the second stage of labor. This highlighted the importance of attitude and inadequate education in decision-making for performing episiotomy.<sup>[9]</sup> Education with a workshop approach is defined as practical training in a simulated situation, recognized as an active teaching method. This approach provides a good opportunity for reflection on issues. Moreover, this teaching method and working in small groups can provide an opportunity to express experiences and clarify matters and change attitudes.<sup>[10]</sup> On the other hand, midwives encounter unpredictable events in their work environments, the stress of which affects their decision-making power. Therefore, the supportive role of physicians alongside the staff can facilitate professional performance and decision-making power in specific cases. In this respect, Tagharrobi *et al.* conducted a research in Iran, concluding that the support and alignment of specialists working in the clinical departments have helped the personnel more easily revise their professional performance.<sup>[11]</sup> It has been reported that being primiparous, high delivery age, high birth weight, and midwife's high work experience

are correlated with performing an episiotomy. Many midwives do not meet the international clinical guidelines for episiotomy. It has been recommended that clinical protocols and training programs are required to change the process of episiotomy.<sup>[9]</sup> While most midwives believe that lithotomy position can reduce episiotomy, mothers have no such belief.<sup>[12]</sup> Studies have shown that the causes of many episiotomies in mothers are not evidence based. Age of work experience and educational levels have been the main causes of episiotomy.<sup>[13]</sup> According to a study, Iranian midwives use episiotomy incision most frequently (88%).<sup>[7]</sup> Therefore, considering to importance of avoiding unnecessary interventions and reducing the pain and suffering of mothers during and after delivery, changing the attitude of staff in delivery units toward minimizing use of episiotomy is essential. Until then, changing attitudes lead to performance modification. To change the attitude, active teaching methods can be used, including an educational workshop. It seems that the mixing of several active teaching methods such as educational workshop, simulation, and support of personnel may be more effective in changing attitude and performance. Despite the different statistics and the high rate of episiotomy in mothers and the study of complications and various treatments for episiotomy in Iran, no study was found to evaluate the effect of workshop approach on the midwives' attitude about episiotomy. Therefore, this study aimed to determine the effect of workshop training along with simulation and support of labor practitioners on their attitude and performance in conducting routine episiotomy.

## Materials and Methods

This quasi-experimental research had one group and a pretest–posttest design. The research was conducted in Shahid Mobini Educational Hospital of Sabzevar, Iran, in 2017. In total, 50 midwives, 10 gynecologists, and 6 midwifery faculty members work in this hospital. Research population included all midwives, instructors, and physicians of Shahid Mobini Hospital and selected via census sampling with the exception of 10 individuals who were in the work shift. Four participants were eliminated from the study because of lack of participation in educational plan >1 h.

Data collection tools included the demographic characteristic questionnaire and the researcher-made questionnaire on the attitude of the personnel toward the application of episiotomy. The questionnaire composed of an 18-item set in four sections to assess the attitude of the clinical personnel and faculty members toward the use of episiotomy in labor. The first section included four items related to individual factors of the labor practitioners, eight items on attitude of labor practitioners toward maternal and neonatal outcomes related to delivery

without episiotomy, three items on factors related to the organization, and three factors on factors related to the parturient. All of these items are scored based on a six-point Likert scale (from completely disagree = 1 to completely agree = 6). Therefore, the minimum and maximum scores obtained in this questionnaire are 18 and 108, respectively, where lower scores are indicative of weaker attitude, and higher scores show a high attitude. The score range of the questionnaire is as follows: 18–49 (weak attitude), 50–79 (moderate attitude), and 80–108 (high attitude). Content validity was applied to determine the validity of the tool by providing the questionnaire for four gynecologists and three midwifery graduates (faculty members). After making the necessary revisions, the questionnaire was distributed among 15 participants, who were asked to determine the ambiguities. In the next stage, the questionnaire was re-examined by the same four gynecologists and three midwifery graduates to evaluate the reforms identified by the participants. In addition, the reliability of the scale was estimated at the Cronbach's alpha of 0.85 after providing the questionnaire of attitude toward episiotomy to 15 midwives.

On the other hand, the demographic characteristic questionnaire contained five items of age, work experience, level of education, workplace, and a history of unpleasant experience in normal natural childbirth without episiotomy (3<sup>rd</sup> or 4<sup>th</sup> perineal-degree tears). The research was carried in two stages after receiving approval from the ethics committee (code: IRMEDSAB.REC.1397.105). In the first stage, all 66 midwives, physicians, and midwifery instructors were invited to participate in the research as labor practitioners. First, the researcher explained the objectives of the study to the participants and received a written informed consent. Afterward, the research tools were completed by the participants, followed by holding a 16-h workshop on the education of natural childbirth for 2 days by one of the gynecologists (faculty member) and two faculty members in the department of midwifery.

In the 1<sup>st</sup> day of the workshop, the midwives were divided into small groups (six to seven members), and one gynecologist and one midwifery faculty member were allocated to each group. During the workshop, the experiences regarding delivery with no episiotomy and relevant advantages and disadvantages were uncovered. Following that, representatives of groups expressed a summary of opinions. The workshop was controlled by a gynecologist, who was also the instructor of the class. Teaching was carried out in the form of a lecture and a question and answer session on application of episiotomy, advantages and disadvantages of labor without episiotomy, differences between routine and selective episiotomy, and the latest statistics, findings,

and approaches in the world. In the 2<sup>nd</sup> day of the workshop, the skill of natural childbirth was taught in clinical skills center using mannequins. In addition, special cases that require episiotomy and the proper time of performing this process were taught.

In the end, all participants practiced the skill of labor without episiotomy in a simulated situation and with the guidance of an instructor. At the end of the workshop, head of the maternity unit pointed out the supportive role of physicians in the use of episiotomy, expressing her support of childbirth without episiotomy in primiparous women. It is worth noting that the workshop was held in the conference hall of Shahid Mobini Hospital and clinical skills center of the mentioned hospital for 2 days during 8:00–16:00. These locations and times were specifically selected so that all participants could attend the sessions. After the educational-justification program (workshop and simulation in clinical skills center), the questionnaire of attitude toward labor without episiotomy was completed by midwives, gynecologists, and midwifery instructors 3 months later. The frequency of delivery and the labor procedure were evaluated five times, and the results were reported in order to assess the performance of physicians and midwives to determine the effectiveness of the intervention at 3-month intervals.

Data analysis was performed in SPSS version 21 (developed by IBM cooperation, Armonk, NY, United States of America) using paired *t*-test and Pearson's correlation test to compare the mean scores before and after the intervention and assess the association between the scores and demographic characteristics. In addition,  $P = 0.05$  was considered statistically significant.

## Results

In this study, the majority of the participants were midwives ( $n=40, 76.9\%$ ), whereas eight participants (15.4%) were midwifery graduates (instructors) and four individuals (7.7%) were gynecologists. In addition, the age range of the participants was 22–52 years with a mean age of  $30.85 \pm 6.8$  years. Moreover, the mean work experience of the participants was  $5.98 \pm 0.86$ , and the highest work experience was 1–3 years, which reported for 28 participants (53.9%). In terms of the level of education, most of the participants had a BSc ( $n = 38, 73.1\%$ ). Furthermore, the majority of the participants were working in the maternity ward ( $n = 38, 73.1\%$ ). In total, 42 participants (80.8%) did not have an unpleasant experience.

Mean attitude of the participants toward episiotomy was  $50.5 \pm 1.58$  before the intervention, which changed to  $61.18 \pm 2.5$ , showing a significant difference between

the attitude before and after the intervention using paired *t*-test ( $P < 0.001$ ). In addition, there was a significant difference in the dimensions of attitude (i.e., maternal and fetal aspects and labor practitioners) before and after the intervention, in a way that mean attitude toward episiotomy changed from  $24.31 \pm 0.84$  to  $29.35 \pm 1.43$  in the maternal aspect ( $P < 0.002$ ), from  $6.22 \pm 0.26$  to  $7.1 \pm 0.27$  in the fetal aspect ( $P < 0.003$ ), and from  $20.1 \pm 0.67$  to  $24.7 \pm 1.36$  in the dimension of labor practitioners ( $P < 0.001$ ) [Table 1].

Pearson's correlation test showed no significant relationship between the attitude toward episiotomy before and after intervention with the variables of ages, work experience, level of education, workplace, and unpleasant experience ( $P > 0.5$ ). The research was conducted in April 2017, and the ratio of episiotomy to the total childbirths in the mentioned month was 169–525 (32.19%), which gradually decreased in the following months, in a way that by following up the performance of the personnel in the first 3 months of 2018, the ratio of episiotomy to total childbirths reduced to 18.08% [Table 2].

## Discussion

In the present study, education with workshop approach was able to change the attitude of midwives toward episiotomy in childbirths, in a way that the attitude of midwives toward this process improved in three aspects of maternal and fetal damages and labor practitioners. There was a significant decrease in the mean episiotomy performed by the personnel 1 year after workshops. Baghdari *et al.* conducted a research to compare the effect of student-centered educational

approaches on knowledge and attitude of midwifery students toward delivery of bad news to patients, reporting a significant difference in the score of the attitude of students after education with role-playing in the form of workshops.<sup>[6]</sup> Moreover, the performance score of individuals improved after the education of breaking bad news with a workshop approach.<sup>[14]</sup> Despite different study populations, our findings are in line with the results obtained in the aforementioned study. This demonstrated that workshop training as one of the active student-centered educational approaches, which emphasizes education in simulated environments and student–instructor interaction, could provide the opportunity to practice and repeat and use the experiences of others by students.

In the current research, it was shown that training by workshop method changed the attitude and performance of the personnel of the maternity block toward episiotomy and significantly reduced the number of episiotomies performed. Similarly, Modarres *et al.* compared the effect of two methods of the workshop and an educational booklet on the interpersonal communications of individuals, observing an increase in this factor after 2 months of education by the mentioned techniques. However, the score of interpersonal communications was higher in the workshop group 3 days after education, compared to the educational booklet.<sup>[15]</sup>

Moreover, Borhani *et al.* conducted an experimental study with a 2-day workshop approach and a 2-month follow-up, marking an increase in the ethical sensitivity of nurses after the educational workshop.<sup>[16]</sup> In another study by Zangiabadizade *et al.*, two active educational methods (multimedia education and role-playing) were compared. According to their results, both educational approaches increased the knowledge and attitude of midwifery students toward natural childbirth, causing an improvement in their knowledge and attitude immediately and 6 weeks after education.<sup>[17]</sup> Similar results were obtained by Abedian *et al.*, who observed that education via role-playing more enhanced the knowledge and attitude of primiparous women toward the type of delivery, compared to the educational method of lectures.<sup>[18]</sup> This shows that holding workshop affects ethical learning, which is a type of shift of attitude.

**Table 1: Comparison of mean and standard deviation of score of attitude of midwives, physicians, and faculty members working in maternity block before and after intervention**

	Score of attitude		<i>t</i>	df	<i>P</i>
	Before	After			
Total aspects	1.58±50.5	2.5±61.18	-4.55	49	<0.001
Maternal aspect	24.31±6.03	29.35±10.23	-3.31	50	0.002
Fetal aspect	6.22±1.91	7.1±1.92	-3.08	49	0.003
Labor practitioners' aspect	20.1±4.83	24.76±9.77	-3.9	50	<0.001

**Table 2: Comparison of the ratio of episiotomy to the total number of natural childbirths in Shahid Mobini Hospital of Sabzevar in 2017 and the first 3 months of 2018**

	First 3 months of 2018			Second 3 months of 2017	Third 3 months of 2017	Fourth 3 months of 2017	First 3 months of 2018
	April	May	June				
Number of episiotomies per month	169	120	109	347	273	265	236
Total number of natural childbirths in month	525	447	480	1479	1331	1188	1305
Ratio of episiotomy to total number of childbirths in month (%)	32.19	26.8	22.7	23.46	20.5	22.3	18.08



Therefore, it could be concluded that educational workshop can change the attitude of individuals toward a specific issue (e.g., episiotomy).

According to the results of the present study, the performance of midwives improved regarding the decrease of episiotomy. In this regard, results obtained by Hamann *et al.* indicated that educational workshop could be a practical guide on intellectual health in the clinical environment.<sup>[19]</sup> It could be observed that educational workshops are one of the common methods used for transfer of information and skills. One of the important issues in learning through workshops is the reflection of learners on new topics for deep learning that occurs in small groups.<sup>[10]</sup>

In a review study, Cooper *et al.* (2012) evaluated 22 articles on the education of midwifery, concluding that specialized training in the field of midwifery knowledge and skills through comprehensive and simulated education can strengthen the critical thinking of midwives by enhancing their ability in clinical decision-makings. This research demonstrated that simulated educations could improve the attitude and performance of midwives in the management of emergency cases, such as controlling bleeding after delivery, carrying out delivery, and managing labor dystocia.<sup>[14]</sup> In educations related to midwifery after rejecting the indication of performing an episiotomy, the final decision for using or lack of using this process has always been made by the labor practitioners. The level of episiotomy significantly decreased in the current research by increasing the knowledge of participants and teaching accurate techniques through workshops and simulation.

One of the major limitations of the present study was lack of a control group and evaluation of the performance of learners in the form of a general statistic in their workplace, which focuses on just one specialty. In this regard, the statistics of performing episiotomy were evaluated using hospital indicators, and the performance of individuals was not assessed individually.

## Conclusions

In general, the supportive educational course on childbirth without episiotomy changed the attitude of the participants and led to the change of their performance. This can reduce the complications associated with episiotomy, which was performed in many cases with no indication. It is suggested that special attention should be paid to staff education with active method. In addition, it is recommended that hospital officials investigate unnecessary interventions such as episiotomy, and if it is high, they will conduct workshops in combination

with simulation and support to minimize this problem. In this study, one of the constraints was the lack of a control group to compare the results. Therefore, it is recommended that future studies be designed in two groups, in order to confirm the effectiveness of manipulation by the recent study.

## Acknowledgments

This article was approved by the vice-chancellor in research and technology, Sabzevar University of Medical Sciences (code of ethics: IRMEDSAB. REC.1397.105). Hereby, we extend our gratitude to the authorities of the vice-chancellor in research and technology for financial support of the article. In addition, we would like to thank the staff of the Sabzevar Clinical Research Development Unit and all participants for assisting us in performing the research.

## Financial support and sponsorship

Nil.

## Conflicts of interest

There are no conflicts of interest.

## References

1. Mohammadi A, Mohammad-Alizadeh-Charandabi S, Mirghafourvand M, Javadzadeh Y, Fardiazar Z, Effati-Daryani F, *et al.* Effects of cinnamon on perineal pain and healing of episiotomy: A randomized placebo-controlled trial. *J Integr Med* 2014;12:359-66.
2. Wu LC, Lie D, Malhotra R, Allen JC Jr., Tay JS, Tan TC, *et al.* What factors influence midwives' decision to perform or avoid episiotomies? A focus group study. *Midwifery* 2013;29:943-9.
3. Sooklim R, Thinkhamrop J, Lumbiganon P, Prasertcharoensuk W, Pattamadilok J, Seekorn K, *et al.* The outcomes of midline versus medio-lateral episiotomy. *Reprod Health* 2007;4:10.
4. Rasouli M, Keramat A, Khosravi A, Mohabatpour Z. Prevalence and factors associated with episiotomy in Shahroud city, Northeast of Iran. *Int J Womens Health Reprod Sci* 2016;4:125-9.
5. Hussein SA, Dahlen HG, Duff M, Schmied V. The barriers and facilitators to evidence-based episiotomy practice in Jordan. *Women Birth* 2016;29:321-9.
6. Baghdari N, Torkmannejad Sabzevari M, Karimi Moonaghi H, Rad M, Amiri M. The effect of educational approaches on knowledge and attitude of midwifery students in breaking bad news to patients. *J Med Educ Dev* 2016;9:12-20.
7. Kaviani M, Sepasi S, Azima S, Emamghoreishi M, Asadi N, Haghpanah S. The effects of olive leaf extract ointment on pain intensity and early maternal complications in primiparous women. *Int J Pharm Pharm Sci* 2017;9:31-4.
8. Trinh AT, Roberts CL, Ampt AJ. Knowledge, attitude and experience of episiotomy use among obstetricians and midwives in viet nam. *BMC Pregnancy Childbirth* 2015;15:101.
9. Wu LC, Malhotra R, Allen JC Jr., Lie D, Tan TC, Østbye T, *et al.* Risk factors and midwife-reported reasons for episiotomy in women undergoing normal vaginal delivery. *Arch Gynecol Obstet* 2013;288:1249-56.
10. Karimi Monaghi H, Rad M, Bakhshi M. Do the new methods of teaching in medical education have adequate efficacy? A systematic review. *Strides Dev Med Educ* 2013;10:271-80.
11. Tagharrobi Z, Mohammadkhan Kermanshahi S, Mohammadi E.

- The facilitators of using complementary therapies in clinical nursing: A qualitative content analysis. *JRUMS* 2016;15:691-714.
12. Diorgu FC, Steen MP, Keeling JJ, Mason-Whitehead E. Mothers and midwives perceptions of birthing position and perineal trauma: An exploratory study. *Women Birth* 2016;29:518-23.
  13. Ahmed HM. Midwives' clinical reasons for performing episiotomies in the Kurdistan region: Are they evidence-based? *Sultan Qaboos Univ Med J* 2014;14:e369-74.
  14. Cooper S, Cant R, Porter J, Bogossian F, McKenna L, Brady S, *et al.* Simulation based learning in midwifery education: A systematic review. *Women Birth* 2012;25:64-78.
  15. Modarres M, Mohseni H, Shiran-Noogi P. The comparison of the effectiveness of problem solving skill education with two methods of workshop and educational booklet on interpersonal communication of midwives. *Res Med Educ* 2017;9:19-28.
  16. Borhani F, Abbaszadeh A, Sabzevari S, Dehestani M. Effect of workshop education and follow up on ethical sensitiveness of nurses. *Q J Med Ethics* 2012;6:11-24.
  17. Zangiabadizade M, Saeediyan M, Shahinfar S. Comparing The effects of role-playing and multimedia-based teaching methods on midwifery students' knowledge and attitude towards vaginal delivery. *Iran J Med Educ* 2017;17:60-8.
  18. Abedian Z, Navaee M, Jaafari Sani H, Arani A, Ebrahimzadeh S. Comparing the effect of two teaching methods, role playing and lecture on primigravida women's knowledge, attitude and performance according to delivery mode. *Iran J Obstet Gynecol Infertil* 2012;15:26-34.
  19. Hamann J, Mendel R, Reichhart T, Rummel-Kluge C, Kissling W. A "mental-health-at-the-workplace" educational workshop reduces managers' stigma toward depression. *J Nerv Ment Dis* 2016;204:61-3.