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PERINEAL MASSAGE: PREVENTING PERINEAL EPISIOTOMY AND PERINEAL LACERATION DURING CHILDBIRTH

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ABSTRACT

Backgrounds: Approximately 4-5% of maternal deaths in Indonesia is caused by trauma in the birth canal, of which perineal laceration and episiotomy are the most common occurrence. Generally, as much as 80-90% of episiotomies are performed on first-time mothers (primipara). Episiotomy can be prevented by perineal massage from 34 weeks gestation.

Aims: To reveal a picture of episiotomy implementation in primiparous mothers who received perineal massage at BPM (Independent Clinic of Midwifery) Istiqomah in Sidotopo, Surabaya .

Methods: This research used descriptive method. The population were primiparous mothers who received perineal massage. The sample of 20 mothers were chosen by consecutive sampling technique. This research used perineal massage as the independent variable and episiotomy and perineal laceration as the dependent variables, and was measured using the observation sheet during childbirth. The data was then processed by using a frequency distribution table.

Results: The results showed that out of 20 respondents who received perineal massage, only four had done an episiotomy during childbirth. Each of these four women had complicated condition - three of whom had fetal distress and one had an exhausted childbirth process.

Conclusion: The main benefit of performing perineal massage during episiotomy procedure is to relax the muscles surrounding the perineum and make them more elastic.

Keywords: Episiotomy, laceration, perineal massage, primipara.

INTRODUCTION

Since it was first documented in 1741, the practice of episiotomy has increased substantially worldwide during the 20th century[1]. The practice of episiotomy is done as a routine measure because it is believed to help smooth the childbirth process. It means, in every birth it is always done especially in primigravida but sometimes episiotomy will be done on the next childbirth, depending on the situation [2]. In fact, this belief should be invalidated by the findings that indicate the routine episiotomy is often cause various problems, sometimes even impact to the quality of life patients[3]. There is no credible evidence that the routine use of episiotomy has a beneficial effect, but there is clear evidence that it is harmful, so performing episiotomy should be based on the right clinical judgment. A good reason for doing an episiotomy during normal childbirth are signs of fetal distress, slow progress of childbirth, and threat of a third-degree tear (including three degrees at the previous childbirth)[4]. It is advisable to perform an episiotomy in primigravida or in women with a rigid perineum[5]. An episiotomy can cause bleeding, so it should not be done too early[6].

But until now, routine episiotomy is often done by birth attendants with consideration that tear as a result of episiotomy tend to be smaller and neater than a tear that occurs naturally [1]. In addition, the episiotomy wound heal faster, although some researches have shown that an episiotomy wound healing cause discomfort and extensive damage than it occurs naturally. In some women, episiotomy can also cause pain during sexual intercourse, even happens for months after childbirth. Episiotomy effect may also increase the pain at the first, second, and sixth week postpartum, and urinary incontinence at the third months postpartum[1].

According to the World Health Organization's 1998 report, in Latin America 70% episiotomy was done on childbirth, and 80-90% of them are primiparas[7, 8], whereas the General Hospital in Yogyakarta, Indonesia in 2004 recorded 208 cases of childbirth with perineal laceration injuries due to episiotomy, which is about 65.61% of the number of vaginal childbirth primiparous mother. Of the 30 primiparas (a woman who is giving birth for the first time) who experienced spontaneous perineal tears, as many as 10 mothers and 20 other mothers experiencing tear with episiotomy, whereas in multiparous mothers experienced a spontaneous perineal laceration as many as 18 mothers and 8 mothers experienced perineal tears with episiotomy[9]. Currently, Indonesia is still a country with the highest MMR (Maternal Mortality Rate) in Asia. According to Indonesia Demographic Health Survey in 2012, the MMR in Indonesia 358/100,000 live births. This amount is slightly decreased based on the Inter- Census Population Survey in 2015 to 305/100,000 live births, but the figure is still far from the target of the global MDG (Millennium Development Goals) which is to reduce the MMR to 102/100,000 live births. The common cause of maternal mortality is bleeding (about 28%), in which 4-5% is obtained from the trauma of the birth canal, one of which can be from perineal tears spontaneously or with episiotomy[10, 11].

Perineal massage is an effective approach to increase the chance of birth with an intact [12, 13]. Massaging the perineum can reduce the incidence of perineal tears and episiotomy, especially in primiparous. Other than that, performing perineal massage for more than four times per week for more than three weeks increases the likelihood of perineal intact in primipara. In addition, the mother who gave birth with the perineum remained intact experience lower pain after childbirth and regain her sexual function improved after 3 months postpartum[14].

From the review, perineal massage is an effort to minimize the costs of episiotomy in childbirth. Perineal massage is massage techniques; sequencing and clapping which is done systemically and gently on the perineum that helps to stretch the skin and tissue around the vagina [17]. This method is a way of preparing the perineal tissues for birth. Perineal massage can be done during 34-36 weeks gestation; 3-5 times per week in the first week and every day for two weeks prior to birth [17]. The aforementioned is considered an easy care and very effective in minimizing the risk of episiotomy and spontaneous perineal laceration.

METHODS

This type of research is using qualitative method. This measurement was done after the provision of perineal massage to the group. The independent variable was the massage perineum and the dependent variables were episiotomy and rupture of the perineum. The hypothesis to be proved is the alternative hypothesis (H_a); the influence of perineal massage on episiotomy and rupture of the perineum during childbirth.

The research population was primiparous mothers in their 34-36 gestational weeks in Independent Clinic of Midwifery Istiqomah. The population were observed from pregnancy until childbirth in April-June 2015. Samples was chosen by consecutive sampling technique with the inclusion criteria namely mother primiparous, singleton pregnancies, term, no complications for both mother and fetus, and normal pelvic conditions. The number of samples in this research were 18 primiparous mother.

Data collection using observation sheets, questionnaires and perineal massage guide. Where previously the researchers approached the respondent to obtain further approval researchers assisted midwives working in Independent Clinic of Midwifery Istiqomah provide perineal massage intervention once taught his

technique to the respondent to be able to do it at home on their own 3-4 times per week. After the researchers waited for 2 months or until the mother bear and in the evaluation of the implementation of episiotomy and perineal rupture using observation sheets and assess whether the mother in doing an episiotomy or not when childbirth takes and how many degrees of their rupture perineum.

RESULTS

Overview: Research Area

Independent Clinic of Midwifery Istiqomah is located in a slum at Sidotopo Jaya Gg III A/43, Surabaya. The clinic has one examination room, one childbirth room, one puerperal room with four beds, one bathroom and one waiting room. The number of patients per month on average are 150 with each is seeking variety of services, among others: pregnant women, childbirth, postpartum mothers, newborns, infants ill, immunization, and family planning.

Table 1. Characteristics of Respondents According to Education, Family Income, Employment Age Mothers and Mothers in BPM Istiqomah Surabaya in April-June 2015.

No	Characteristics	Number	Percentage
1.	Level of Education:		
	Elementary (SD)	10	50
	Junior (SMP)	8	40
	High School (SMA)	1	5
	College	0	0
	No School	1	5
2.	Income Families:		
	<1,000,000	0	0
	1000000-2000000	14	70
	>2,000,000	6	30
3.	Occupation:		
	Government Employee	0	0
	Private Employee	2	10
	Merchant	11	55
	Farmer	0	0
	Not Working	7	35
4.	Mother Age:		
	17-25 years	14	70
	26-35 years	6	30
	36-40 years	0	0
	> 40 years	0	0
Total		20	100

Based on the table 1 above, the characteristics with most respondents are: education level is elementary School (SD) with ten mothers (50%), monthly earning is IDR 1,000,000 to 2,000,000 with 14 women (70%), job as a trader with as many as 11 mothers (55%), and primiparous maternal age is 17-25 years with 14 women (70%).

Table 2. Characteristics of Respondents by Pregnancy Age at Independent Clinic of Midwifery Istiqomah Surabaya in April-June 2015.

Characteristics	Number	Percentage
Age Pregnancy:		
34 weeks	5	25
35 weeks	11	55
36 weeks	4	20
Total	20	100

Based on the table 2 above, 11 mothers (55%) of the respondents are in their 35 gestational weeks

Table 3. Characteristics of Respondents Based Measures Independent Clinic of Midwifery Istiqomah Episiotomy in Surabaya in April-June 2015

Implementation of episiotomy	Number	Percentage
Yes	4	20%
No	16	80%
Total	20	100%

Table 4. Characteristics of Respondents by Degree of Episiotomy and Laceration of Perineum at Independent Clinic of Midwifery Istiqomah Surabaya in April-June 2015

Implementation of episiotomy	degree lacerations	Number	Percentage
Yes	1	0	0
	2	4	20%
	3	0	0
	4		0
No	1	8	40%
	2	3	15%
	3	0	0
	4	0	0
Whole	0	5	25%
Total	20	20	100%

Table 3 shows that 16 mothers (80%) are not experiencing an episiotomy during childbirth, while table 4 shows that the five (25%) respondents' perineum remain intact during childbirth and eight mothers (40%) suffered first degree lacerations.

DISCUSSION

From the above data, episiotomy was not performed on 16 (80%) and only 4 (20%) maternal mothers received episiotomy at childbirth. The incidence of perineal tears is reduced because when the mother did the perineal massage, the muscles around the perineum will be more relaxed and the birth canal will be more elastic [18, 19]. In addition, one of the benefits of massage the perineum during pregnancy is the comfort that the mother needed to cope with the labor. When carrying out the perineal massage the mother will experience unpleasant heat, which simulates the same feeling as when the baby's head is passing through the perineum [20].

Feelings of anxiety and fear in the face of childbirth is one of the factors that led to the birth canal laceration[2]. Facing of childbirth with both happiness and pride will provide comfort and smooth delivery while minimizing perineal tears [2, 17, 20]. Based on the undertaken research there was an effect of massaging the perineum in primigravida to the implementation of episiotomy and uterine rupture during childbirth. This is because the massage will stretch the muscles around the perineum and allow smoother blood flow, so that the perineum will become more elastic, and make the mother becomes more relaxed which reduces their anxiety on the labor of labor [21]. Consequently, episiotomy may not need to be performed during childbirth unless there are specific indications [2, 3, 12, 13, 15, 18]. For instance, episiotomy were only performed to ease the labor process on four respondents (20%) because of fetal distress on three mothers and another could not strain the muscle further, based on the table 1.

Mother's inability to strain during childbirth can be attributed to the age factor. From the table 1, 70% or 14 mothers are within the age of 17-25 years old, whereas healthy reproductive age for the mother is normally within her 20-35 years old. The reproductive organs on women aged younger than 20 years old may not yet be fully developed, while at the age of 35 years old and above, women's reproductive organ function is declining. Therefore, the possibility of the occurrence of postpartum complications is greater at both age categories. The person's age may also indicate the level of maturity of their mental and reproductive system, hence it is recommended that women is better start to reproduce at the age of 20-35 [22].

Teenage pregnancy, or pregnancy in women younger than 20 years old, possess greater health risk to both the mother and the offspring. To start with, teenagers may not have yet fully developed physically, and childbirth complications such as rip birth canal may occur. Performing perineal massage on pregnant teenagers to prevent the execution of episiotomy is therefore less effective, whereas mature women's respond to the massage is sounder.

Moreover despite the fact that the mothers' education is largely only elementary school, they are well knowledgeable on how to perform perineum massages. This is because the mothers are educated through media such as a leaflet which contains about the benefits and guidelines of perineum massage. In addition, the mothers were provided olive oil, allowing them to perform the perineal massage regularly both at home or at the clinic.

In terms of occupation, mothers with jobs are also at advantageous in practicing the perineal massage than the ones who do not work, because the social aspect at work facilitates information and experience sharing. Moreover, Snehandu B. Karr theorize that a person's behavior is also determined by the faith in oneself to act, based on the references from someone in his or her trust such as midwives or community leaders [23]. While the majority of respondents work in the morning as a trader, they set aside some time in the afternoon or evening to come to the clinic and continue performing perineal massage.

CONCLUSION

The main benefit of performing perineal massage during episiotomy procedure is to relax the muscles surrounding the perineum and make them more elastic. With these results, health service attendants can design a perineal massage program and counselling in their Ante-Natal Care (ANC) department for primigravida in their 34 weeks of gestation until she gave birth. Research with more samples and true experimental research design is needed to further prove the validity of the findings.

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