

Management of Perineal Massage in Pregnant Women as an Effort to Prevent Perineal Rupture in Vaginal Delivery (Literative Review)

Euvangelia Dwilda Ferdinandus, Gusti Ayu Gita Maharani, Ratna Dwi Jayanti

Midwifery Study Program, Faculty of Medicine Airlangga University, Indonesia

euvangelia.dwilda@fk.unair.ac.id, gusti.ayu.gita-2020@fk.unair.ac.id,

ratna.dwi@fk.unair.ac.id

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Abstract

When approaching the time of delivery in the third trimester of pregnancy, pregnant women experience anxiety about the stigma that childbirth will hurt and injure the perineum, prevention of perineal rupture can be done by perineal massage. The method used in this research is to use a literature review study This discussion aims to collect and analyze articles to identify the effectiveness of perineal massage management as an effort to prevent rupture. Results In this discussion it was found that perineal massage has significant results in reducing the occurrence of perineal rupture. Perineal massage is also beneficial in reducing the rate of episiotomy as well as providing other benefits to the mother and the newborn. However, these studies have drawbacks, namely, this perineal massage does not yet have global clinical guidelines on the standard of implementing perineal massage, in some studies the sample experienced dropout in research and differences in research results that affect perineal massage on the prevention of perineal rupture. further research is needed regarding the standard of perineal massage and the support of husbands and midwives in education and implementation of perineal massage.

Keywords : *perineal massage; Pregnant mother; Perineal Rupture;*

Introduction

The number of maternal deaths in Indonesia in 2020 showed 4,627 deaths in Indonesia. This number has increased by 9.6% compared to the previous year, which was 4,221 deaths. Based on the causes, most of the maternal deaths were caused by bleeding as many as 1,330 cases, hypertension in pregnancy as many as 1,110 cases, and disorders of the circulatory system as many as 230 cases (Ministry of Health, 2021).

Bleeding as a cause of maternal death can occur during pregnancy, during delivery and even after childbirth. Postpartum hemorrhage or better known as post-partum hemorrhage (HPP) is a cause of maternal death with an incidence of 1%-6% of all deliveries (Wormer et al., 2022). Tear of the birth canal including perineal rupture is one of the main causes of bleeding experienced by 85% of maternity mothers.

When approaching the time of delivery in the third trimester of pregnancy, pregnant women experience anxiety about the stigma that giving birth will be painful and injure the perineum (Sri Mulati, 2016). Injury to the birth canal that can occur during the birth of a baby with or without the use of a device is called a perineal rupture. There are several factors that cause perineal rupture. Factors in the mother, namely, parity, birth spacing, improper pushing method, and mother's age. While the factors in the fetus, namely, the weight of the newborn and presentation. Factors in a vaginal delivery are vacuum extraction, instrument trauma, and episiotomy. As well as factors that support childbirth, namely the leadership of labor that is not appropriate. (Fatimah and Lestari, 2018) In addition, perineal rupture also has an impact on increasing the degree of perineal laceration, increasing pain in the first days of the postpartum period and increasing the incidence of infection and bleeding that results in maternal death. (Choirunissa and Han, 2019)

Prevention of perineal rupture can be done by perineal massage. This perineal massage can increase blood flow, elasticity, and relaxation of the pelvic floor muscles which can be done at gestational age >34 weeks or 1-6 weeks before delivery. This massage is useful in preparing the mother's mentality during an internal examination and preparing the perineal tissue for the birth process, especially when the baby's head is crowning so that the perineum is more relaxed. (Siti Nuryawati and Yuwansyah, 2019) but what is often asked is the effectiveness of perineal massage in reducing the risk of bleeding due to perineal rupture. In addition, there are other treatments in the management of perineal massage that are applied other than in Indonesia. Based on this background, the authors are interested in discussing the management of perineal massage in pregnant women as an effort to prevent perineal rupture in vaginal delivery.

Method

Method type the research method used is literature study or literature review. Literature review comprehensive overview related to research that has been carried out on certain scientific-based topics. This article was written using various sources from scientific journals and medical e-books. Source searches are carried out on the online of

journal publications such as pdf drive (<https://www.pdfdrive.com/>), National Centre for Biotechnology Information/NCBI (<https://www.ncbi.nlm.nih.gov/>).

Research and Discussion

Perineal massage will help soften the perineal tissue so that the tissue will open up and make it easier to expel the baby. During pregnancy, this technique is safe and not dangerous in its application in protecting the function of the perineum (Nisa, 2020) Mothers can start massage in the perineal area by providing lubricant on the fingers, placing the thumb on the perineum, pressing gently and slowly the perineum towards the rectum (anus).), to the side and do this well and regularly. (Savitri and Yusefni, 2014) Perineal massage is performed more effectively in primigravida women and less optimal in multigravidas who have had the previous episiotomy because scarring of the perineum causes the tissue to become weaker and tends to tear in the next delivery. (Mutmainah et al., 2019)

The research of Shahoei et al. (2016) at Besat Sanandaj Hospital, Iran with a Randomized Control Trial, explained that perineal massage can contribute significantly ($p < 0.05$) to reducing the occurrence of perineal rupture and episiotomy. This study was conducted by dividing the sample by the number and characteristics that did not have significant differences in the control and intervention groups. Another result obtained after the study was that perineal massage can reduce perineal pain after childbirth. However, despite the evidence regarding this outcome, perineal massage during pregnancy is still not recommended by any clinical guidelines. Perineal massage is believed to be a safe and acceptable procedure for pregnant women. Thus, it is only recommended to women who are interested in using this method to reduce perineal trauma and pain after childbirth.

Another study by (Ugwu et al., 2018) using the RCT (Randomize Control Trial) method which evaluated the effectiveness of perineal massage in pregnant women in reducing perineal trauma and postpartum morbidity, stated that perineal massage can prevent birth trauma and reduce the incidence of birth trauma. episiotomy in nulliparous women. The significant reduction in episiotomy can reduce maternal pain and increase the mother's bounding attachment to her baby. this technique can also reduce the occurrence of flatus incontinence after delivery. This significant observation could occur because in the control group there was an increased incidence of intact perineum and reduced side effects on nerve endings. An episiotomy extending to the sphincter may predispose to fecal incontinence or flatus. However, this study has limitations, namely using a blind procedure, where the application of the depth level of the finger that enters and performs vaginal massage is not monitored according to standards, this procedure also cannot be carried out by one person which will affect the success rate of massage, consistency and compliance. against perineal massage may also not be as directed. This study also experienced a reduction in the sample due to the refusal of the husband by pregnant women who volunteered to be the sample, and deliveries were carried out elsewhere.

The results of a systematic review and meta-analysis with regard to quality in the RCT by Abdelhakim et al. (2020), explained that perineal massage can significantly reduce the occurrence of perineal rupture, especially at the third and fourth degrees. This technique also has an effect on decreasing the occurrence of episiotomy, perineal pain, and duration of labor, increasing the APGAR score due to less duration of labor and perineal trauma, and better wound healing. Some of the main obstacles experienced in the implementation of perineal massage, namely, lack of information and advice on this technique, women's resistance to touching themselves, difficult independent implementation due to a large stomach, use of oil during massage, and feeling of tiredness or cramps in the fingers during implementation. perineal massage. This study also has some limitations, namely that most of the studies were not blinded, which led to the heterogeneity of the reported results, differences in inclusion criteria, and divergence between outcome definitions between studies.

The results of research conducted by Purnami and Noviyanti (2019) that perineal massage has not been proven to significantly reduce the possibility of perineal trauma (including episiotomy), but can be proposed as a method to prevent perineal trauma. The disadvantages of this study are that it has several bias factors that cannot be controlled due to the limited number of samples and there are several factors that affect perineal lacerations.

Conclusion

Based on the results of this literature, it is concluded that perineal massage has significant results in reducing the occurrence of perineal rupture. Perineal massage is also useful in reducing the level of episiotomy which in case of expansion of the birth canal will result in trauma to the nerve endings that cause fecal incontinence, reducing the level of pain during the puerperium, increase the APGAR score and shortening the duration of labor. In some studies, it is also stated that this research is safe and harmless and does not cause side effects. However, these studies have drawbacks, namely, this perineal massage does not yet have global clinical guidelines on standards for the implementation of perineal massage, in some studies the sample experienced dropout in the study due to several factors such as not being supported by the husband in the mother who volunteered to be the sample. and deliveries performed elsewhere. In addition, research with a blind procedure on the implementation of perineal massage by pregnant women is not monitored directly so it is difficult to determine the standardization of the implementation of perineal massage, lack of information and advice regarding perineal massage in pregnant women, an independent implementation which is constrained by a large stomach and differences in research results that affect perineal massage on the prevention of perineal rupture. So that further research is needed regarding the standard of perineal massage and support from husbands and midwives in the education and implementation of perineal massage.

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