The Implementation of Vulva Hygiene Treatment in Postpartum Women to Prevention of Rupture Perineum Infection

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Abstract

Perineal rupture or tear of the birth canal is usually experienced by postpartum mothers or mothers in labor. Either because of the episiotomy or naturally due to the pressure of the fetal head. Perineal rupture affects women’s physical. The impact of perineal rupture in women who are not properly treated is infection perineum. As the treatment efforts that can be done to prevent infection, namely by performing vulva hygiene care. The research explores quantitative evidence published in an electronic database, Google Scholar. Studies have shown that proper care of vulva hygiene can be 10 times greater in preventing infection in perineal rupture. The results showed that vulva hygiene treatment was able to prevent infection in perineal rupture.

Introduction

Every mother who gives birth (postpartum) will usually experience perineal rupture (tear of the birth canal) either due to episiotomy or naturally due to the pressure of the fetal head, especially primiparous mothers who have never experienced labor before this is because the muscles in the perineum are still stiff (Widia, 2017).

Perineal rupture affects women’s physical, psychological, and social well-being in the postnatal period and may also have long-term impacts (Fraser & Cullen, 2003). It can also interfere with breastfeeding, family life, and sexual relationships.

According to the World Health Organization (WHO) 2016, there were 2.7 million cases of perineal rupture in postpartum mothers, and 26% of them experienced slow healing more than 7 days after delivery. This figure is estimated to reach 6.3 million in 2050. In the UK, each year there are 20,000 women who give birth who experience perineal rupture, 15% of whom experience slow wound healing, and 6% of them experience infection due to lack of vulvar hygiene during the healing process.

In Asia, the problem of perineal rupture is quite a lot in society, 50% of the incidence of perineal rupture in the world occurs in Asia (Leon-Larios et al., 2017). The results of the Indonesian Health Demographic Survey (IDHS) stated that in 2012 cases of perineal rupture were targeted, namely 106 cases and an increase of 11 cases from the previous year. The prevalence of maternal who experience perineal rupture in Indonesia in the age group 25-30 years is 24% and in mothers aged 32-39 years is 62% (Bascom, 2011).
Data obtained in Makassar City, in 2016 the number of mothers gave birth as many as 381 people, as many as more than 186 people experienced perineal rupture. Data in 2017 from January to December 14, the number of mothers gave birth as many as 376 people, as many as 204 people experienced perineal rupture.

The impact of perineal rupture on mothers who do not receive proper care is an infection in the suture wounds and can spread to the bladder tract and infection in the birth canal so that it can result in complications of bladder infections and birth canal infections (Desideria, 2019).

According to Herawati (2010), due to improper treatment can result in perineal conditions affected by lokhea and humidity will greatly support the proliferation of bacteria which can cause infection in the perineum.

To avoid infection of perineal rupture, vulva care is needed, which is called vulva hygiene. Siswono (2001) adds that the benefits of vulva hygiene are to keep the vagina and the surrounding area clean and comfortable, to prevent the appearance of vaginal discharge, unpleasant odors and itching and to keep vaginal pH normal (Timbawa, 2015). This study explores the quantitative evidence published in the Google Scholar and Pudmed electronic databases based on the problems raised in this article.

**Methods**

A literature review was carried out through searching the results of scientific publications in the 2016-2020 period using the Pudmed database and the Google Scholar database. In the Pudmed database using keyword 1. "Perineal rupture" found 3292 articles. Keyword 2. "Vulva hygiene" found 1279 articles. In keyword 3. "Infection prevention" found 501011 articles. Keyword 4. "Post Partum" found 69401 articles. Keyword 5 is carried out by combining keywords 1, 2, and 3, namely "Vulva Hygiene AND Infection Prevention AND Perineal Rupture" found 45 articles, after finding 45 articles, then limiting the number of articles LIMIT publication dates (2015-2020) found 0 articles.

While in the google scholar database search by entering keyword 1. "Perineal rupture" found 2,240 articles. Keyword 2 "vulva hygiene" found 1,150 articles. Keyword 3 "infection prevention" found 1,500 articles. Keyword 4 "postpartum" found 4,000 articles. Keyword 5 combines the keywords 1,2,3 and 4, namely "Perineal Rupture of Vulva Hygiene Prevention of Post Partum Infection" found 457 articles, after finding 457 articles, then limiting the number of articles LIMIT publication dates (vulnerable 2015-2020) found 390 articles. After 390 articles were found, then there were restrictions on those with abstracts, and 152 articles were found. After finding 152 articles, then the full-text restriction was carried out and 70 articles were found. Furthermore, 31 articles were found to restrict the articles that were not paid. After finding 31 articles, the restrictions were carried out in accordance with the research objectives, it was found 4 articles that were interesting to study.

**Results and Discussion**

**Postpartum**

Postpartum is a period of healing from the birth of the placenta and fetal membranes (indicating the end of the intrapartum period) to the return of the female reproductive organs in a non-pregnant condition (Taviyanda, 2019).

The delivery process is physically and psychologically tiring. So that the postpartum period can have an impact on the quality of life of the mother. Perineal tear, both natural and episiotomy, can result in impaired pelvic floor muscle function, which can reduce the quality of life of the mother after childbirth. Labor episiotomy is often performed to control tears in
the birth canal so as to facilitate wound healing because it is easier to sew and put back together (Manuaba, 2015).

Perineal Rupture

The perineum is a network that is located distal to the pelvic diaphragm. The perineum contains a number of superficial muscles, during childbirth, these muscles are often damaged when the fetus is born. The perineum is located between the vulva and anus, its average length is 4 cm. Perineal rupture is a tear that occurs in the perineum during delivery. Perineal rupture occurs in nearly all first deliveries and not infrequently with subsequent deliveries. The occurrence of perineal rupture is caused by maternal factors (parity, birth spacing, and baby weight), inappropriate labor leadership, history of labor (Prawitasari, 2015).

Infection Process

Infection in the postpartum period is an infection in the genitalia after childbirth, characterized by an increase in body temperature. Postpartum infection includes all inflammation caused by the presence of non-sterile equipment, perineal rupture, bleeding, and poor hygiene in the perineal area (Siska, 2019).

Vulva Hygiene

Vulva hygiene is cleaning the vulva and the surrounding area in female patients who are in the puerperium or unable to do it alone. Vulva hygiene also aims to prevent infection, for healing of perineal suture wounds and for perineal hygiene (Timbawa, 2015).

The goals of perineal care are to remove perineal secretions, to prevent and alleviate infection, and to provide comfort.

Based on research conducted by Timbawa (2015) with the title The relationship of vulva hygiene with the prevention of perineal wound infection in postpartum mothers at Pancaran Kasih GMIM Manado Hospital, the results showed that the results of statistical analysis using the chi-square test at the level of significance α = 0.05 or the confidence interval ρ< 0.05. The statistical test results obtained the value of ρ = 0.001 < α (0.05), thus it can be said that there is a relationship between vulva hygiene and prevention of perineal wound infection in postpartum mothers at Pancaran Kasih GMIM Manado Hospital. Then obtained OR = 10.667, which means that the role of good vulva hygiene has a 10 times greater chance of preventing infection compared to less vulva hygiene.

Based on research conducted by Harty & Prihatiningsih (2015) entitled The Relationship between Postpartum Vulva Hygiene and Perineal Stitch Wounds Healing at Mergangsan Health Center and Jetis Health Center Yogyakarta City, the results obtained from 24 respondents were divided into 2 categories, namely respondents who had good wound healing, namely 21 people. (87.5%) and the remaining wound healing was not good, namely 3 people (12.5%). Test data using Sperman rho obtained a correlation value of 0.659 with a significant P of 0.000 (P˂0.05). So Ha is accepted and Ho is rejected, so it can be concluded that there is a relationship between postpartum maternal vulva hygiene and the healing of perineal suture wounds at Mergangsan Health Center and Puskesmas Jetis Kota is high. Good Vulva hygiene treatment will affect the speed of healing of the perineal suture wound. The better the care of vulva hygiene, the faster the healing of perineal suture wounds.

Based on research conducted by Wahyuni & Pratama (2019) with the title Study of Vulva Hygiene Knowledge of Perineal Care at Suko Asih Clinic, Sukoharjo, the results obtained by using the Kendal Tau bivariate analysis showed that there was a relationship between postpartum knowledge about vulva hygiene and perineal care behavior. The majority of
mothers with high school education do not perform proper nursing actions due to the lack of information received. The higher the education level of a person, the easier it is to receive information so that they can carry out vulva hygiene care properly and appropriately to get good results and there are no signs of infection.

Based on research conducted by Dyan (2019) with the title Relationship of Vulva Hygiene with Incidence of Perineal Wound Infection in Post-partum Women at the Aminah Amin Clinic, Samarinda showed that the results of research from 27 respondents with good vulva hygiene did not experience infection incidence of 100%. Of the 8 respondents who did not practice proper vulva hygiene, 6 respondents (75%) experienced the incidence of infection. The results of the calculation of the chi-square test obtained a Fisher Exact Test value of 0.000 <α (0.05), so it can be concluded that there is a significant relationship between vulva hygiene and the incidence of perineal wound infection in postpartum mothers at the Aminah Amin Clinic, Samarinda.

**Conclusion**

Based on several research results in this literature review, it can be seen that good vulva hygiene treatment is proven to be effective in preventing infection in perineal rupture than those who do not treat it properly.

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