



Original Research

## The Relationship Between Food Abstinence Behaviour and Perineal Wounds in Postpartum Mothers on Days 3-14

lin Danial<sup>\*1</sup>, Hayun Manudyaning Susilo<sup>2</sup>

1. Paguat Community Health Centre, Pohuwato Regency, Gorontalo Province

2. Universitas Muhammadiyah Ponorogo

\* Corresponding author.

lin Danial

E-mail address:

[iindanial88@gmail.com](mailto:iindanial88@gmail.com)

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### Abstract

*The postpartum period is a critical phase of maternal recovery in which adequate nutrition is essential for preventing complications and promoting perineal wound healing. However, cultural practices involving dietary restrictions are still commonly observed and may negatively affect nutritional intake and healing outcomes. This study aimed to examine the relationship between dietary restriction culture and perineal wound healing among postpartum mothers. A quantitative descriptive-analytical study with a cross-sectional design was conducted involving 32 postpartum mothers within 3–14 days after delivery who experienced perineal lacerations. Samples were selected using simple random sampling. Data were collected using a structured questionnaire to assess dietary restriction practices and the REEDA scale to evaluate perineal wound healing. Descriptive statistics were used for univariate analysis, while the Spearman rank correlation test was applied for bivariate analysis ( $\alpha = 0.05$ ). The results showed that 53.1% of respondents did not practice dietary restrictions, and wound healing outcomes were evenly divided between good and poor categories (50.0% each). Statistical analysis revealed a significant relationship between dietary restriction culture and perineal wound healing ( $p = 0.001$ ), with a very strong negative correlation ( $r = -0.932$ ). In conclusion, dietary restriction practices are strongly associated with poorer perineal wound healing. Adequate and balanced nutrition during the postpartum period is therefore essential to support wound healing and improve maternal health outcomes.*

### 1. Introduction

The postpartum period is a critical phase for the survival of both mothers and newborns. Most maternal and neonatal deaths occur within the first month after delivery. Therefore, comprehensive and intensive health care during the postpartum period is essential to prevent illness and mortality among mothers and newborns (SDKI, 2017). One of the most important aspects of postpartum care is adequate nutritional intake. Proper nutrition during the postpartum period aims to restore maternal health and physical strength, improve the quality and quantity of breast milk, and prevent postpartum infections. Postpartum mothers are encouraged to consume a balanced diet containing carbohydrates, proteins, fats, vitamins, and minerals, all of which play a vital role in the perineal wound healing process. Protein deficiency, in particular, can significantly delay wound healing in postpartum mothers (Komala, 2017).

Customs and traditions are integral components of community behavior that shape social life and daily habits. However, without being fully realized, some cultural practices that have developed

within communities may become barriers to healthy living. One such example is traditional practices related to nutritional intake, especially among postpartum mothers. Optimal health status is closely associated with balanced nutritional intake, both in terms of quantity and quality. In many cases, inadequate nutritional intake arises from limited knowledge as well as deeply rooted beliefs, values, or norms that may conflict with modern health principles (Oktarina, 2012).

The Maternal Mortality Rate (MMR) is a key indicator of the success of maternal health programs. MMR is defined as the ratio of maternal deaths occurring during pregnancy, childbirth, and the postpartum period. The World Health Organization (WHO) reported in 2014 that approximately 800 women die every day due to complications related to pregnancy and childbirth, with about 99% of these deaths occurring in developing countries (WHO, 2014). These data highlight the importance of improving maternal health care, particularly during the postpartum period.

Perineal wounds commonly occur as a result of tearing of the birth canal during delivery or due to perineal incision (episiotomy). According to research by Rohmin et al. (2017), the ideal healing time for perineal wounds is approximately 6–7 days after childbirth. Wound healing is indicated by wound closure without signs of redness, swelling, pain, or tissue separation, allowing the mother to sit and walk comfortably. Proper perineal wound care includes maintaining cleanliness of the area between the vulva and anus, caring for the placental site, and facilitating the return of reproductive organs to their pre-pregnancy condition (Walyani & Purwoastuti, 2015).

Several factors influence the healing process of perineal wounds, including maternal age, cultural practices, personal hygiene, educational level, and nutritional status. Inadequate management of these factors may delay wound healing (Maritalia, 2014). Preventive efforts include educating mothers on proper perineal hygiene, such as cleaning the genital area after urination and defecation to reduce the risk of infection, regularly changing sanitary pads at least twice daily, and consuming nutritionally dense foods such as vegetables, legumes, and protein-rich foods (Walyani & Purwoastuti, 2015).

The healing of perineal wounds in postpartum mothers is strongly influenced by the quality of care received during the postpartum period. Cultural factors play a significant role in shaping attitudes and behaviors related to childbirth, postpartum care, and newborn care. Some cultural practices are perceived as valuable cultural heritage and are deeply ingrained in community beliefs, making behavioral change challenging despite health education efforts by healthcare professionals. Therefore, strong support from families, communities, and health workers is crucial to promote healthy behaviors and accelerate maternal recovery. One essential component of postpartum recovery is the consumption of a balanced and nutritious daily diet consisting of adequate amounts of carbohydrates, proteins, fats, vitamins, and minerals (Arma et al., 2010).

## **2. Research Method**

This study employed a quantitative descriptive–analytical design with a cross-sectional approach and was conducted at Paguat Primary Health Center. The study population consisted of all postpartum mothers receiving postpartum care at the health center. The sample comprised postpartum mothers who experienced perineal pain, with a total of 32 respondents selected using a simple random sampling technique. Inclusion criteria included postpartum mothers within 3–14 days after delivery, mothers who experienced perineal lacerations, and mothers who were willing to participate in the study. Exclusion criteria included mothers who were less than 3 days postpartum or more than 14 days postpartum, mothers without perineal lacerations, and those who declined to participate.

The independent variable in this study was dietary restriction culture, while the dependent variable was perineal wound healing. Data were collected using a structured questionnaire to assess dietary restriction practices and the REEDA (Redness, Edema, Ecchymosis, Discharge, Approximation) observation scale to evaluate perineal wound healing. Univariate analysis was conducted using descriptive statistics, while bivariate analysis was performed using the Spearman rank correlation test, with a significance level set at  $\alpha = 0.05$ .

## **3. Results and Discussion**

### **3.1 Results**

The results of the univariate analysis describing the characteristics of the respondents are presented in Table

**Table 1. Characteristics of Respondents (Univariate Analysis)**

| Variable              | Category                 | Frequency (n) | Percentage (%) |
|-----------------------|--------------------------|---------------|----------------|
| Age (years)           | < 20                     | 2             | 6.3            |
|                       | 20–35                    | 28            | 87.5           |
|                       | > 35                     | 2             | 6.3            |
| Education Level       | Elementary School (SD)   | 7             | 21.9           |
|                       | Junior High School (SMP) | 11            | 34.4           |
|                       | Senior High School (SMA) | 10            | 31.3           |
|                       | Higher Education         | 4             | 12.4           |
| Employment Status     | Unemployed               | 22            | 68.8           |
|                       | Employed                 | 10            | 31.2           |
| MUAC (LILA)           | < 23.5 cm                | 10            | 31.3           |
|                       | ≥ 23.5 cm                | 22            | 68.7           |
| Body Mass Index (BMI) | < 18.5                   | 1             | 3.1            |
|                       | 18.6–24.9                | 15            | 46.9           |
|                       | ≥ 25                     | 16            | 50.0           |
| Number of Children    | 1                        | 10            | 31.3           |
|                       | 2                        | 17            | 53.1           |
|                       | 3                        | 5             | 15.6           |
| Parity                | Primiparous              | 10            | 31.3           |
|                       | Multiparous              | 22            | 68.7           |
| Postpartum Day        | Day 2                    | 5             | 15.6           |
|                       | Day 3                    | 6             | 18.8           |
|                       | Day 4                    | 4             | 12.5           |
|                       | Day 5                    | 7             | 21.9           |
|                       | Day 6                    | 5             | 15.6           |
|                       | Day 7                    | 5             | 15.6           |

Based on age, the majority of respondents were aged 20–35 years, totaling 28 postpartum mothers (87.5%), while respondents aged under 20 years and over 35 years each accounted for 2 postpartum mothers (6.3%). In terms of educational background, nearly half of the respondents had completed junior high school (SMP), with 11 postpartum mothers (34.4%), followed by senior high school (SMA) graduates totaling 10 respondents (31.3%). Regarding employment status, most respondents were unemployed, with 22 postpartum mothers (68.8%).

Based on mid-upper arm circumference (MUAC/LILA), the majority of respondents had a MUAC greater than 23.5 cm, accounting for 22 postpartum mothers (68.7%). In terms of body mass index (BMI), half of the respondents had a BMI greater than 25, totaling 16 postpartum mothers (50.0%), while 15 respondents (46.9%) had a normal BMI (18.6–24.9), and only 1 respondent (3.1%) was underweight.

Regarding the number of children, most respondents had two children, totaling 17 postpartum mothers (53.1%), followed by respondents with one child (31.3%) and three children (15.6%). Based on parity, the majority of respondents were multiparous, with 22 postpartum mothers (68.7%), while 10 respondents (31.3%) were primiparous. With respect to postpartum days, the highest proportion of respondents was on the fifth day postpartum, totaling 7 postpartum mothers (21.9%).

**Table 2. Cross-tabulation of Dietary Restriction Culture and Perineal Wound Healing (Bivariate Analysis)**

| Dietary Restriction Culture | Perineal Wound Healing |             | Total     |             | p-value         | r     |
|-----------------------------|------------------------|-------------|-----------|-------------|-----------------|-------|
|                             | Good                   | %           | Poor      | %           |                 |       |
| Practicing restriction      | 0                      | 0.0         | 15        | 46.9        | 15 (46.9)       | 0.000 |
| Not practicing restriction  | 16                     | 50.0        | 1         | 3.1         | 17 (53.1)       |       |
| <b>Total</b>                | <b>16</b>              | <b>50.0</b> | <b>16</b> | <b>50.0</b> | <b>32 (100)</b> |       |

The results of the cross-tabulation and analysis of the relationship between dietary restriction culture and perineal wound healing among postpartum mothers are presented in Table 2.

Table 2 shows that nearly half of the respondents who practiced dietary restrictions experienced poor perineal wound healing, totaling 15 postpartum mothers (46.9%). In contrast, among respondents who did not practice dietary restrictions, the majority experienced good perineal wound healing, totaling 16 postpartum mothers (50.0%).

The results of the Spearman rank correlation test indicated a p-value of 0.001 ( $< \alpha = 0.05$ ), demonstrating a statistically significant relationship between dietary restriction culture and perineal wound healing among postpartum mothers at PMB Thatama Erny, Krai Village, Yosowilangun. The correlation coefficient value was  $r = -0.932$ , indicating a very strong negative correlation. This negative correlation suggests that the practice of dietary restrictions is inversely associated with perineal wound healing, meaning that postpartum mothers who adhere to dietary restriction practices tend to experience poorer perineal wound healing outcomes.

### 3.2 Discussion

#### Dietary Restriction Culture among Postpartum Mothers

Based on the results of this study, more than half of the respondents did not practice dietary restrictions, totaling 17 postpartum mothers (53.1%). Dietary restriction practices were assessed using a questionnaire that measured the frequency of food consumption related to protein intake, carbohydrates, micronutrients such as vitamins A and C, and adequate water intake. The data recap revealed that postpartum mothers rarely consumed fish, cheese, milk, as well as foods rich in vitamins A and C.

Dietary restriction refers to a tendency to avoid or limit the consumption of certain foods due to cultural prohibitions that have been passed down through generations and are practiced in specific situations. These restrictions are often referred to as food taboos or dietary prohibitions. Over time, traditional food taboos have gradually diminished due to increasing public awareness of health, allowing individuals to distinguish between medically safe and unsafe foods. However, some individuals continue to adhere to dietary restrictions during the postpartum period because these practices are deeply rooted in cultural traditions related to maternal and infant health (Arma et al., 2010).

This finding is consistent with previous research conducted by Mandasari et al. (2010) in the Cibirong Community Health Center, Bogor, West Java, involving 30 postpartum mothers. The study showed that the majority of respondents did not practice dietary restrictions (70%). Similar results were reported by Hardianty et al. (2011) at Nosarara Health Center, Palu City, involving 35 postpartum mothers, where 57.1% of respondents did not practice dietary restrictions.

Dietary restriction culture is influenced by several factors, including age, education, employment status, number of children, and parity. In this study, most respondents were aged between 20 and 35 years. Age reflects the level of knowledge and experience acquired by mothers. Older postpartum mothers generally have more experience but may be more inclined to follow dietary restrictions recommended by family members due to long-standing traditions. However, mothers aged 20–35 years are considered to be in a transitional period—physically, intellectually, and socially—making them more susceptible to adopting or abandoning traditional practices depending on family and environmental influences (Marcellina & Nisa, 2018).

Educational background also plays a significant role. Nearly half of the respondents had completed junior high school education. Higher educational attainment is associated with better knowledge and more rational cognitive abilities in evaluating dietary practices during the postpartum period. Mothers with higher education levels are generally more receptive to health information, including the potential negative impacts of dietary restrictions. As a result, when the perceived negative effects outweigh the benefits, mothers are less likely to adhere to such practices (Nurjanah, Puspitaningrum, & Ismawati, 2017).

Employment status further influences dietary practices. Most respondents in this study were unemployed, which reflects household income and socioeconomic status. Families with higher income levels tend to have better purchasing power for nutritious foods and are more attentive to the quality and quantity of dietary intake, including for postpartum mothers. Conversely, families with lower income levels may have limited access to nutritious foods, making dietary restrictions more prevalent. According to the researcher's assumption, dietary restriction practices among postpartum mothers are influenced by age, education, and employment status. The majority of respondents who

did not practice dietary restrictions reflects a cultural shift aligned with increased awareness of health and nutrition. However, some mothers continue to adhere to dietary restrictions due to strong cultural and familial influences.

### **Perineal Wound Healing among Postpartum Mothers**

The results of this study showed that perineal wound healing was evenly distributed between good and poor healing outcomes, with 16 postpartum mothers (50.0%) in each category. Perineal wound healing was assessed using the REEDA questionnaire, which evaluates redness, edema, ecchymosis, discharge, and wound approximation. Observational findings indicated frequent complaints related to redness and wound approximation.

Perineal wounds occur as a result of perineal tears or episiotomy during childbirth. Within six to seven days after delivery, perineal wounds typically begin to heal, marked by tissue regeneration and wound closure. Episiotomy wounds generally heal within 1–7 days, characterized by minimal granulation tissue formation and minimal scarring, indicating a rapid healing process.

Perineal wound healing is considered rapid if healing occurs within 1–7 days, normal if within 7–14 days, and delayed if healing exceeds 14 days. Delayed healing is characterized by poor wound closure, signs of infection such as redness, swelling, warmth, pain, discharge, and prolonged recovery time. Good wound healing is indicated by a dry wound, closed perineum, and absence of infection (Windiarti, 2010).

These findings are supported by previous studies. Sinaga et al. (2020) reported that 86.7% of postpartum mothers experienced good perineal wound healing in their study conducted at BPM Irma Harahap, North Sumatra. Similarly, Jaelani et al. (2017) found that 58% of postpartum mothers experienced healed perineal wounds in their study at the Sipayung Health Center.

Perineal wound healing is influenced by several factors, including MUAC (LILA), BMI, parity, and number of children. In this study, most respondents had normal nutritional status based on MUAC and BMI. Adequate nutritional intake supports metabolic processes, tissue maintenance, and regeneration, which are essential for wound healing. Balanced nutrition during the postpartum period is also necessary to support metabolism and breast milk production (Sinaga et al., 2020).

Based on parity and number of children, most respondents were multiparous with two children. Mothers with lower parity are more likely to prepare adequately for nutritional needs during pregnancy and postpartum, thereby supporting better recovery and wound healing (Rohmin, Octaviani, & Jania, 2017). According to the researcher's assumption, perineal wound healing is influenced by nutritional status, parity, and number of children. Although wound healing outcomes were evenly distributed in this study, mothers with good nutritional status tended to experience faster healing due to optimal metabolism and tissue regeneration. Poor wound healing in some respondents may be attributed to suboptimal wound care or other health conditions.

### **Relationship between Dietary Restriction Culture and Perineal Wound Healing**

The results of this study demonstrated a significant relationship between dietary restriction culture and perineal wound healing among postpartum mothers. Most mothers who did not practice dietary restrictions experienced good perineal wound healing, whereas those who adhered to dietary restrictions tended to experience poor healing outcomes.

These findings are consistent with previous studies. Mandasari et al. (2010) found a significant relationship between dietary restriction beliefs and episiotomy wound healing among postpartum mothers ( $p = 0.001$ ). Similarly, Selvianti and Widyaningsih (2013) reported that dietary restriction culture significantly influenced perineal wound healing among postpartum mothers in Bengkulu City ( $p = 0.001$ ). Kasari and Wahyuni (2020) also demonstrated a significant association between dietary restrictions and perineal wound healing using the Spearman rank correlation test.

According to the researcher's assumption, dietary restriction culture is closely associated with perineal wound healing. Postpartum mothers who do not practice dietary restrictions tend to experience optimal wound healing, characterized by absence of infection, clean and dry perineal wounds, and proper wound closure. Adequate consumption of balanced nutrition not only accelerates perineal wound healing but also improves overall maternal health and supports optimal breast milk production.

#### 4. Conclusion

This study concludes that dietary restriction culture remains present among postpartum mothers, although more than half of the respondents did not practice dietary restrictions. Postpartum mothers who avoided dietary restrictions tended to have better nutritional intake, which plays an essential role in supporting the perineal wound healing process.

The findings also indicate that perineal wound healing among postpartum mothers was equally distributed between good and poor healing outcomes. Perineal wound healing is influenced by several factors, including nutritional status, parity, number of children, and overall postpartum care. Mothers with adequate nutritional status generally experienced faster and better wound healing due to optimal metabolic processes and tissue regeneration.

Importantly, this study demonstrates a statistically significant relationship between dietary restriction culture and perineal wound healing among postpartum mothers. Mothers who practiced dietary restrictions were more likely to experience poor perineal wound healing, whereas those who did not practice dietary restrictions tended to have better healing outcomes. The strong negative correlation indicates that adherence to dietary restrictions negatively affects the perineal wound healing process.

Therefore, it can be concluded that avoiding dietary restriction practices and ensuring adequate, balanced nutritional intake during the postpartum period are crucial for accelerating perineal wound healing, maintaining maternal health, and supporting optimal recovery after childbirth.

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