



Case study

Early Mobilization to Facilitate Lochia Discharge in Postpartum Mothers with the Nursing Problem of Infection Risk

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Abstract

Introduction: The postpartum period is a recovery phase following childbirth during which mothers remain vulnerable to complications, including infection. Inadequate lochia discharge may increase the risk of postpartum infection. One non-pharmacological nursing intervention that can support uterine involution and facilitate lochia discharge is early mobilization. This study aimed to describe the implementation of early mobilization to facilitate lochia discharge in postpartum mothers with the nursing problem of infection risk.

Method: This study employed a descriptive case study involving two mothers who had undergone normal delivery and experienced the nursing problem of infection risk. Early mobilization was implemented gradually up to six hours postpartum. Following the intervention, lochia discharge was observed using the COCA instrument.

Results: The implementation of early mobilization demonstrated that both respondents experienced smooth lochia discharge. The lochia was characterized as *lochia rubra*, with a fresh-red color, a normal fishy odor, and an amount sufficient to fill the sanitary pad. Differences in the amount of lochia discharge were influenced by factors such as age and activity; however, overall, early mobilization was effective in facilitating lochia discharge.

Conclusion: The findings indicate that the implementation of early mobilization was effective in facilitating lochia discharge in postpartum mothers with the nursing problem of infection risk.

Keywords: Early mobilization, lochia, postpartum

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INTRODUCTION

The postpartum period is a recovery phase that begins after the delivery of the placenta and ends when the reproductive organs return to their pre-pregnancy condition. This period generally lasts for six to eight weeks and begins after childbirth as the reproductive organs gradually return to their previous state (Khodijah et al., 2025).

The World Health Organization (WHO) reported that approximately 10% of women experience infection following childbirth, with most cases occurring in developing countries due to delayed detection and treatment (WHO, 2022).

The World Health Organization (WHO) recorded 303,000 maternal deaths worldwide in 2021, while in 2022 the reported figure was 3.109 million. According to the 2023 Indonesian Demographic and Health Survey (SDKI), approximately 28% of maternal deaths in Indonesia were attributed to bleeding, 13% to eclampsia or hypertensive disorders during pregnancy, 9% to prolonged labor, 11% to abortion-related complications, and 10% to other factors (Kemenkes RI, 2021).

Global data indicate that the number of maternal deaths in 2024 was 109, increasing from 105 deaths in 2023. The highest proportion of maternal deaths in 2024 was attributed to other causes, accounting for 48 deaths or 44%, whereas the lowest proportion was associated with post-abortion complications, at 2% (Dinkes Prov. Sumsel, 2024).

Postpartum lochia bleeding accounted for 18% of cases in 2021. This figure increased to 51.4% in 2022 before declining to 35% in 2023 (BPS Sumsel).

In South Sumatra Province, 131 maternal deaths were recorded in 2021. Based on health profile data, the number of reported maternal deaths in South Sumatra decreased to 97 cases in 2022. One of the major contributing factors was postpartum bleeding. In 2021, 70 women (5.33%) experienced postpartum bleeding among 1,313 women who gave birth. In 2022, 77 women (5.4%) experienced postpartum bleeding

among 1,431 women who gave birth. In 2023, the number increased to 216 women (9.63%) among 2,242 women who gave birth. The high incidence of postpartum bleeding encouraged the researcher to investigate this topic (Basriyah & Lailiyah, 2022).

Postpartum hemorrhage may occur due to several causes, including uterine atony, accounting for approximately 50–60%, which may be associated with prolonged labor; retained placenta, approximately 16–17%, related to placental implantation; and birth canal lacerations, approximately 4–5%, which may result from extensive tears or blood-clotting disorders. The process through which the uterus returns to its pre-pregnancy condition is known as uterine involution. Several factors influence uterine involution, including early mobilization, postpartum exercises, nutritional status, psychological factors, early initiation of breastfeeding, parity, and maternal age (Maula et al., 2023).

Early mobilization can help postpartum mothers reduce the accumulation of lochia within the uterus and improve blood circulation around the reproductive organs, thereby supporting the return of the reproductive organs to their previous condition. Early mobilization is also important in preventing thrombophlebitis. Following a normal delivery, when movement is not restricted by intravenous infusion and the mother's vital signs are stable, the mother can generally be assisted by a family member or independently to bathe or use the bathroom approximately one to two hours after delivery (Yulianti, 2020).

Early mobilization during the postpartum period is an important practice that contributes to the mother's recovery following childbirth. This process focuses not only on physical recovery but may also influence the mother's mental and emotional well-being. One important indicator of postpartum recovery is lochia discharge, which refers to the fluid expelled from the uterus following childbirth. Appropriate lochia discharge indicates that the uterus is returning to its normal size and that the involution process is progressing properly (Khodijah et al., 2025).

Early mobilization is an important intervention in postpartum care that aims to accelerate recovery following childbirth. Recent research has demonstrated that early mobilization contributes not only to physical health but also to lochia discharge, which is the fluid released from the uterus after delivery. The effect of early mobilization on lochia discharge is associated with the postpartum recovery process (Khodijah et al., 2025).

Prevention of postpartum infection includes maintaining personal and environmental hygiene, performing early mobilization, providing adequate nutrition, properly caring for wounds, and monitoring signs of infection. Early mobilization is one of the measures that can support these preventive efforts (Tengah, Setiani, & Yulianti et al., 2022).

Based on data from Tk II Dr. Ak Gani Hospital in Palembang, there were 211 spontaneous deliveries in 2023, 189 in 2024, 198 in 2025, and 92 in 2026, resulting in a total of 690 spontaneous deliveries. Based on a preliminary survey, it was found that 2 out of 3 mothers who gave birth met the conditions observed in this study.

Based on the background described above, the author was interested in conducting a study entitled “Early Mobilization to Facilitate Lochia Discharge in Postpartum Mothers with the Nursing Problem of Infection Risk.” This study aimed to prevent infection associated with lochia discharge in postpartum mothers.

METHODS

This study employed a descriptive case study design using a nursing process approach. The study was conducted to describe the implementation of early mobilization in facilitating lochia discharge among postpartum mothers with the nursing problem of infection risk.

The case study was conducted in the Melati Ward of Tk II Dr. Ak Gani Hospital, Palembang, in 2026. The study involved two postpartum mothers who had undergone spontaneous/normal delivery and experienced the nursing problem of infection risk. The respondents were selected using purposive sampling based on predetermined inclusion and exclusion criteria.

Data were collected through interviews, observation, physical examinations, and documentation. Early mobilization was implemented gradually during the postpartum period through three stages, namely at 2, 4, and 6 hours postpartum. Following each stage of early mobilization, the condition and discharge of lochia were observed to identify any changes.

The collected data were analyzed descriptively and presented in narrative and tabular forms. This study received ethical approval from the Health Research Ethics Committee of STIKes Hesti Wira Sriwijaya under Registration Number 001950/KEP STIKES HESTI WIRA SRIWIJAYA/2026. All respondents were informed about the objectives and procedures of the study and expressed their willingness to participate.

RESULTS

This study involved two postpartum mothers, namely Mrs. P and Mrs. W, who were treated in the Melati Ward of Tk II Dr. Ak Gani Hospital, Palembang. Both respondents experienced the nursing problem of infection risk associated with lochia discharge. Before the intervention was implemented, the condition of lochia in both respondents was assessed. Subsequently, early mobilization was provided for one day through three stages, namely at 2, 4, and 6 hours postpartum. After each stage of early mobilization, an evaluation was conducted to assess the condition and discharge of lochia and to identify any changes.

Table 1. Respondent Characteristics

Component	Respondent 1	Respondent 2
Name	Mrs. P	Mrs. W
Age	24 Years	21 Years
Education	Senior High School	Junior High School
Occupation	Housewife	Housewife
Obstetric Status	G1P1A0	G1P1A0
HPHT	August 3, 2025	August 1, 2025
Mode of Delivery	Spontaneous/Normal	Spontaneous/Normal
Perineal Injury	Second-degree and sutured	Second-degree and sutured
Condition After Delivery	Appeared weak and pale, with dry lip mucosa and lochia rubra discharge	Appeared weak and pale
Assessment at 2 Hours Postpartum	Lochia rubra discharge was present and suppository medication had been administered to help reduce pain	Suppository medication had been administered to help reduce pain

Based on the assessment conducted in the Melati Ward of Tk II Dr. Ak Gani Hospital, Palembang, the researcher obtained two postpartum respondents who met the study criteria, namely Mrs. P as the first respondent and Mrs. W as the second respondent. At the initial stage, the researcher assessed the condition of both respondents, including their postpartum condition and lochia discharge. The assessment showed that both respondents had the nursing problem of infection risk. The lochia observed in both respondents was fresh red in color with a strong fishy odor, indicating the characteristics of lochia rubra.

Based on these conditions, early mobilization was implemented to help facilitate lochia discharge. The intervention was carried out over one day through three stages, namely at 2, 4, and 6 hours postpartum. At each stage, mobilization was performed gradually according to the respondents' abilities, followed by reassessment of lochia discharge.

The results showed that after early mobilization was implemented, both respondents continued to have fresh-red lochia with a strong fishy odor, consistent with lochia rubra. Based on the overall implementation results, infection risk did not occur in either respondent.

The gradual implementation of early mobilization helped facilitate lochia discharge and supported efforts to prevent infection risk in postpartum mothers. In addition, the evaluation showed that both respondents were able to perform early mobilization gradually according to the prescribed stages. Following the intervention, the lochia in both respondents remained fresh red in color with a strong fishy odor, indicating lochia rubra. The evaluation confirmed that infection risk did not occur in either respondent.

DISCUSSION

The results of this case study showed that the implementation of early mobilization in both subjects, Mrs. P and Mrs. W, helped facilitate lochia discharge in postpartum mothers with the nursing problem of infection risk. Before the intervention, both subjects had fresh-red lochia with a fishy odor. Early mobilization was subsequently provided gradually over one day, at 2, 4, and 6 hours postpartum. Following the intervention, both subjects continued to have fresh-red, fishy-smelling lochia and the discharge filled the sanitary pad. These findings indicate that early mobilization helped facilitate lochia discharge in both subjects.

The findings of this case study are consistent with the study by Dini (2021), which reported an association between early mobilization and the amount of lochia discharge in mothers at 6 hours postpartum, with a p-value of 0.036. Early mobilization may improve blood circulation within the uterus, resulting in better uterine contractions and facilitating lochia discharge. This finding supports the results

observed in both subjects in the present case study, as mobilization was performed gradually and accompanied by monitoring of lochia discharge.

The findings are also consistent with the study by Qiftiyah and Ulya (2023), which showed that most mothers who performed early mobilization experienced lochia discharge that corresponded with the stages of the postpartum period, accounting for 56.25%. Khasanah, Maharani, and Juwariyah (2022) further explained that mobilization performed at 2, 4, and 6 hours postpartum could help accelerate the involution process of the reproductive organs, facilitate lochia discharge, and improve blood circulation.

In addition, Khodijah et al. (2025) explained that early mobilization is one of the interventions that contributes to maternal recovery following childbirth and may accelerate lochia discharge. Appropriate lochia discharge is associated with the process of uterine involution after delivery. This is consistent with the findings of the present case study, in which both subjects demonstrated lochia discharge following the implementation of early mobilization.

Differences in lochia discharge between the two subjects in this case study may have been influenced by several factors, including age and activity. Mrs. P was 24 years old, whereas Mrs. W was 21 years old. The KTI explains that age may influence an individual's ability to perform mobilization. Minarni (2020) stated that increasing age may be accompanied by decreases in neuromuscular and cardiovascular function, muscle mass and strength, walking ability, and balance. In addition to age, both subjects also received support from their husbands while performing early mobilization.

Based on the results of the intervention and previous studies, the researcher assumes that gradual early mobilization in mothers following normal delivery can help facilitate lochia discharge. Early mobilization may help prevent the accumulation of residual blood and tissue within the uterus, thereby supporting maternal recovery and reducing the risk of infection during the postpartum period. The final results of the case study showed that infection risk did not occur in either subject and that the implementation of early mobilization was effective in facilitating lochia discharge in postpartum mothers.

CONCLUSION

The implementation of early mobilization in postpartum mothers with the nursing problem of infection risk in the Melati Ward of Tk II Dr. Ak Gani Hospital, Palembang, showed favorable results. The intervention was provided to two subjects, Mrs. P and Mrs. W, gradually over one day at 2, 4, and 6 hours postpartum. Before the intervention, both subjects had fresh-red lochia with a fishy odor. Following the implementation of early mobilization, lochia discharge continued and filled the sanitary pad. The evaluation showed that infection risk did not occur in either subject.

Early mobilization can serve as a nursing intervention to help facilitate lochia discharge in postpartum mothers. The intervention was performed gradually according to the mother's ability and may support blood circulation and uterine contractions. Therefore, the implementation of early mobilization can assist maternal recovery after childbirth while supporting efforts to prevent infection risk during the postpartum period.

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