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Application Of Early Breastfeeding Initiation (IMD) To The Process Of Uterine Involution In Nursing Care For Postpartum Mothers On Days 1-5 at Hj. Purwanti Independent Practice Midwife

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Abstract

The purpose of this study was to determine the application of this breastfeeding initiation (IMD) to the involution process in nursing care for postpartum mothers on days 1-5. Conducted using a case study method at Hj. Purwanti Midwife Practice. The results of the assessment are that the mother complains of discomfort, grimaces, there are uterine contractions, and episiotomy wounds, complains of unsatisfied sleep, feels not enough sleep. he problem raised was postpartum discomfort. Interventions carried out are pain management, sleep support, postpartum care, perineal care. The evaluation results obtained on days 1-5 postpartum TFU 5 fingers below the center or ½ symphysis pubis

Keywords : Nursing Care for Postpartum Mothers, Uterine Involution, Early Breastfeeding Initiation.

1. Introduction

The postpartum period begins after the birth of the placenta and ends when the uterus returns to its pre-pregnancy state, lasting 6 weeks or 42 days (Afriyani et al., 2024; Chauhan & Tadi, 2020; Martin et al., 2022). The event in the postpartum period experienced by a mother is the process of uterine involution, during this period the mother needs special care, assistance, and supervision to restore health as before pregnancy (Sibeko et al., 2021; M. R. S. Wulandari et al., 2022).

Uterine involution is the process of uterine shrinkage caused by uterine contractions influenced by the hormone oxytocin (Heller et al., 2023; Julikas et al., 2024). The uterus shrinks gradually from 1000 grams postpartum to 40-60 grams after 6 weeks or 42 days, starting after the placenta is born and ending when the uterine apparatus returns to its pre-pregnancy state. The factor that causes uterine sub-involution is one of which is decreased uterine contractions so that wide blood vessels do not close completely and result in the risk of bleeding which in turn often causes maternal death (Luo et al., 2021).

Based on the Government Agency Performance Accountability Report of Cimahi City, the maternal mortality ratio was 123 per 100,000 live births, which means there were 13 cases of death. 28% of these cases were complications of postpartum hemorrhage. Cases of bleeding in the postpartum period are mostly caused by placental retention and uterine atony, which is the failure of the uterus to contract after childbirth

(Almeida et al., 2016).

Uterine contractions are needed for the involution process so that the uterus can gradually shrink so that there is no bleeding until it finally returns to its pre-pregnancy size at week 6 postpartum (Martin et al., 2022; R. Wulandari, 2024). Factors that influence the occurrence of uterine involution include early mobilization, nutritional status, postpartum exercises and Early Initiation of Breastfeeding (IMD) (Dharma, 2024; Tambunan et al., 2023). (IMD) is the act of the baby looking for his own mother's nipple (without being thrust into the nipple) immediately after the baby is born, carried out within 30 minutes to 1 hour (Purwati et al., 2023).

According to the results of research by Rosyati and Damayanti (2022) the process of initiation of early breastfeeding is very influential on reducing uterine involution, bounding attachment between mother and baby through skin to skin and suction on the nipple can trigger the release of natural oxytocin as a hormone that helps accelerate the process of uterine involution to prevent bleeding. Another study relevant to the same issue was conducted by Hutajulu et al. (2024) the statistical test results of TFU 2 hours after IMD obtained a value of p = 0.003 and TFU 12 hours after IMD obtained a value of p = 0.000, while TFU 7 days after IMD obtained p = 0.002, it can be concluded that there is a significant difference in the average TFU after IMD..

IMD is one form of nursing care actions in maternity services carried out in various health care institutions, one of which is Independent Practice Midwife (BPM), namely Midwife Hj. Purwanti located in Cimahi with a fairly high number of childbirth. Based on preliminary studies obtained data, the number of childbirth in BPM Hj. Purwanti for the last three months from October to March as many as 54 people, and through interviews with senior midwives that IMD is always given to mothers in labor but has not been implemented effectively because of the time and conditions that are not in accordance with the theory that IMD is carried out the baby must find his own mother's nipple for a maximum of 1 hour.

The purpose of this study was to determine the application of this breastfeeding initiation (IMD) to the involution process in nursing care for postpartum mothers on days 1-5. Based on the background and research results above, the authors are interested in conducting a case study with the title “Application of Early Breastfeeding Initiation (IMD) to the Involution Process in Nursing Care for Postpartum Mothers on Days 1-5 at Hj. Purwanti Independent Practice Midwife”.

2. Methodology

The study used a single descriptive case study method (Atmowardoyo, 2018). A case study is a research design that includes an assessment of one research unit in an incentive such as a client, family, group, community or institution (Karunathilake et al., 2018; Williams et al., 2020). This case study design is a descriptive method that describes and interprets the object as it is. Descriptive case studies are case studies that seek to describe events that occur in a real, realistic, actual, real at this time, because this case study is to make descriptions, descriptions systematically, factually and accurately about the facts, properties and relationships of the phenomena being investigated (Rukajat, 2018).

The instrument in this case study uses a nursing care format consisting of assessment, diagnosis, planning, action and nursing evaluation, standard operating procedures (SOP) for IMD and SOP for measuring TFU, uterine contractions and lochhea and checklists. Secondary data was taken from the patient's status.

The method of data collection in this study is by taking a nursing process approach which consists of assessment, determining diagnoses, determining interventions, implementing implementation and evaluating results. To obtain data, an assessment is carried out with interview techniques, explaining the IMD procedure, and asking for informed consent as the availability of respondents.

3. Result

This case study was conducted for 1 day on May 01, 2024 at TPBM Bidan Hj. Purwanti Amd.Keb which is located at Gg. Lestari, Utama Kec. Cimahi Selatan Cimahi City, West Java and continued with a patient home visit for 5 days on May 02 to 05, 2024 which is located at Hujung Kidul RT 04/07 Kel Cimahi Selatan. Data obtained that the patient named Mrs. M aged 27 years with a medical diagnosis of P1A0 was the first delivery for Mrs. M. The patient's medical history said the stomach felt uncomfortable. The patient said the discomfort increased during activity and decreased when breathing, the discomfort was felt like pressure in the abdomen, on a scale of 1-10 the discomfort was felt on a scale of 3, the discomfort was felt to disappear. The patient said no one in his family had hereditary diseases. The patient said that no one in his family has diabetes, hypertension, or infectious diseases such as tuberculosis, hepatitis, etc. Mrs. M had a history of menstruation at the age of 13 years with a 28-day cycle and the length of her period was about 6-7 days. Mrs. M said she had never experienced desminorhe only regular heartburn and had no complaints of vaginal discharge. Mrs. M's marital history is married once and has only had 1 child and has plans to use IUD birth control.

Data obtained from the patient Mrs. M, namely Subjective Data, the patient said that she was uncomfortable after giving birth and the stomach felt uncomfortable. While the Objective Data obtained that the patient looked grimacing, there were strong uterine contractions, laceration wounds, Blood Pressure 100/70, Pulse 90x/min, Temperature 36.5, Respiration 17x/min, SpO2 96%, TFU 3 fingers below the center, Pain scale 3 (NRS 1-10).

The diagnosis taken from Mrs. M is Postpartum discomfort associated with uterine involution characterized by the patient complaining of discomfort, the stomach feels nauseous, looks grimacing, there are strong continuous contractions, there is a laceration wound, Blood Pressure 100/70, Pulse 90x/min, Temperature 36.5, Respiration 17x/min, SpO2 96%, TFU 3 fingers below the center, Pain scale 3 (NRS 1-10).

It can be concluded that the diagnosis of Mrs. M Postpartum Discomfort which has the criteria for the results of complaints of discomfort, moderate, moderate grimacing, moderate episiotomy / laceration wounds, moderately increased uterine contractions, complaints of unsatisfied sleep increased. Complaints of insufficient rest increased. Then interventions can be carried out, namely pain management, sleep support, postpartum care, perineal care.

Discussion

According to (Br Kaban, 2017) IMD is the process of the baby being allowed to find his own mother's nipple (without being thrust into the nipple) immediately after the baby is born, carried out within 30 minutes to 1 hour. This application is very beneficial for mothers and babies, one of the benefits for mothers is to produce oxytocin which affects uterine contractions so as to reduce the occurrence of bleeding due to subinvolution

The application of IMD to Mrs. M is carried out in theory through the steps listed in the SOP, among others: explaining the purpose, washing hands, wearing gloves, checking the patency of the baby's airway, drying the baby, in detail the steps taken are as follows: at 16.50 WIB the baby boy was born immediately crying (APGAR score 10), then the umbilical cord was cut, the baby's body was dried and then given telon oil, the baby was attached to the mother's stomach, the baby was given a hat and the baby's body was covered with a blanket but the front of the baby's body was attached to the mother's stomach, then the baby was allowed to move to find the mother's nipple by itself, at 17.50 WIB the baby could find the mother's nipple and suck well. At 17.55 IMD was completed, then the baby was weighed and measured body length 49 cm, weight 3.2 kg, LK / LD 35 / 34 cm, the general condition of the baby was good, then the baby was treated with his mother (rooming Inn).

Uterine involution that the author observed for 5 days can be seen the results. Day 1 Thursday, May 02 at 11.00-12.00 WIB TFU 3 fingers below the center, uterine contractions palpable hard, lochea rubra. Day 2 Friday, May 03 at 10:00-11:00 am TFU 3 finger below center, uterine contraction palpable hard, lochae serosa Day 3 Saturday, May 04 at 10:00-11:00 am TFU 4 finger below center, uterine contraction palpable hard, lochae serosa. Day 4 Sunday, May 05 at 10:00-11:00 am TFU 5 finger below center, hard palpable uterine contractions, serous lochae, and Day 5 Monday, May 06 at 10:00-11:00 am TFU 5 finger below center, hard palpable uterine contractions, lokhea serosa.

Uterine involution that occurs in Mrs. M, in accordance with the theory according to (Rosyati & Damayanti, 2022) that IMD affects the decrease in TFU, the baby's suction on the mother's breast produces the hormone oxytocin which affects the appearance of contractions in the uterus so that with these contractions the uterus can involve well and faster so as to reduce the risk of bleeding.

4. Conclusion

This study shows that early initiation of breastfeeding (IMD) has a significant role in accelerating uterine involution in postpartum mothers, as indicated by a consistent decrease in fundus uteri (TFU) height in the first five days after delivery. This finding corroborates the theory that oxytocin stimulation due to infant suction contributes to more effective uterine contractions, thereby reducing the risk of postpartum hemorrhage. The implications of this study confirm the importance of implementing IMD as a standard intervention in midwifery practice to improve maternal health. However, the limitation of this study lies in the single case-based study design without control, so the generalizability of the findings is still limited. Further research with an experimental design involving a control group and larger sample size is needed to confirm the causal

relationship between IMD and accelerated uterine involution and explore other factors that may influence this process.

References

Afriyani, L. D., Veftisia, V., Salafas, E., Mursit, H., Rahmawati, A., Sumarni, T., Salmiati, S., Hasbahuddin, H., Bakhtiar, M. I., Anggraini, H., Fitrianti, F., Juaris, J., Sofiyanti, I., Astuti, F. P., Setyowati, H., Sofiyanti, I., Widyawati, S. A., Sujianto, U., Illiyyin, Z., … Prinaryanto, B. A. (2024). The analytic hierarchy process supporting decision making for sustainable development: An overview of applications. *Journal of Islamic Marketing*, *2*(1), 1–16. https://doi.org/10.3390/app11041926

Atmowardoyo, H. (2018). Research methods in TEFL studies: Descriptive research, case study, error analysis, and R & D. *Journal of Language Teaching and Research*, *9*(1), 197–204. https://doi.org/10.17507/jltr.0901.25

Chauhan, G., & Tadi, P. (2020). *Physiology, postpartum changes*.

Dharma, D. P. (2024). Determinants of Postpartum Hemorrhage Incidence in the Maospati Magetan Health Center Working Area in 2023, Indonesia. *Health Dynamics*, *1*(6), 199–207.

Heller, D. S., Cramer, S. F., & Turner, B. M. (2023). Abnormal Uterine Involution May Lead to Atony and Postpartum Hemorrhage: A Hypothesis, With Review of the Evidence. *Pediatric and Developmental Pathology*, *26*(5), 429–436.

Julikas, N., Selvia, A., & Sari, D. P. (2024). The Effect of Oxytocin Massage on Uterine Involution in Postpartum Women in The Work Area of The Technical Implementation Unit of The Sei Pancur Community Health Center, Batam City 2023. *MEDICA (International Medical Scientific Journal)*, *6*(1), 18–27.

Karunathilake, H., Perera, P., Ruparathna, R., Hewage, K., & Sadiq, R. (2018). Renewable energy integration into community energy systems: A case study of new urban residential development. *Journal of Cleaner Production*, *173*, 292–307.

Luo, L., Wan, J., Chen, X., Zhang, H., Zhang, M., & Chen, Q. (2021). Uterine necrosis, infection, and subinvolution: complications observed after combined application of modified B-Lynch suture and vascular ligation. *Journal of International Medical Research*, *49*(5), 03000605211010730.

Martin, C., Viky, M., Rokibullah, R., & Sofinia, H. (2022). The Physiological Changes In The Postpartum Period After Childbirth. *Asian Journal of Social and Humanities*, *1*(03), 105–118. https://doi.org/10.59888/ajosh.v1i03.19

Sibeko, L., Johns, T., & Cordeiro, L. S. (2021). Traditional plant use during lactation and postpartum recovery: Infant development and maternal health roles. *Journal of Ethnopharmacology*, *279*, 114377.

Tambunan, L. Y., Umamy, F., & Fitria, A. (2023). The Effect of Early Breastfeeding Initiation (IMD) on Uterine Involution in Post Partum Mothers at Ninda Harni Clinic. *Journal Homepage: Https://Ejournal. Ipinternasional. Com/Index. Php/Ijphe*, *3*(1), 471–477.

Williams, M. T., Reed, S., & Aggarwal, R. (2020). Culturally informed research design issues in a study for MDMA-assisted psychotherapy for posttraumatic stress

disorder. *Journal of Psychedelic Studies*, *4*(1), 40–50.

Wulandari, M. R. S., Sukmandari, N. M. A., & Purnamayanthi, P. P. I. (2022). Postnatal Education Package for Breastfeeding Motivation And Self Efficacy Postpartum Mother's Early Stage. *International Journal of Nursing and Health Services (IJNHS)*, *5*(2), 178–186.

Wulandari, R. (2024). The effectiveness of postpartum exercise on uterine involution in postpartum women in Aek Haruaya village, Portibi district, North Padang lawas regency in 2023. *Jurnal EduHealth*, *15*(01), 40–45.