

MIDWIFERY CARE FOR A LABOR-GIVING MOTHER WITH MRS. "D" WITH A PROLONGED FIRST STAGE

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A B S T R A C T

Background: Labor is a physiological process that may be complicated by prolonged first stage of labor, characterized by slow cervical dilation and potentially increasing the risk of maternal exhaustion, infection, and fetal complications. One non-pharmacological intervention that can support labor progress is the use of a gym ball with the pelvic rocking technique, which may improve maternal comfort and facilitate fetal head descent. **Objective:** To provide intranatal midwifery care for Mrs. "D", G4P3A0, at 42 weeks and 2 days of gestation with prolonged first stage of labor at Mawasangka Community Health Center using the seven-step Varney midwifery management and SOAP approach. **Subject:** Mrs. "D", G4P3A0, with prolonged first stage of labor. **Method:** This study used a descriptive method with a case study design. Data were obtained through interviews, observation, physical examination, obstetric examination, and secondary data, then analyzed and presented using the seven-step Varney midwifery management and SOAP format. **Results:** Midwifery care was provided through assessment of basic data, identification of diagnosis, potential problems, required interventions, planning, implementation, and evaluation. The interventions included monitoring vital signs and labor progress and applying a gym ball with the pelvic rocking technique. Following the intervention, uterine contractions became more effective, cervical dilation progressed to complete dilation, and the baby was delivered spontaneously in good condition without complications. **Conclusion:** Intranatal midwifery care for Mrs. "D" with prolonged first stage of labor was implemented comprehensively according to standards using the Varney and SOAP approaches. The gym ball with pelvic rocking technique may be used as a complementary method to support labor progress and improve maternal comfort.

INTRODUCTION

Labor is a physiological process at the end of pregnancy characterized by the expulsion of the fetus, placenta, and amniotic membranes through the birth canal or through certain procedures, generally occurring at 37–42 weeks of gestation (Wimilda, Sulistyowati and Layliyah, 2020). The labor process occurs in four stages: stage I, stage II, stage III, and stage IV, each of which requires monitoring to ensure the mother and baby remain in good condition. Stage I is the stage of cervical dilation from the onset of regular uterine contractions to a full dilation of 10 cm, while stage II lasts from full dilation until the baby is born, stage III from the baby is born until the placenta is delivered, and stage IV is the observation period for the first two hours after delivery. Although it is a natural process, labor can experience complications, one of which is a prolonged stage I which can hinder the progress of labor and increase risks to both mother and baby. (Roos Etty, Damanik and Trimuliani Gowasa, 2023)

Prolonged first stage of labor occurs when the cervical dilation process takes longer than expected and can lead to prolonged labor. This condition can be related to inadequate uterine contractions, resulting in delayed cervical dilation. (Susilowati, Prastika and Martanti, 2021). Prolonged labor is influenced by the 3Ps: power, the strength of uterine contractions; passage, the condition of the birth canal; and passenger, the condition of the fetus. These factors can also be influenced by maternal age, parity, anxiety, and the mother's health. Prolonged labor can increase the risk of maternal fatigue, infection, postpartum hemorrhage, fetal distress, asphyxia, and even maternal and infant death if not properly managed (Maghfiroh, 2020)

A prolonged first stage of labor is a problem that requires attention because the length of labor can increase the risk of maternal and neonatal complications. Excessively long labor can cause extreme fatigue in the mother, increase the risk of intrauterine infection and postpartum hemorrhage, and in the fetus, it can cause fetal distress due to head compression, placental insufficiency, and

asphyxia, which can result in death if not treated promptly (Sartika, Nasla and Delpia, 2026). This problem is related to the still high Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR), both globally and in Indonesia, so that improving the quality of services during pregnancy and childbirth is an important part of efforts to prevent avoidable deaths (WHO, 2023). In Indonesia, the MMR based on the results of the 2020 Population Census was recorded at around 189 per 100,000 live births, while the IMR is still in the range of 16–24 per 1,000 live births, which shows that maternal and infant health services still face various challenges (Kemenkes, 2024)

Efforts to reduce maternal and infant mortality rates can be carried out by providing comprehensive and continuous midwifery care, including delivery assistance by skilled health workers and proper monitoring of the condition of the mother and baby (Septiana, 2024). One of the efforts that can be implemented to support the progress of labor is the use of a gym ball or physical therapy ball which can help lower the fetal head by utilizing gravity, while also providing comfort and stimulating the release of endorphins in the mother (Sri Hadi Sulistiyaningsih and Siti Ni'amah, 2023). The maternal and infant mortality rates (MMR) in Southeast Sulawesi remain a concern, with 74 maternal deaths and 278 infant deaths recorded in 2023 (Kemenkes, 2023). In Baubau City, the number of maternal deaths in 2022 was recorded at 4 cases, while the IMR was 7.4 per 1,000 live births. Therefore, strengthening midwifery services is still necessary to prevent complications that can occur during the delivery process. ('Profil Kesehatan Kota Baubau Tahun', 2022)

Based on the results of a preliminary survey conducted from December 2, 2025, to January 23, 2026, at the Mawasangka Community Health Center in Central Buton Regency, 14 of 65 women in labor experienced a prolonged first stage of labor. These findings indicate that prolonged first stage remains a problem encountered in delivery services at primary health care facilities and requires appropriate, systematic, and continuous midwifery care. Based on these conditions, the author was interested in conducting a case study on the implementation of intranatal midwifery care for Mrs. "D" with a prolonged first stage at the Mawasangka Community Health Center in Central Buton Regency. This case study aims to provide an overview of the implementation of intranatal midwifery care for women with a prolonged first stage through a comprehensive midwifery management approach. This can serve as a reference for improving the quality of midwifery services and the safety of mothers and infants.

METHODS

This study uses a descriptive method with a case study approach, applying midwifery care based on Varney's seven-step management and progress notes in the form of SOAP. This approach was used to systematically describe the implementation of intranatal midwifery care for women laboring with a prolonged first stage of labor. Varney's seven-step management process includes baseline data collection, identification of actual diagnoses or problems, identification of potential diagnoses or problems, identification of the need for immediate intervention, care planning, care implementation, and evaluation. Subsequent progress notes were documented using the SOAP format for Mrs. "D."

The case study was conducted at the Mawasangka Community Health Center from December 3, 2025, to May 3, 2026. The subject in this case study was Mrs. "D," 26 years old, G4P3A0, at 42 weeks and 2 days gestation, who experienced a prolonged latent phase of the first stage of labor. Subject selection was based on the results of the obstetric assessment and examination, which indicated problems in labor progress requiring comprehensive midwifery care..

The data used consisted of primary and secondary data. Primary data were obtained directly from the subjects through interviews, observations, physical examinations, obstetric examinations, monitoring of vital signs, and observations of labor progress during care. Secondary data were obtained from documentation and patient medical records at the Mawasangka Community Health Center, as well as literature sources relevant to the case of prolonged first stage of labor and the implementation of midwifery care. Data collection was conducted systematically in accordance with Varney's seven-step management process.

Data analysis was conducted descriptively by comparing the results of the assessment, examination, diagnosis, planning, implementation, and evaluation of care provided to Mrs. "D" with relevant midwifery care theories and standards. The collected data were then selected and organized based on information related to the mother's condition and labor progress. The analysis was then presented systematically in the form of a description of midwifery care based on Varney's seven steps and the patient's progress using SOAP documentation.

The case study adhered to ethical principles of midwifery research, including informed consent, anonymity, and confidentiality. Informed consent was obtained after the subject received an explanation of the purpose, process, benefits, and rights of the subject during the case study. The subject's identity was kept confidential using initials or a code, while all information obtained from the subject and medical records was used solely for the purposes of preparing the report and was not disseminated to unauthorized parties.

RESULTS & DISCUSSION

Subjective Data

The assessment of Mrs. "D" on December 29, 2025, at the Mawasangka Community Health Center was conducted on a 26-year-old woman, G4P3A0, with a gestational age of 42 weeks and 2 days based on her last menstrual period (LMP) of March 22, 2025. She presented with abdominal pain radiating to her back, which began at 11:00 PM WITA on December 28, 2025, accompanied by bloody mucus discharge. She reported active fetal movement, had no history of serious illnesses or drug or food allergies, and had not consumed alcohol, drugs, or herbal medicine during her pregnancy. She stated that she was ready for labor and received support from her husband and family.

Objective Data

Examination results showed the mother's general condition was good, with *compos mentis* consciousness. Vital signs were within normal limits, including blood pressure of 120/80 mmHg, pulse rate of 82 beats/minute, respiratory rate of 20 breaths/minute, and temperature of 36.5°C. A Leopold's examination revealed a fetal heart rate (FFU) of approximately 32 cm, palpable buttocks at the fundus, a fetal back on the left, cephalic presentation, and a divergent fetal heart rate (PAP) with a Leopold IV. The fetal heart rate (FHR) was clear, strong, and regular, with a frequency of 140–147 beats/minute. An internal examination revealed cervical dilation of 2–3 cm at 11:00 PM WITA, followed by 3 cm at 3:00 AM WITA, 6 cm at 7:00 AM WITA, 7 cm at 11:00 AM WITA, and a complete 10 cm at 3:00 PM WITA. Her contractions increased from 3 to 5 times in 10 minutes, each lasting 40–50 seconds.

Assessment

Based on the assessment results, Mrs. "D" was diagnosed as G4P3A0, 42 weeks 2 days gestation, intrauterine, singleton live fetus, elongated site, left dorsal, cephalic presentation, divergent BPD, maternal and fetal condition good, with a first stage of labor. During monitoring, no potential diagnoses or conditions requiring emergency intervention were identified. Labor progressed until full dilation, and the mother entered the second stage.

Management

Care during the first stage included monitoring vital signs, heart rate (FHR), contractions, and the progress of dilation using a partograph. The mother was educated about the labor process and pain, relaxation techniques, and breathing control. She was encouraged to empty her bladder, meet her food and drink needs, choose a comfortable position, especially lying on her left side, and walk between contractions. She was also taught how to use a gym ball and practiced it between contractions, which lasted approximately 30 minutes. Monitoring results showed that the cervix was 10 cm dilated at 3:00 PM WITA, with the heart rate remaining within normal limits.

During the second stage of labor, delivery was assisted according to Normal Delivery Care standards. The baby was born spontaneously on December 29, 2025, in good condition with an Apgar score of 9/10, male, weighing 4,000 grams, and measuring 53 cm long. During the third stage, active management was performed, including oxytocin administration, controlled cord traction, and uterine massage. The placenta was delivered at 5:10 PM WITA, with good uterine contractions, but a second-degree perineal rupture was detected. During the fourth stage, vital signs, uterine contractions, fundal height, bladder volume, and bleeding were monitored regularly. The mother's condition remained stable, with good uterine contractions and an empty bladder. The baby received care including vitamin K administration, eye ointment, and hepatitis B immunization, and was monitored regularly.

DISCUSSION

Subjective Data

The assessment of Mrs. "D" revealed that she presented with abdominal pain radiating to her lower back, accompanied by increasingly strong contractions and the discharge of mucus mixed with blood. These complaints are signs of labor. Based on the assessment, the labor process lasted longer than expected, resulting in a prolonged first stage of labor. A prolonged labor can cause fatigue in the mother, requiring monitoring and support throughout the delivery process (Alam and Altahirah, 2021)

Complaints of abdominal pain that spreads to the waist, increasingly strong contractions, and the discharge of mucus mixed with blood are in accordance with the theory that signs of labor include uterine contractions, changes in the cervix, and the discharge of mucus mixed with blood as early signs of labor (Mutmainnah *et al.*, 2021). The gestational age that has reached term and passed the estimated delivery date can also be determined by calculating the gestational age using Naegele's formula (Kehamilan *et al.*, 2022). Furthermore, the mother's psychological condition during labor needs to be considered, as anxiety can affect her comfort and perception of labor pain.

Objective Data

The examination results showed that Mrs. "D" was in good general condition, with vital signs within normal limits, and an obstetric examination indicated a single, viable intrauterine fetus in a cephalic presentation. Labor progress examination showed that cervical dilation was slow and took longer than normal. The dilation process lasted 27 hours, from 1:00 PM WITA on December 28th to 4:00 PM WITA on December 29th. In the first 16 hours, dilation only increased from 2–3 cm to 3 cm, with an average rate of approximately 0.26 cm/hour, indicating a slowing of labor progress.

The physical examination results showed a good general condition, vital signs within normal limits, and a single, viable intrauterine fetus in a cephalic presentation, consistent with normal pregnancy outcomes (Yusri, 2020). The first stage of labor lasts from the onset of contractions until complete dilation and consists of a latent phase and an active phase (Mutmainnah *et al.*, 2021). In multiparous mothers, the first stage generally lasts around 6–8 hours, while labor that lasts more than 8 hours or shows slow progress in dilation can be categorized as a prolonged first stage (Subiastutik and Maryanti, 2022). This condition can be influenced by less effective uterine contractions, the mother's psychological condition, or other factors (Merida *et al.*, 2023).

Assessment

Based on subjective and objective data, Mrs. "D" was diagnosed as G4P3A0 with a prolonged first stage of labor. This diagnosis was based on the 27-hour duration of labor and the slow cervical dilation, particularly in the first 16 hours, when the cervical dilation only increased to 3 cm. This condition indicates that labor progress was not in line with the expected time and rate of dilation.

The diagnosis was established based on the systematic interpretation of assessment and examination data. Complete and accurate data collection is the basis for determining the diagnosis and subsequent midwifery care. Accuracy in data collection also plays a role in improving diagnostic accuracy and successful management. The midwife's ability to recognize a prolonged first stage early is crucial to prevent complications for the mother and fetus.

In Mrs. "D"'s case, there were also potential problems such as maternal fatigue, infection, and fetal disorders such as asphyxia due to a prolonged labor. Prolonged labor can increase the risk of maternal and neonatal complications, requiring close monitoring during labor (Mutmainnah *et al.*, 2021). Conditions during delivery and early life also need to be considered because they are related to the condition of the baby and subsequent growth and development, especially in babies with risk factors such as low birth weight and nutritional problems (Justin *et al.*, 2025)

Management

Midwifery care for Mrs. "D" involved continuous monitoring of the condition of the mother and fetus, as well as the progress of labor. Monitoring included vital signs, uterine contractions, fetal heart rate, cervical dilation, and labor progress using a partograph. The mother was provided with psychological support, relaxation and breathing techniques, and was encouraged to maintain a comfortable position. Fluid and nutritional needs were also met according to the mother's condition. In this case, no emergency signs such as bleeding or fetal distress were found, so no immediate intervention or collaboration with other healthcare professionals was required. Immediate intervention

was provided if conditions threatening the safety of the mother or fetus were identified (Marmi, 2017) The midwife's ability to differentiate between normal and abnormal conditions is necessary so that the actions taken are in accordance with the mother's needs (Dwi Susilowati, 2021).

Midwifery care for women in labor needs to be carried out comprehensively through monitoring the condition of the mother and fetus, the progress of labor, and providing support during the labor process. Asari et al. (2025) showed that monitoring vital signs, labor progress, providing breathing and relaxation techniques, meeting fluid needs, protecting the perineum, and monitoring the third and fourth stages of labor are important parts of supporting a safe delivery. In the case of Mrs. "D", care was also carried out through monitoring vital signs, fetal heart rate, contractions, and cervical dilation using a partograph, accompanied by providing psychological support, relaxation and breathing techniques, meeting fluid and nutritional needs, and using a gym ball with pelvic rocking techniques. Thus, the implementation of care for Mrs. "D" is in line with the principles of intranatal care that emphasize continuous monitoring and support for the mother during the labor process (Altahira, Asari and Sapril, 2025)

In addition to monitoring and support during labor, complementary interventions such as using a gym ball with pelvic rocking techniques are provided to help increase comfort and support labor progress. Using a gym ball can help speed up the labor process and improve maternal comfort (Elvira *et al.*, 2023). Pelvic rocking movements can help expand the pelvic cavity and support the descent of the lowest part of the fetus (Nurhasanah *et al.*, 2023). Using a birth ball can also help the mother maintain an active position during labor and support the progress of labor (Sutisna, 2021). Exercises using a birth ball have been reported to help reduce pain and accelerate cervical dilation during the first stage of labor.

Implementation was carried out according to plan, including providing emotional support, teaching relaxation and breathing techniques, monitoring the condition of the mother and fetus, and assisting the mother in pelvic rocking exercises using a gym ball. Following the intervention, cervical dilation progressed to 10 cm, allowing labor to proceed to the next stage (Andarwulan, Hubaedah and Hakiki, 2022) Implementing care in accordance with procedures and action plans can improve the quality of midwifery services.

Furthermore, delivery assistance was provided according to Normal Delivery Care standards until the baby was born, followed by newborn care. Continuous evaluations of the mother and fetus' condition were conducted to assess the success of the care and determine the necessary follow-up. The evaluation results indicated that the mother was able to follow the provided care, labor progressed well, and labor proceeded without complications until the baby was born. Therefore, the care provided to Mrs. "D" met the needs of the mother with a prolonged first stage of labor and demonstrated a congruence between theory and practice.



Figure 1. Gym ball technique and labor process

CONCLUSION

Midwifery care for Mrs. "D" G4P3A0, 42 weeks and 2 days gestation, with a prolonged first stage of labor at the Mawasangka Community Health Center was implemented comprehensively and systematically using Varney's 7-Step approach, which includes baseline data collection, baseline data interpretation, identification of actual diagnoses or problems, identification of potential problems, immediate and collaborative action, care planning, implementation, and evaluation, and documented in SOAP format. Based on the assessment results, Mrs. "D" experienced labor with slow cervical dilation, thus establishing a diagnosis of prolonged first stage. The care provided included monitoring the condition of the mother and fetus, monitoring the progress of labor using a partograph, providing emotional support, meeting fluid and nutritional needs, relaxation techniques, and complementary care in the form of a gym ball with pelvic rocking techniques to help increase maternal comfort and support labor progress. Throughout the care process, the condition of the mother and fetus remained good, cervical dilation progressed to full, labor proceeded spontaneously, the baby was born in good condition, and no complications were encountered during the first to fourth stages. The evaluation showed that the care provided was implemented according to the plan and midwifery service standards so that the objectives of the case study could be achieved. The limitations in this case study are the limited time of implementation and observation of the labor process until the fourth stage and the case study was only conducted on one subject, so the results of the implementation of complementary care in the form of a gym ball with pelvic rocking techniques cannot be generalized to all women giving birth with a prolonged first stage.

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