

## Midwifery Care for a Woman in Labor with Prolonged First Stage Using a Gym Ball at Kanapa Napa Community Health

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### ARTICLE INFORMATION

Received: 5 August 2025  
Revised : 9 September 2025  
Accepted: 14 October 2025  
DOI:

### KEYWORDS

Midwifery, Childbirth, First Stage of Labor, Prolonged First Stage of Labor, Gym Ball

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### A B S T R A C T

**Background:** Prolonged first stage of labor is marked by slow cervical dilation from ineffective uterine contractions, which can cause maternal fatigue, anxiety, infection, and fetal distress. The gym ball is a non-pharmacological complementary care to support labor progress. **Purpose:** To provide intranatal midwifery care to Mrs. "W" with prolonged first stage at Kanapa-Napa Community Health Center using Varney's seven-step approach with SOAP documentation. **Sample/Subject:** A woman in labor, Mrs. "W", 28 years old, G1P0A0, 39 weeks 3 days gestation, diagnosed with prolonged first stage of labor. **Method:** A descriptive case study using Varney's seven-step approach; data were collected through interviews, observation, physical examination, and documentation, then analyzed and recorded as SOAP. **Results:** After care—monitoring vital signs, fetal heart rate, and contractions every 30 minutes, psychological support, nutrition support, and gym ball for 30 minutes—contractions improved from 3×10 minutes/15–20 seconds to 4–5×10 minutes/35–40 seconds, cervical dilation progressed from 4 cm to full, and the baby was born spontaneously and healthy without major complications. **Conclusion:** Intranatal care using Varney's seven-step approach with the gym ball method helped accelerate labor progress and improve maternal comfort in a case of prolonged first stage of labor.

**Keywords:** Midwifery, Childbirth, First Stage of Labor, Prolonged First Stage of Labor, Gym Ball

### INTRUODOCTION

Childbirth is the process by which the fetus, placenta, and amniotic membranes are expelled from the uterus through the birth canal, initiated by cervical opening and dilation resulting from regular uterine contractions—characterized by consistent frequency, duration, and strength. Childbirth is considered normal when it occurs at term ( $\geq 37$  weeks of gestation) and proceeds without complications (Sitorus et al., 2024). According to the World Health Organization (WHO), a normal delivery is a spontaneous birth process involving a vertex presentation (head-first) at a gestational age of 37–42 completed weeks, resulting in both the mother and baby being in good health (P. D. Anggraeni et al., 2022).

Prolonged labor is a contributing factor to increased maternal and perinatal morbidity and mortality, particularly when the first stage of labor is prolonged. A prolonged first stage of labor is defined as a condition where the latent phase exceeds 8 hours, characterized by a cervical dilation rate of less than 1 cm per hour—specifically less than 1.2 cm per hour for primigravidae and less than 1.5 cm per hour for multiparae. Prolonged labor occurs in approximately 5% of deliveries, with an incidence rate twice as high among primigravidae. This condition contributes to rising Maternal Mortality Rates (MMR) and Infant Mortality Rates (IMR); globally, prolonged labor accounts for 8% of maternal deaths, while in Indonesia, the figure is 9% (Efrida Riado Trini Tesya Sitompul, 2019).

Prolonged labor can lead to various complications, including intrapartum infection, uterine rupture, pathological retraction ring, fistula, and pelvic floor injury in the mother, as well as caput succedaneum, molding, and asphyxia in the fetus (Restanty et al., 2018). This condition is largely influenced by the mother's psychological state, which can heighten pain perception, induce stress, and trigger the release of certain hormones, thereby weakening uterine contractions (Sofwatillah, Risnita, 2024). Maternal mortality reports in Southeast Sulawesi Province show an upward trend, rising from 67 per 100,000 live births in 2021 to 74 per 100,000 live births in 2022; consequently, prolonged labor remains a public health issue requiring serious attention.

Various strategies have been developed to manage prolonged first-stage labor, ranging from pharmacological interventions—such as oxytocin augmentation—to non-pharmacological approaches

involving complementary care. Although effective, pharmacological management carries risks of side effects like uterine hyperstimulation and fetal distress if not strictly monitored; consequently, many primary care facilities, such as community health centers, prioritize non-pharmacological approaches as a first-line measure prior to referral (Ijabah et al., 2023). Several non-pharmacological methods whose effectiveness has been studied include relaxation techniques, acupressure, aromatherapy, prenatal gentle yoga, Maryam exercises, upright positioning, and the use of a gym ball or birthing ball (Khalifatunnisak et al., 2023).

One non-pharmacological complementary care method used to help accelerate labor progress during prolonged first-stage labor is the gym ball technique—specifically, pelvic rocking exercises performed on the ball. This method utilizes gravity, expands the pelvic cavity, and stimulates the release of natural endorphins and oxytocin, thereby facilitating cervical dilation and reducing labor pain. Previous studies indicate that consistent use of a birthing ball by women in the active phase of the first stage of labor can significantly shorten the duration of this stage compared to groups not receiving the intervention; the upright sitting position on the ball aids the descent of the fetal presenting part, exerting optimal pressure on the cervix and triggering the Ferguson reflex (Subani & Sari, 2023). Based on an assessment conducted at the Kanapa-Napa Community Health Center on December 22, 2025, a case of prolonged first-stage labor was identified in Mrs. "W," who was experiencing inadequate contractions and anxiety regarding her fetus's condition, thereby posing a risk of complications if not managed promptly.

As primary healthcare facilities, Community Health Centers (Puskesmas) play a crucial role in the early detection and initial management of childbirth complications—including prolonged first-stage labor—prior to referral to higher-level facilities when necessary. The role of midwives in providing comprehensive, continuous, and evidence-based care is key to reducing maternal morbidity and mortality associated with prolonged labor (Gitasari et al., 2025). Therefore, the implementation of systematic midwifery management, combined with safe and easily applicable complementary care in primary health facilities, is highly relevant for further examination through case studies.

Based on the foregoing, the author is interested in conducting a case study on intranatal care for Mrs. "W," who experienced a prolonged first stage of labor, by implementing complementary gym ball care at the Kanapa-Napa Community Health Center. The study aims to provide a practical illustration of applying Varney's seven-step midwifery management and SOAP documentation in addressing a prolonged first stage of labor within primary midwifery practice. It is hoped that this case study will serve as a scientific reference for healthcare professionals—particularly midwives—in delivering intranatal care that is safe, effective, and centered on the comfort of the laboring mother.

## METHODOLOGY

This study employs a qualitative descriptive method using a case study approach. This approach is utilized to provide an in-depth description of the provision of intranatal midwifery care for a woman experiencing a prolonged first stage of labor. The care was administered based on Varney's seven steps of midwifery management: data assessment, identification of diagnoses or problems, identification of potential problems, determination of immediate action, care planning, implementation of care, and evaluation. The entire care process was documented using the SOAP method, comprising subjective data, objective data, assessment, and planning (Harfiani et al., 2024).

This case study was conducted at the Kanapa-Napa Community Health Center (Puskesmas), Mawasangka District, from December 2, 2025, to January 23, 2026. The research subject was a woman in labor diagnosed with a prolonged first stage of labor who received midwifery care at the Kanapa-Napa Community Health Center. The subject was selected using purposive sampling based on specific criteria: a woman in labor experiencing a prolonged first stage, willingness to participate in the study, and receipt of midwifery care throughout the labor process.

The study utilizes primary data, which were obtained directly through interviews, observations, and physical examinations of the mothers. Secondary data were gathered from Maternal and Child Health (MCH) handbooks, medical records, healthcare service logs, and relevant literature. The use of both data types aims to ensure comprehensive information and support the accuracy of the assessment results. The collected data were subsequently reviewed, categorized, and descriptively analyzed to provide a holistic overview of the care provided and to facilitate the drawing of conclusions (Sofwatillah, Risnita, 2024).

This study adheres to ethical principles for health research. Prior to the provision of care, subjects received an explanation regarding the research objectives and procedures and signed an

informed consent form. Subject identities were protected through the use of initials or codes, while the confidentiality of all information obtained was maintained and used solely for research purposes.

## RESULTS & DISCUSSIONHASIL

**Table 1. Characteristics and Summary of Care Outcomes for Case Study Subjects**

| Characteristics            | Results                                  |
|----------------------------|------------------------------------------|
| Maternal age               | 28 years old                             |
| Obstetric status           | G1P0A0                                   |
| gestational age            | 39 weeks 3 day                           |
| initial opening            | 4 cm                                     |
| His early                  | 3x10 minutes, duration 15-20 seconds     |
| Early DJJ                  | 132/minute                               |
| Long gym ball intervention | 30 minutes, 2 sessions                   |
| His after the intervention | 4-5x10 minutes, duration 35-40 seconds   |
| Complete opening achieved  | December 23, 2025, at 11:00 WITA         |
| Bavi,s birth time          | December 23, 2025, at 1:15 PM WITA       |
| Birth weight               | 3.700 grams                              |
| Complocations              | First-degree perineal rupture (heacting) |

### Subjective Data

The assessment of subjective data was conducted from the time Mrs. "W" arrived at the Kanapa-Napa Community Health Center (Puskesmas) on December 22, 2025, at 01:10 WITA, until the completion of the delivery process. Upon admission, the mother (28 years old; G1P0A0; 39 weeks and 3 days pregnant; husband Mr. "N," 25 years old) complained of abdominal pain radiating to her back—present since 14:00 WITA on December 21, 2025—accompanied by a bloody mucous discharge, although there had been no significant cervical dilation. She described her contractions as weak and infrequent, reported extreme fatigue due to the prolonged labor process, and expressed anxiety regarding her ability to cope with labor and the condition of her fetus. Upon entering the second stage of labor, she reported a strong urge to push and a sensation of needing to defecate, accompanied by anal pressure and intensifying pain. During the third stage, she complained of lower abdominal pain and fatigue, and felt a heavy flow of blood from the birth canal. Entering the fourth stage, she continued to experience abdominal pain and postpartum fatigue but felt overall relief and gratitude for the birth of her baby... These complaints align with the theory that in primigravidae, early labor pain and inadequate uterine contractions (uterine inertia) often trigger physical fatigue and psychological anxiety, as the cervix and birth canal tissues have not previously undergone stretching.

### Objetive Data

Initial physical examination showed the mother in good general condition, fully conscious (\*compos mentis\*), with vital signs within normal limits (BP 126/82 mmHg, pulse 80 bpm, respiration 20 breaths/min, temperature 36.5°C). Leopold maneuvers indicated a single, live fetus in cephalic presentation and longitudinal lie with the fetal back on the left; the fetal heart rate (FHR) was regular at 132 bpm. A vaginal examination (VT I) at 01:00 WITA revealed normal vulva/vagina, a thick cervix, 4 cm dilation, intact membranes, and the fetal head at the Hodge II station; there was no molding or cord prolapse, but uterine contractions were inadequate (3 contractions per 10 minutes, lasting 15–20 seconds). These findings were consistent with the clinical criteria for prolonged first stage of labor, defined as a cervical dilation rate of less than 1.2 cm/hour in primigravidae (Nia Clarasari Mahalia Putri, 2023). Following care, uterine contractions improved gradually to 4–5 contractions per 10 minutes lasting 35–40 seconds, and cervical dilation progressed to full dilation (10 cm) by 11:00 WITA on December 23, 2025. During the second stage of labor, examination revealed a bulging perineum, gaping vulva and anus, full dilation, intact membranes, cephalic presentation, fetal head at Hodge V station, and a good, regular FHR (140 bpm); the baby was delivered spontaneously at 13:15 WITA. During the third stage, findings included good uterine contractions (firm and round), the uterine fundus palpable at the level of the umbilicus, a sudden brief gush of blood, and apparent

lengthening of the umbilical cord, indicating placental separation. The placenta and fetal membranes were delivered intact, though a first-degree perineal tear was noted. During the fourth stage of labor, vital signs remained within normal limits; uterine contractions were strong, with the uterus firm and round, and the fundal height was at the level of the umbilicus. Bleeding gradually decreased from 30 cc to 10 cc over the two-hour monitoring period, and the infant was born healthy, weighing 3,700 grams.

### **Analysis**

Based on the subjective and objective data, the assessments established progressively throughout the labor process are as follows. During the first stage of labor, the diagnosis established for Mrs. "W" (G1P0A0, 39 weeks and 3 days of gestation, intrauterine, singleton, live fetus, longitudinal lie with the back on the left, cephalic presentation) was a prolonged first stage of labor; potential issues identified included the risk of maternal exhaustion, fetal distress due to intrauterine hypoxia, and intrapartum infection resulting from the prolonged labor process. Early identification of these potential issues is crucial for preparing preventive and anticipatory measures to avoid severe complications. The assessment for the second stage was a second stage of labor progressing well toward spontaneous delivery; for the third stage, it was a progression showing clear signs of placental separation; and for the fourth stage, it was a progression with the mother and baby in good general condition, despite a minor birth canal laceration requiring suturing.

### **Management**

Comprehensive and continuous midwifery care was provided to Mrs. "W" from the first through the fourth stages of labor. During the first stage, the mother's general condition, vital signs, fetal heart rate, uterine contraction frequency and duration, cervical dilation progress, and fetal head descent were monitored through periodic examinations and the use of a partograph. The mother received explanations regarding her own and the fetus's condition, along with psychological support to alleviate anxiety and boost her confidence during the labor process. To enhance comfort and facilitate labor progress, she was encouraged to mobilize, adopt comfortable positions (particularly the left lateral position), practice relaxation and breathing techniques, and maintain adequate nutrition and hydration; additionally, complementary care involving the use of a gym ball for pelvic rocking exercises for approximately 30 minutes was provided. All procedures were explained to the mother beforehand to ensure her cooperative participation in the care. Furthermore, the care involved collaboration with other healthcare professionals to monitor the condition of the mother and fetus, and preparations were made for a potential referral should labor fail to progress.

Once full cervical dilation is achieved, management proceeds to the second stage of labor by monitoring the condition of the mother and fetus, preparing delivery equipment, guiding the mother to push effectively in coordination with contractions, assisting her in finding a comfortable position, and conducting the delivery according to established procedures. After the baby's head is delivered, the umbilical cord is checked for possible nuchal cord entanglement, followed by the delivery of the shoulders and the rest of the body. The baby is then placed on the mother's abdomen, dried, and placed in skin-to-skin contact with the mother, allowing for the initiation of breastfeeding.

During the third stage of labor, active management was performed, involving repositioning the umbilical cord clamp, applying controlled cord traction during uterine contractions accompanied by dorsocranial uterine pressure, assisting with placental delivery, massaging the uterine fundus, and inspecting the placenta and fetal membranes for completeness. Following the delivery of the placenta, an examination of the birth canal revealed a first-degree perineal tear, which was subsequently treated with suturing.

During the fourth stage of labor, the mother's general condition, vital signs, uterine contractions, fundal height, bladder status, and amount of bleeding were periodically monitored to facilitate the early detection of potential postpartum hemorrhage. The baby remained on the mother's abdomen to maintain skin-to-skin contact and support the breastfeeding process. The mother was provided with food and fluids to aid recovery after delivery, while the baby's condition continued to be monitored. Upon completion of all procedures, the instruments and the surrounding area were cleaned and decontaminated. Evaluation results indicated that uterine contractions remained strong and firm, the mother's general condition and vital signs were stable, bleeding gradually subsided, and the baby was in good condition. Thus, the midwifery care for Mrs. "W"—spanning the first through the fourth

stages of labor—was successfully delivered continuously, and the issue of prolonged first-stage labor was resolved without serious complications for either the mother or the baby.

## **DISCUSSION**

### **Subjective Data**

Based on the assessment of Mrs. “W” (G1P0A0, 39 weeks and 3 days of gestation), subjective data indicate that she presented with abdominal pain radiating to her back—starting on December 21, 2025, at 15:30 WITA—accompanied by the discharge of blood-tinged mucus from the birth canal. She reported that her contractions remained weak and infrequent, and that cervical dilation had not progressed significantly. Additionally, she expressed fatigue due to the prolonged labor process and anxiety regarding her ability to cope with labor and the condition of her fetus. These complaints indicate signs of labor accompanied by psychological and physical states that could influence the birthing process. These complaints align with the theory that in primigravidae, early labor pain and inadequate uterine contractions (uterine inertia) often trigger physical fatigue and psychological anxiety, as the cervix and birth canal tissues have not previously undergone stretching (Huang et al., 2024). Theoretically, prolonged labor can lead to maternal fatigue and anxiety, which in turn may affect the effectiveness of uterine contractions and the progression of labor (Nasty Lasmi et al., 2022). Thus, the subjective data obtained in Mrs. “W’s” case align with the clinical presentation of a woman experiencing labor with suboptimal progression during the first stage.

### **Objective Data**

Objective data indicate the mother's general condition is good, and she is fully conscious (\*compos mentis\*). Vital signs are within normal limits: blood pressure 126/82 mmHg, pulse 80 beats/minute, respiration 20 breaths/minute, and temperature 36.5°C. Leopold maneuvers reveal a single, live, intrauterine fetus in a longitudinal lie, with the fetal back on the left side and cephalic presentation. The fetal heart rate (FHR) is 132 beats/minute and regular, indicating the fetus is in good condition at the time of assessment. A vaginal examination at 01:00 WITA shows a normal vulva and vagina; the cervix remains thick with 4 cm dilation; the amniotic membranes are intact; fetal head descent is at the Hodge II level; and no molding or cord prolapse is detected. Palpable uterine contractions are weak, occurring three times in 10 minutes with a duration of 15–20 seconds. These findings indicate a discrepancy between the duration of labor and the progression of cervical dilation and uterine contraction strength. This condition forms the basis for diagnosing prolonged first-stage labor, particularly as cervical dilation is proceeding more slowly than the expected rate of labor progression for a primigravida. The findings indicate that the labor process has not yet shown optimal progression toward the active phase. According to the WHO, the latent phase of the first stage of labor is characterized by painful uterine contractions accompanied by cervical changes and a slower rate of dilation up to approximately 5 cm, whereas the active phase begins at 5 cm of dilation and continues until full dilation. The WHO also emphasizes that the pattern of cervical dilation in early labor varies significantly; therefore, a dilation rate of less than 1 cm per hour cannot serve as the sole basis for diagnosing abnormal labor progression (Persalinan et al., 2020). The WHO also emphasizes that the pattern of cervical dilation during the early phase of labor varies significantly and that the threshold of 1 cm of dilation per hour cannot serve as the sole indicator for identifying impaired labor progress. Consequently, 4 cm of dilation in this case still falls within the latent phase according to the WHO definition and cannot be immediately categorized as prolonged labor or arrest of labor based solely on that examination finding (Safrina Komariah et al., 2022).

### **Analysis**

This condition forms the basis for diagnosing prolonged first-stage labor, particularly as cervical dilation is proceeding more slowly than the expected rate of labor progression for a primigravida. Based on the subjective and objective data, the established analysis is that Mrs. “W” (G1P0A0, gestational age 39 weeks and 3 days) is carrying a single live intrauterine fetus in a longitudinal lie with a left-sided back and cephalic presentation; both mother and fetus are in good condition, but she is experiencing a prolonged first stage of labor. This diagnosis is based on the protracted nature of the labor, accompanied by inadequate uterine contractions and slow cervical dilation. This condition aligns with the theory that a prolonged first stage of labor can occur when cervical dilation proceeds more slowly than expected, particularly when accompanied by inadequate uterine contractions. In this case, the most prominent factor is weak and infrequent uterine

contractions, resulting in suboptimal cervical dilation. In addition to the actual diagnosis, issues regarding maternal fatigue and anxiety were also identified. If these conditions are not managed effectively, potential complications may arise, such as worsening maternal fatigue, impaired labor progression, fetal distress, and an increased risk of infection due to the prolonged labor (A. D. Anggraeni et al., 2024).

## Management

Comprehensive management for Mrs. “W” prioritized monitoring the condition of both the mother and fetus, alongside efforts to facilitate the progression of labor. The initial step involved clearly communicating examination findings to the mother and her family to ensure she understood her condition and to alleviate her anxiety. Providing emotional support during labor was crucial, as anxiety and fear can increase tension and hinder the mother's ability to cope with contractions. Subsequently, the medical team collaborated with the physician to administer a Ringer’s Lactate infusion and prepare oxygen for potential use. Vital signs, fetal heart rate, and uterine contractions were monitored regularly to enable early detection of any changes in the condition of the mother or fetus. The mother was also encouraged to void regularly—since a full bladder can impede the descent of the fetal head—and to adopt a left lateral position to enhance comfort and support uteroplacental perfusion (Gultom et al., 2024).

In addition to standard care, nutritional and fluid support tailored to the mother's condition is provided to help maintain energy levels during labor. Mothers are also taught relaxation and breathing techniques to help reduce tension and enhance their ability to cope with pain and contractions. As a complementary measure, a gym ball (or birthing ball) is utilized; the mother sits on the ball and performs pelvic rocking movements for 30 minutes, a practice carried out twice. Using the gym ball in an upright position allows for mobilization and pelvic movement, thereby helping to increase comfort, utilize gravity, and facilitate the descent of the fetal head and the progression of cervical dilation (Huang et al., 2024). The implementation of this care aligns with research by Subani, which indicates that the use of a birthing ball can help accelerate the progression of cervical dilation in women during the first stage of labor. Research findings also demonstrate that upright positions—including the use of a birthing ball—can help accelerate progress during the first stage compared to lying down, while other studies indicate that the left lateral position and upright positions can support the progression of cervical dilation (Subani & Sari, 2023).

Evaluation of the care provided indicated positive changes in Mrs. “W”’s labor process. Following continuous monitoring and care, uterine contractions improved gradually—shifting from a frequency of 3 contractions per 10 minutes (lasting 15–20 seconds) to 4–5 contractions per 10 minutes (lasting 35–40 seconds). Cervical dilation also progressed steadily, reaching full dilation (10 cm) at 11:00 WITA on December 23, 2025. Both the mother and fetus remained in good condition throughout the monitoring period. These results demonstrate that the management provided effectively supported the improvement of contractions and the progression of labor, leading to the conclusion of the first stage and the mother's entry into the second stage of labor.

When compared with previous theories and research findings, the care provided to Mrs. “W” was generally consistent with the principles of midwifery management. Research on the effectiveness of upright positions regarding the duration of the active phase of the first stage of labor in primigravidas indicates that upright positions—including sitting on a birthing ball—can significantly shorten the duration of the first stage compared to the supine position, as they utilize gravity and increase the pelvic diameter (Heni sumastri & Dwiana As, 2023). Similarly, research on the effects of the left lateral and upright positions indicates an acceleration in the progression of cervical dilation comparable to the results observed in the case of Mrs. “W.” Numerous other studies on non-pharmacological complementary methods—such as gentle prenatal yoga and Maryam exercises—also report reduced labor pain intensity and accelerated progression during the first stage of labor, consistent with the findings of this case study. These results reinforce the evidence that non-pharmacological approaches based on movement and body positioning are generally effective as complementary care for prolonged first-stage labor (Nasifah et al., 2022). The assessment encompassed the subjective and objective data necessary to identify labor-related issues, and the analysis considered both actual conditions and potential complications; meanwhile, management involved monitoring maternal and fetal status, meeting basic needs, providing psychological support and collaborative care, and administering complementary care using a birth ball. The use of mobilization and upright positioning in this case aligns with research demonstrating the benefits of

such positions for the progression of labor (Phalswal et al., 2024). Thus, no significant discrepancy was found between theory and practice in the care provided to Mrs. “W,” who was experiencing a prolonged first stage of labor.

Nevertheless, the successful progression of labor in this case cannot be attributed solely to the use of a gym ball, as the labor process is influenced by various factors—such as the strength of uterine contractions, the mother's psychological state, fetal position and descent, and the support provided during labor. Furthermore, as this is a single case study, the findings cannot be absolutely generalized to all mothers experiencing a prolonged first stage of labor. Therefore, while the gym ball can be viewed as a form of complementary care that supports labor management, it must be implemented alongside continuous monitoring and standard midwifery care (Tatsch et al., 2025).



Figure 1. Providing gym ball care

## CLOSING

### Conclusion

Intranatal midwifery care for Mrs. “W,” who presented with a prolonged first stage of labor at the Kanapa-Napa Community Health Center, was administered in accordance with Varney’s seven-step midwifery management approach. This process encompassed the assessment of subjective and objective data; the diagnosis of a prolonged first stage of labor; the identification of potential issues—specifically maternal fatigue, fetal distress, and infection risk; the determination of immediate interventions and collaboration with other healthcare professionals; the formulation and implementation of a care plan focused on accelerating cervical dilation using a gym ball; and the final evaluation. The results demonstrated that Mrs. “W” successfully achieved full cervical dilation and delivered a healthy baby spontaneously without severe complications; thus, it can be concluded that the application of complementary gym ball care within the framework of Varney’s seven-step midwifery management can help accelerate labor progress and enhance maternal comfort in cases of a prolonged first stage of labor. Limitations of this case study include the single-subject scope, the subjectivity involved in pain perception, and the limited availability of gym ball equipment at the healthcare facility where the study was conducted.

### Sugestion

It is recommended that the Kanapa-Napa Community Health Center (Puskesmas) equip itself with the necessary facilities and infrastructure to support complementary care—including the provision of gym balls in various sizes tailored to the heights of women in labor—and develop Standard Operating Procedures (SOPs) for the use of gym balls as part of “mother-friendly care” during the first stage of labor, ensuring consistent implementation by all healthcare personnel at the facility.

For the midwifery profession, the findings of this case study are expected to serve as a consideration for implementing evidence-based, non-pharmacological complementary care as part of "mother-friendly care"—particularly in cases of prolonged first-stage labor—without overlooking the need to remain vigilant for danger signs requiring collaborative action or immediate referral. Continuous efforts to enhance midwives' competence through training in complementary intrapartum care must also be sustained.

Future researchers are advised to conduct studies with more robust designs—such as experimental studies incorporating a control group and a larger sample size—to obtain stronger scientific evidence regarding the effectiveness of the gym ball method in accelerating the first stage of labor, as well as to examine other factors influencing the success of this intervention, such as parity, body mass index, and the level of psychosocial support received by the mother

Clients and their families are encouraged to actively participate in prenatal classes and pregnancy exercises to prepare themselves physically and psychologically for childbirth, and to openly communicate any complaints or concerns to healthcare providers so that the care delivered can be tailored to individual needs.

## THANK-YOU NOTE

The author extends gratitude to Midwives Wa Ode Nesya Jeni Samrida, S.ST., M.Keb, and Risnawati, S.ST., M.Kes, for their guidance and supervision during the preparation of this case study; to the Kanapa-Napa Community Health Center (Puskesmas) in Mawasangka District for the permission and facilities provided during the provision of care; and to Mrs. “W” and her family for agreeing to participate as the subject of this case study.

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