The 6th Mitra Husada Health International Conference (MiHHICo) 2026
Volume 6 (2026) ISSN: 2988-3768

MIDWIFERY CARE MANAGEMENT FOR A 25-YEAR-OLD PREGNANT WOMAN (G1P0A0) WITH PREMATURE RUPTURE OF MEMBRANES (PROM) AT KLINIK PRATAMA SITI KHOLIJAH IN 2026

[1]Khairunnisa, [2] Kartika Ovalina Br.Ginting, [3]Erin Padilla Siregar,
[4]Diah Pitaloka,[5]Damayanty S, [6]Siti Kholijah
[1,2,3,4,5]Sekolah Tinggi Ilmu Kesehatan Mitra Husada Medan
Email : 2319201032@mitrahusada.ac.id,2319201029@mitrahusada.ac.id, erinpadilla@mitrahusada.ac.id,diahpitaloka@mitrahusada.ac.id,Damayanty mitrahusada.ac.id, sitikholijah@mitrahusada.ac.id

ABSTRACT

Background: The Maternal Mortality Rate (MMR) in Indonesia remains high, recorded at 189 per 100,000 live births in 2025, placing Indonesia among the countries with the highest MMR in Southeast Asia. One of the major causes of pregnancy and childbirth complications is Premature Rupture of Membranes (PROM), which can increase the risk of infection, preterm labor, and maternal and neonatal mortality. Therefore, appropriate midwifery care is essential to prevent further complications in PROM cases. **Objective:** This case study aims to analyze the management of midwifery care for a 25-year-old pregnant woman, Ny. R, G1P0A0, with Premature Rupture of Membranes (PROM) at Klinik Pratama Siti Kholijah. **Methods:** This study used a descriptive case study approach. The subject was one pregnant woman diagnosed with PROM. Data were collected through interviews, observation, physical examination, and medical record documentation. The analysis was conducted by reviewing the mother's characteristics, pregnancy history, obstetric history, and medical history, and then comparing them with relevant theories and midwifery care standards. **Results:** The case study showed that the management of midwifery care for a woman with PROM was carried out through comprehensive assessment, monitoring of maternal and fetal conditions, and collaborative management according to medical indications to prevent further complications. **Conclusion:** Midwifery management in pregnant women with Premature Rupture of Membranes (PROM) must be performed promptly, appropriately, and comprehensively to prevent the risk of infection and complications for both mother and fetus.

Keywords: Care Management, Premature Rupture of Membranes, PROM

The 6th Mitra Husada Health International Conference (MiHHICo) 2026
Volume 6 (2026) ISSN: 2988-3768

INTRODUCTION

The Maternal Mortality Rate (MMR) remains a significant public health issue, particularly in developing countries. In Indonesia, the MMR is still relatively high, recorded at 189 per 100,000 live births in 2025 (Sorrenti *et al.*, 2024). This situation places Indonesia among the countries with the highest maternal mortality rates in Southeast Asia and indicates that maternal health services still require continuous improvement, especially in the prevention and management of pregnancy and childbirth complications (Starrach *et al.*, 2025).

One of the major complications that can occur during pregnancy is Premature Rupture of Membranes (PROM) (Sinaga, 2022). PROM is defined as the rupture of the amniotic sac before the onset of labor. This condition may occur at term or preterm and is associated with various risk factors such as infection, cervical insufficiency, and a history of reproductive tract disorders (Surya and Aryasatiani, 2023). PROM is clinically important because it can lead to serious complications, including intrauterine infection (chorioamnionitis), umbilical cord compression, preterm birth, and an increased risk of maternal and neonatal morbidity and mortality.

If PROM is not managed promptly and appropriately, it may result in severe adverse outcomes for both the mother and the fetus (Rinayanti Manurung *et al.*, 2024). Therefore, early detection and appropriate management are essential components of obstetric care. Midwifery care plays an important role in identifying risk factors, performing comprehensive assessments, monitoring maternal and fetal conditions, and ensuring timely referral and collaborative management when necessary.

In addition, evidence-based midwifery interventions are crucial in reducing complications associated with PROM. These interventions include careful observation of vital signs, fetal heart rate monitoring, prevention of infection, and preparation for safe delivery planning. This case study aims to describe the management of midwifery care in a 25-year-old pregnant woman, G1P0A0, diagnosed with PROM at Klinik Pratama Siti Kholijah in 2026. This study is expected to provide an overview of the implementation of comprehensive midwifery care in high-risk pregnancy cases and contribute to improving maternal and neonatal health outcomes.

METHODS

This study used a descriptive case study design to analyze the midwifery care management provided to a pregnant woman diagnosed with Premature Rupture of Membranes (PROM). The case was conducted at Klinik Pratama Siti Kholijah in 2026.The subject of this study was a 25-year-old pregnant woman, G1P0A0, who was diagnosed with PROM. The selection of the subject was based on the presence of a high-risk pregnancy condition requiring comprehensive midwifery care management. Only one case was included in this study to allow for an in-depth analysis of the care process.

Data collection was carried out using several methods, including interviews, direct observation, physical examination, and documentation review from the patient's medical records. The interview was conducted to obtain information related to the patient's identity, obstetric history, current pregnancy complaints, and supporting factors. Observation and physical examination were performed to assess the maternal condition, including vital signs and obstetric status, as well as fetal well-being.

The 6th Mitra Husada Health International Conference (MiHHICo) 2026
Volume 6 (2026) ISSN: 2988-3768

In addition, medical record documentation was used to support the accuracy of clinical data and to complement findings obtained from interviews and examinations. The collected data were then organized and analyzed descriptively by reviewing the patient's condition, identifying existing problems, and comparing the findings with relevant midwifery theories and standard care guidelines.

RESULTS AND DISCUSSIONS

The case involved a 27-year-old pregnant woman (G2P1A0) at 36 weeks of gestation who presented with vaginal fluid leakage mixed with blood for approximately three hours before admission. The fluid was clear and odorless, accompanied by lower abdominal pain radiating to the back. Fetal movement was still active, and there was no history of fever or chronic diseases.

Table 1. Maternal History and Case Presentation

Component	Findings
Age	27 years old
Obstetric status	G2P1A0
Gestational age	36 weeks
Chief complaint	Vaginal fluid leakage with blood spotting
Fluid characteristics	Clear, odorless
Additional symptoms	Lower abdominal pain radiating to back
Fetal movement	Active
Medical history	No chronic disease
Previous delivery	Normal spontaneous delivery

The patient presented with clinical features highly suggestive of premature rupture of membranes (PROM), characterized by spontaneous leakage of clear amniotic fluid before the onset of active labor. The presence of mild blood spotting and abdominal pain indicated possible early labor activity. The absence of fever and chronic illness reduced the likelihood of concurrent systemic infection or medical comorbidities.

Table 2. Physical Examination Findings

Component	Findings
General condition	Good
Consciousness	Compos mentis
Blood pressure	90/70 mmHg
Pulse	88 beats/min
Temperature	36.8°C
Fundal height	28 cm
Fetal heart rate (FHR)	100 beats/min
Vaginal examination	Oligohydramnios, cervical dilation 1 cm
Repeat PV exam	Not performed

Physical examination revealed that the patient was hemodynamically stable. Vital signs were within acceptable limits, although blood pressure was slightly low, which is common in pregnancy but still requires monitoring. Fetal heart rate was 100 beats per minute, slightly below normal range, indicating the need for close fetal surveillance. Vaginal examination confirmed oligohydramnios and minimal cervical dilation, indicating early labor changes

The 6th Mitra Husada Health International Conference (MiHHICo) 2026
Volume 6 (2026) ISSN: 2988-3768

associated with PROM. Repeated vaginal examination was intentionally avoided to reduce the risk of ascending infection, which is a key principle in PROM management.

Table 3. Diagnosis and Care Needs

Component	Description
Diagnosis	PROM at 36 weeks gestation
Physical needs	Infection prevention, monitoring TTV and FHR, rest, nutrition
Psychological needs	Anxiety reduction and emotional support
Medical needs	IV access, oxygen readiness, referral preparation

The patient was diagnosed with premature rupture of membranes (PROM), a high-risk obstetric condition that requires immediate monitoring and intervention. Care priorities included infection prevention, continuous maternal and fetal monitoring, and maintaining maternal stability. Psychological support was essential due to the anxiety caused by sudden fluid leakage and uncertainty regarding delivery outcomes. Medical preparedness, including intravenous access and oxygen support, was also necessary in case of maternal or fetal deterioration.

Table 4. Potential Risks

Maternal Risks	Fetal Risks
Intrauterine infection	Fetal distress / asphyxia

The main maternal risk identified was intrauterine infection due to the loss of protective amniotic membranes, which allows ascending bacterial infection. For the fetus, the primary risk was fetal distress or asphyxia caused by reduced amniotic fluid volume, which may lead to umbilical cord compression and impaired oxygen supply.

Table 5. Management and Intervention

Intervention	Description
Referral	Transfer to hospital for advanced care
Education	Explanation of PROM and risks
Infection prevention	Avoid repeated vaginal examination
Positioning	Left lateral bed rest
Consent	Informed consent obtained

Immediate management focused on ensuring maternal and fetal safety through timely referral to a higher-level facility. The patient and family were given clear explanations regarding the diagnosis, risks, and possible outcomes to support informed decision-making. Infection prevention was prioritized by avoiding repeated vaginal examinations. The patient was advised to maintain left lateral position to improve uteroplacental circulation. Informed consent was obtained prior to referral in accordance with ethical and legal standards.

Table 6. Evaluation

Component	Result
Understanding	Patient and family understood condition
Consent	Family agreed to referral
Clinical condition	Stable during management
Compliance	Patient followed instructions
Outcome	Successful referral preparation

Evaluation showed that the patient and family understood the condition and agreed with the recommended management plan. The patient remained clinically stable throughout the

The 6th Mitra Husada Health International Conference (MiHHICo) 2026
Volume 6 (2026) ISSN: 2988-3768

process and complied with medical instructions. Overall, the care was effective in ensuring safe stabilization and timely referral, which is critical in PROM cases to prevent complications.

DISCUSSION

This case study describes the midwifery care management of a 27-year-old pregnant woman (G2P1A0) at 36 weeks of gestation diagnosed with Premature Rupture of Membranes (PROM). PROM is an obstetric condition where the amniotic sac ruptures before the onset of labor (Montesinos, Downe and Ramsden, 2023). International literature consistently states that PROM is associated with significant maternal and neonatal risks, particularly infection, preterm birth, and fetal compromise. In this case, the patient presented with clear vaginal fluid leakage accompanied by mild blood spotting and lower abdominal pain. These findings are consistent with the typical clinical presentation of PROM. According to recent obstetric evidence, PROM occurs in approximately 8–10% of term pregnancies and contributes to nearly one-third of preterm deliveries worldwide. Although the patient's vital signs were stable and there were no signs of fever, PROM remains a high-risk condition because complications may develop rapidly after membrane rupture (Santana *et al.*, 2018).

One of the important findings in this case was a fetal heart rate of 100 beats per minute, which is slightly below the normal range. Recent international studies indicate that abnormal or borderline fetal heart rate patterns in PROM cases may reflect early fetal stress due to reduced amniotic fluid volume and potential umbilical cord compression (Ernawati, Qonitatillah and Sulistyono, 2023). A 2024 meta-analysis also highlighted that PROM is strongly associated with increased neonatal morbidity, particularly respiratory distress and fetal distress, especially when oligohydramnios is present (Evalilis Br Munthe, Nur Azizah and Rosmani Sinaga, 2024). The management in this case followed evidence-based midwifery practice, focusing on infection prevention, continuous monitoring, and timely referral. Avoidance of repeated vaginal examinations is strongly supported by international guidelines, as it significantly reduces the risk of ascending infection and chorioamnionitis. A 2023 systematic review reported that infection risk is one of the most critical complications in PROM and increases with prolonged latency period after membrane rupture.

Another important aspect of care was maternal positioning in the left lateral position, which is recommended in obstetric practice to improve uteroplacental perfusion and fetal oxygenation (Buciu *et al.*, 2025). Studies on PROM management emphasize that conservative positioning and close monitoring can temporarily stabilize maternal-fetal conditions before definitive delivery planning. Early referral to a higher-level health facility was also a key intervention in this case (Lee and Lynch, 2025). Recent systematic reviews comparing outpatient and inpatient management of PROM show that hospital-based management allows better surveillance, early detection of complications, and improved neonatal outcomes, especially in cases with borderline fetal heart rate or oligohydramnios (Wahyuni *et al.*, 2020).

In addition to clinical management, psychological support played an essential role. The patient experienced anxiety due to sudden fluid leakage and uncertainty about fetal condition (Feduniw *et al.*, 2025). Effective communication and reassurance are important components of midwifery care, as maternal stress can negatively affect pregnancy experience and cooperation during management (Danciu *et al.*, 2023). This case aligns with international findings that emphasize PROM as a condition requiring early recognition, strict infection prevention, continuous fetal monitoring, and timely referral (Masembe *et al.*, 2024). Evidence from recent global studies consistently supports that comprehensive midwifery care significantly improves maternal and neonatal outcomes in PROM cases.

CONCLUSIONS

This case study describes the midwifery care management of a 27-year-old pregnant woman (G2P1A0) at 36 weeks of gestation diagnosed with Premature Rupture of Membranes (PROM). Based on the findings, PROM presents as a high-risk obstetric condition that requires immediate and comprehensive management to prevent maternal and fetal complications. The clinical assessment showed that the patient presented with clear vaginal fluid leakage, mild blood spotting, and lower abdominal pain, while vital signs remained stable. However, the fetal heart rate was slightly below the normal range, and oligohydramnios was identified, indicating the need for close fetal monitoring and early intervention.

The midwifery care provided in this case focused on early identification, infection prevention, continuous maternal and fetal monitoring, and timely referral to a higher-level healthcare facility. Avoidance of repeated vaginal examinations and positioning in the left lateral position were important interventions to reduce the risk of infection and improve uteroplacental circulation. Psychological support and effective communication were essential in reducing maternal anxiety and improving understanding of the condition and treatment plan. Collaboration with medical personnel ensured that the patient received appropriate and timely management.

ACKNOWLEDGEMENT

The author would like to express sincere gratitude to STIKes Mitra Husada Medan for providing academic support during this research. The author also thanks the research supervisor for valuable guidance and all respondents who willingly participated in this study. Appreciation is also extended to healthcare workers and related parties who assisted in the data collection process.

CONFLICT OF INTEREST AND FUNDING DISCLOSURE

The author declares that there is no conflict of interest regarding the publication of this article. This research did not receive any specific grant from funding agencies in the public, commercial, or non-profit sectors.

AUTHOR CONTRIBUTIONS

All the author make a contribution for the article such as conceptor, data curation, investigation, methodology, formal analysis, validation, visualization, writing original draft, writing review and editing.

REFERENCES

Buciu, V.B. *et al.* (2025) "The Impact of Maternal Education on Neonatal Outcomes in Preeclamptic Pregnancies from a Low-Resource Settings," *Journal of Clinical Medicine*, 14(11), pp. 1–16. Available at: https://doi.org/10.3390/jcm14113937.

Danciu, B.M. *et al.* (2023) "Is Spontaneous Preterm Prelabor of Membrane Rupture Irreversible ? A Review of Potentially Curative Approaches," *biomedicines*, pp. 1–18.

Ernawati, E., Qonitatillah, J. and Sulistyono, A. (2023) "The management of Monochorionic Monoamniotic (MCMA) twin pregnancy," *Majalah Obstetri & Ginekologi*, 31(2), pp. 103–109. Available at: https://doi.org/10.20473/mog.v31i22023.103-109.

Evalilis Br Munthe, Nur Azizah and Rosmani Sinaga (2024) "Hubungan Umur dan Gravida dengan Kejadian Kekurangan Energi Kronik pada Ibu Hamil di Puskesmas Lau Baleng Kecamatan Lau Baleng Tahun 2023," *Jurnal Siti Rufaidah*, 2(4), pp. 75–83.

Feduniw, S. *et al.* (2025) "Does the Vaginal Microbiota Influence the Incidence of the Preterm Premature Rupture of Membranes ?," 9, pp. 1–15.

Lee, D. and Lynch, T.A. (2025) "PPROM in the late preterm period: an argument for expectant management," *American Journal of Obstetrics & Gynecology MFM*, 7(1). Available at: https://doi.org/10.1016/j.ajogmf.2024.101563.

Masembe, S. *et al.* (2024) "Adverse maternal outcomes and associated factors among mothers of advanced age delivering at a tertiary hospital, southwestern Uganda: a cross-sectional study," *BMC Pregnancy and Childbirth*, 24(1), pp. 1–8. Available at: https://doi.org/10.1186/s12884-024-06557-1.

Montesinos, L.R., Downe, S. and Ramsden, A. (2023) "Systematic review on the management of term prelabour rupture of membranes," *BMC Pregnancy and Childbirth*, pp. 1–11. Available at: https://doi.org/10.1186/s12884-023-05878-x.

Rinayanti Manurung, H. *et al.* (2024) "Implementation of UMKM based on Participation Innovation And Digitalization In Achieving SDG's Through Ced Prevention at PMB Sarfina Br Sembiring 2023," *Lldikti1.Kemdikbud.Go.Id*, 1(1), pp. 6–12.

Santana, D.S. *et al.* (2018) "Perinatal outcomes in twin pregnancies complicated by maternal morbidity: Evidence from the WHO Multicountry Survey on Maternal and Newborn Health," *BMC Pregnancy and Childbirth*, 18(1), pp. 1–11. Available at: https://doi.org/10.1186/s12884-018-2082-9.

Sinaga, S.N. (2022) "Quality Management of Maternal and Child Health Services in Antenatal Care Services in The Time of The Covid-19 Pandemic," *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 7(1), pp. 399–406. Available at: https://doi.org/10.30604/jika.v7i1.1503.

Sorrenti, S. *et al.* (2024) "European Journal of Obstetrics & Gynecology and Reproductive Biology Outcomes of twin pregnancies complicated by prelabor rupture of membranes before 26 weeks of gestation : systematic review and meta -analysis," *European Journal of Obstetrics & Gynecology and Reproductive Biology*, 303(October), pp. 70–77. Available at: https://doi.org/10.1016/j.ejogrb.2024.10.008.

Starrach, T. *et al.* (2025) "PROM at term : when might be the best time to induce labour ? A retrospective analysis," *Archives of Gynecology and Obstetrics*, 312(1), pp. 247–255. Available at: https://doi.org/10.1007/s00404-025-07981-0.

Surya, R. and Aryasatiani, E. (2023) "Persalinan En Caul pada Kehamilan Kembar," *Cermin Dunia Kedokteran*, 50(7), pp. 371–372. Available at: https://doi.org/10.55175/cdk.v50i7.955.

Wahyuni, R. *et al.* (2020) "… Peningkatan Berat Badan Bayi Dan Keterampilan Ibu Pasca Bersalin Dengan Bblr (Dismatur) Setelah Kelas Perawatan Metode Kanguru Di Rumah Sakit Haji …," *Dinamika Kesehatan Jurnal Kebidanan dan Keperawatan*, 11(2), pp. 635–643. Available at: https://doi.org/10.33859/dksm.v11i2.691.