

MIDWIFERY CARE MANAGEMENT FOR INTRAUTERINE FETAL DEATH DURING PREGNANCY: CASE REPORT 2025

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ABSTRACT

Intrauterine fetal death (IUFD) is a serious pregnancy complication and an important indicator in assessing the quality of obstetric and perinatal health services. Comprehensive midwifery care is essential, both to maintain the mother's physical condition and to provide adequate psychological support, especially in primary healthcare facilities. **Objective :** To describe and analyze the implementation of midwifery care management for Mrs. Y, 29 years old, G6P5A0, diagnosed with IUFD at the Nirmala Sapni Primary Clinic. **Objective:** This study used a qualitative method with a clinical case study approach. Midwifery care was implemented based on Varney's seven steps and documented using the SOAP format. Data were collected through history taking, a thorough physical examination, and supporting examinations to confirm the diagnosis. **Result :** Mrs. Y presented with complaints of decreased fetal movement for the past week, which then became absent in the morning, accompanied by lower abdominal pain. Objective examination results showed the mother's general condition was stable with a blood pressure of 110/70 mmHg. However, a fetal heart rate was not detected by ultrasound and was confirmed by intrauterine fetal distress (IUFD) at 31 weeks and 4 days of gestation. Treatment included comprehensive communication, information, and education (IEC), early psychological support for the mother, coordination with referral facilities, and safe referral to the hospital for termination of pregnancy. **Conclusion:** The midwifery care provided to Mrs. Y complied with applicable standard operating procedures. Early identification of decreased fetal movement and expedited referral were crucial in preventing maternal complications, such as coagulation disorders and systemic infections.

Keywords : High-risk pregnancy, Intrauterine Fetal Death (IUFD), Midwifery Care

Introduction

Pregnancy and childbirth are physiological processes that women naturally experience. Although considered normal, each phase of pregnancy carries the risk of complications that can develop into pathological conditions. One obstetric complication that has significant clinical and psychological impacts is intrauterine fetal death (IUFD). According to the World Health Organization (WHO) definition, IUFD is the death of a fetus that occurs before the fetus is fully born from the mother's womb at 28 weeks of gestation or a fetal weight of 1000 grams or more. (Hermawan, Wibisono and Nainggolan, 2021)

IUFD remains a global health problem that requires serious attention. It is estimated that nearly two million stillbirths occur annually worldwide. The majority of these cases occur in low- and middle-income countries, which generally face limited access to emergency obstetric and neonatal care. In an effort to reduce the incidence of stillbirth, the World Health Assembly, through the Every Newborn Action Plan (ENAP), set a global target to reduce the third trimester stillbirth rate to a maximum of 12 per 1,000 total births by 2030. (Dana A Muin *et al.*, 2021)

The causes of IUFD are complex and involve various interacting factors. Maternal factors include young or old maternal age, multiparity, gestational hypertension, preeclampsia, diabetes mellitus, and systemic infections. Fetal factors include severe congenital anomalies, intrauterine infections, and fetal growth restriction. Furthermore, placental and umbilical cord factors such as placental abruption, tight cord entanglement, knots, and uteroplacental insufficiency can also contribute to intrauterine fetal death. (Atkins *et al.*, 2023)

If a dead fetus remains in the uterus without adequate management, the mother is at risk of various serious complications. These complications include Disseminated Intravascular Coagulation (DIC), maternal sepsis, uterine atony due to decreased uterine muscle elasticity, and psychological disorders such as depression, severe anxiety, and Post-Traumatic Stress Disorder (PTSD). Therefore, early detection and prompt treatment are crucial in preventing further complications. In the context of primary healthcare, midwives play a strategic role in identifying signs of fetal loss, providing emotional support to the mother and family, and coordinating and making appropriate referrals based on the patient's clinical condition. Based on this, this case study aims to describe the implementation of midwifery care management for Mrs. Y, G6P5A0, diagnosed with Intrauterine Fetal Death (IUFD) at the Nirmala Sapni Primary Clinic. (Dana A Muin *et al.*, 2021)

Research Method

This article was written using a clinical case report approach, focusing on the implementation of comprehensive midwifery care management and supported by a review of relevant literature. The data collection and case analysis process were conducted based on Varney's Seven-Step Midwifery Management framework, which includes: (1) collecting subjective and objective baseline data, (2) interpreting data to establish a diagnosis and obstetric problem, (3) identifying potential diagnoses or problems, (4) identifying the need for immediate intervention and collaboration, (5) developing a comprehensive care plan, (6) implementing care according to the established plan, and (7) evaluating the outcomes of the care provided. (Dana A. Muin *et al.*, 2021)

Subjective data were obtained through interviews and direct history taking with the patient, supported by information from the patient's husband, who acted as the patient's companion.

Objective data were collected through a general physical examination, a comprehensive obstetric examination including Leopold's palpation and fetal heart rate auscultation using a Doppler or Doptone, and supporting examinations in the form of simple laboratory tests and ultrasonography (USG) to confirm the diagnosis. (Mills *et al.*, 2022)

The entire midwifery care process was then analyzed and adjusted to the principles of evidence-based practice. The literature review was obtained from various accredited national and international scientific journals published between 2020 and 2025. This literature was used as a basis for understanding the pathophysiology, risk factors, and management recommendations for Intrauterine Fetal Death (IUFD), particularly at the primary healthcare level. (Scalise *et al.*, 2022)

Result

1. Baseline Data Assessment

On March 6, 2025, at 7:30 PM WIB (Western Indonesian Time), an initial assessment was conducted on Mrs. Y, a 29-year-old Muslim woman with a high school education, and a housewife. The patient presented to the Nirmala Sapni Primary Clinic with her husband, Mr. M, 33. Her primary complaint was decreased fetal movement, which had been felt for the past week and had not been felt at all since 8:00 AM WIB that same day. In addition, the patient complained of persistent, dull pain in the lower abdomen. Based on her obstetric history, the patient was pregnant, para five, and had zero miscarriages (G6P5A0). All previous deliveries had occurred spontaneously at term and were attended by midwives without significant complications. The patient had no history of miscarriage. The first day of the last menstrual period (LMP) was recorded on July 25, 2024, so the Estimated Date of Delivery (TP) was obtained on April 2, 2025. Gestational age was calculated using Naegele's rule, indicating a gestational age of 31 weeks and 4 days at the time of assessment. (Song *et al.*, 2025)

2. Physical Examination and Supporting Examinations

Vital signs showed the mother's general condition within normal limits, with a blood pressure of 110/70 mmHg, a pulse rate of 80 beats per minute, a respiratory rate of 24 breaths per minute, and a body temperature of 36.0°C. Anthropometric examination revealed a pre-pregnancy weight of 47 kg, a weight at the time of examination of 55 kg, a height of 160 cm, and a mid-upper arm circumference (MUAC) of 24 cm. Obstetric examination using Leopold's palpation revealed a fundal height of 27 cm, with an estimated fetal weight of approximately 2,170 grams. In Leopold I, the buttocks were palpable in the uterine fundus. Leopold II showed the fetal back on the right side of the mother's abdomen, with small fetal parts palpable on the left side. Leopold III identified the fetal head as the presenting part, while Leopold IV obtained convergent results, indicating the fetal head had not yet entered the pelvic inlet. Auscultation using Doppler/Doptone did not detect a fetal heartbeat. This finding was later confirmed by ultrasound, which showed no fetal cardiac activity. Furthermore, the abdomen appeared tense during the examination. Simple laboratory tests revealed a hemoglobin level of 10 g/dL. Urine protein and glucose tests were negative. Screening for infectious diseases, including HBsAg, HIV, syphilis, and malaria, also came back negative. The patient has blood type O. (Silver *et al.*, 2007)

3. Data Interpretation and Escalation Steps

Based on the history, physical examination, and supporting tests, an obstetric diagnosis was made: Mrs. Y, 29 years old, G6P5A0, 31 weeks and 4 days gestation, with a single intrauterine fetus in a cephalic presentation and right dorsal position, accompanied by. (Kasa *et al.*, 2023)

Intrauterine Fetal Death (IUFD). The mother's general condition at the time of assessment was stable. The main problems identified included the absence of fetal movement, the absence of a fetal heartbeat, lower abdominal pain, and anxiety and grief due to the loss of the fetus. The assessment revealed no signs of a maternal emergency, such as shock, hemorrhage, or eclampsia. However, the patient is at potential risk of developing a blood clotting disorder (coagulopathy) if the deceased fetus remains in the uterine cavity for a prolonged period.

Based on these conditions, the need for immediate action determined includes providing therapeutic communication, information, and education (KIE) to patients and families, initial psychological support, and coordination and implementation of fast and safe referrals to referral hospitals to obtain definitive management.(Momo *et al.*, 2019)

Discussion

The assessment of Mrs. Y revealed decreased or absent fetal movement, accompanied by lower abdominal pain. This complaint is a common clinical sign in cases of intrauterine fetal death (IUFD). In obstetrics, the mother's perception of decreased fetal movement is an important indicator of fetal well-being. Decreased fetal activity that persists for one week and culminates in the complete disappearance of fetal movement indicates the possibility of fetal hypoxia due to progressive impairment of uteroplacental perfusion.(Bhasme and Moray, 2025)

In terms of maternal risk factors, Mrs. Y is classified as highly multiparous with obstetric status G6P5A0. Multiparity is known to be associated with an increased risk of pregnancy complications, including placental dysfunction. Although her five previous deliveries were normal without complications, pregnancies in women with high parity still require closer monitoring because structural and functional changes in the uterus can affect the effectiveness of uteroplacental circulation. Furthermore, laboratory results showed a hemoglobin level of 10 g/dL, indicating mild anemia. Anemia during pregnancy can reduce the blood's ability to transport oxygen to maternal and placental tissues, potentially worsening fetal hypoxia.

Physical examination findings also revealed a discrepancy between the gestational age based on the Last Menstrual Period (LMP), which was 31 weeks and 4 days, and the measured fundal height (FH), which was 27 cm. This discrepancy could indicate fetal growth restriction or decreased amniotic fluid volume. In cases of intrauterine fetal death (IUFD), stagnation or decreased fundal growth is often associated with reduced amniotic fluid production and degenerative changes in fetal tissue following intrauterine death. (Muin, 2021)

These findings further strengthen the suspicion of a serious fetal disorder. The diagnosis was confirmed through auscultation of the fetal heart rate using a Doppler/Doptone, which showed negative results. This was then confirmed by an ultrasound examination (USG), which showed no fetal cardiac activity. The absence of a heartbeat on ultrasound examination is the main diagnostic standard in establishing the diagnosis of Intrauterine Fetal Death.(Kulkarni, Palaniappan and Evans, 2017)

The management provided at the Nirmala Sapni Primary Clinic focuses on stabilizing the mother's condition, providing clear and empathetic communication, information, and education (IEC), providing psychological support to the patient and family, and coordinating referrals to health facilities capable of comprehensive obstetric care. This approach aligns with the principles of woman-centered midwifery care, particularly in cases of fetal loss that have a profound emotional impact. (Bakhabkhi *et al.*, 2023)

In pregnancies diagnosed with IUFD after the age of viability, definitive management requires termination of the pregnancy at a referral facility based on the clinical condition and existing obstetric indications. Prompt and appropriate referral is crucial to prevent maternal complications, including coagulation disorders such as Disseminated Intravascular

Coagulation (DIC), infection, and other complications that can arise if a deceased fetus remains in the uterus for an extended period. Therefore, early detection of decreased fetal movement and a rapid response by healthcare providers are crucial factors in maintaining maternal safety and preventing more serious complications. (Patel *et al.*, 2014)

Conclusion and Suggestion

Conclusion

The implementation of midwifery care management for Mrs. Y, 29 years old, G6P5A0, diagnosed with *Intrauterine Fetal Death* (IUFD) at 31 weeks and 4 days of gestation at the Nirmala Sapni Primary Clinic was carried out systematically in accordance with Varney's Seven-Step Midwifery Management approach. Through a comprehensive assessment, specifically addressing complaints of decreased fetal movement and the absence of a fetal heartbeat, the diagnosis of IUFD was made accurately and quickly. The care provided included comprehensive communication, information, and education (IEC), psychological support for the mother and family, and safe and timely referral to a secondary healthcare facility. All procedures were performed in accordance with midwifery care standards, with no physical complications observed in the mother during the initial management process. (Bohiltea *et al.*, 2020)

Recommendations

1. For the Nirmala Sapni Primary Clinic :

The clinic is expected to continue to maintain and improve the quality of midwifery services, particularly in the early detection of pregnancy complications. Efforts that can be made include improving the competence of healthcare workers in the use of Doppler/Doptone devices and basic ultrasound, as well as optimizing education on fetal movement monitoring (kick count) for pregnant women in their third trimester.

2. For Midwifery Students :

This case study is expected to serve as a learning resource and clinical reference in understanding the management of IUFD cases. Furthermore, students are expected to improve their skills in conducting assessments, analyzing data, establishing obstetric diagnoses, and documenting care using the SOAP format systematically and accurately.

3. For the Community :

Pregnant women and their families are expected to be more active in maintaining a healthy pregnancy by complying with recommended Antenatal Care (ANC) visits. Furthermore, any changes or decreases in fetal movement should be immediately consulted with a healthcare professional for early detection and treatment of possible pregnancy complications. (Deshpande and R., 2020)

APPRECIATE (If There Is)

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