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CASE REPORT: MIDWIFERY CARE FOR A GRANDE MULTIGRAVIDA PREGNANCY RESULTING FROM IUD FAILURE WITH GESTATIONAL DIABETES AND A HISTORY OF CESAREAN SECTION

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ABSTRACT

Grande multigravida pregnancies carry a high risk of various complications for both mother and baby. Such conditions require comprehensive midwifery care to detect complications early and safeguard the health of both the mother and the fetus. This case report aims to describe the midwifery care provided for a grande multigravida pregnancy involving IUD failure, gestational diabetes, and a history of Cesarean section. Methods: A case study approach utilizing the midwifery management process was employed. Data collection involved history taking, physical examinations, diagnostic tests, observation, and documentation regarding Mrs. A at the Plaosan Community Health Center (Puskesmas) between January and May 2026. Results and Discussion: Midwifery care focused on monitoring maternal and fetal status, managing gestational diabetes through education on diet and physical activity, monitoring blood glucose levels, counseling on high-risk pregnancy danger signs, and planning for postpartum contraception. Following comprehensive care, the mother's condition showed positive progress; random blood glucose (RBG) levels decreased, and hemoglobin (Hb) levels reached 14.4 g/dL, resulting in a stable maternal condition. Conclusion: Midwifery care delivered over a three-month period—encompassing assessment, education, counseling, and evaluation—successfully improved the mother's understanding of high-risk pregnancy. Pregnant women with gestational diabetes can prevent complications by adhering to a lowcarbohydrate and low-glucose diet, engaging in daily exercise (such as walking), and avoiding strenuous activities.

Keywords: Grande Multigravida, IUD Failure, Gestational Diabetes, History of Cesarean Section.

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INTRODUCTION

Background

Pregnancy is an important period in a woman's reproductive cycle that involves significant physical and psychological changes. Identification of pregnancy risk status is essential to prevent complications that may threaten maternal and fetal health. Grande multigravida pregnancy, particularly in women with four or more pregnancies, is classified as a high-risk pregnancy and requires closer monitoring. In this case, the pregnancy occurred following **IUD contraceptive failure** and was accompanied by **gestational diabetes and a history of Cesarean section**. Grande multigravida pregnancies may be associated with

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maternal complications such as gestational anemia, placenta previa, preeclampsia, premature rupture of membranes, and gestational diabetes, while fetal complications may include malpresentation and intrauterine fetal death.

Gestational diabetes requires particular attention because uncontrolled blood glucose levels may increase the risk of complications for both mother and fetus. Management includes nutritional regulation, appropriate physical activity, blood glucose monitoring, and pharmacological treatment when lifestyle interventions are insufficient. Early detection and continuous monitoring through antenatal care are therefore essential, especially in high-risk pregnancies. Therefore, comprehensive and continuous midwifery care is needed for pregnant women with multiple risk factors. This case report describes the midwifery management of Mrs. A, a grande multigravida pregnancy resulting from IUD failure, complicated by gestational diabetes and a history of Cesarean section, at Plaosan Community Health Center, Magetan Regency.

Goal

The general aim of this case report is to describe the implementation of midwifery care for Mrs. A, a pregnant woman with a grande multigravida pregnancy resulting from IUD failure, accompanied by gestational diabetes and a history of Cesarean section, at Plaosan Community Health Center, Magetan Regency.
Specifically, this case report aims to describe the assessment of subjective and objective data, analyze the patient's condition based on the collected data, and provide appropriate midwifery management in accordance with established midwifery care standards.

METHODS

This study used a **case report design** based on the midwifery management process. The case involved Mrs. A, a pregnant woman with a grande multigravida pregnancy resulting from IUD failure, accompanied by gestational diabetes and a history of Cesarean section. The case was conducted at **Plaosan Community Health Center (Puskesmas Plaosan), Magetan Regency**, from **January to May 2026**. Data were collected through clinical interviews, physical examinations, supporting diagnostic tests, direct observation, and medical record documentation. The collected data were analyzed systematically to identify the patient's maternal and fetal condition and to determine appropriate midwifery management according to established standards.

The midwifery care focused on monitoring maternal and fetal health, controlling gestational diabetes through dietary management and physical activity, monitoring blood glucose levels, providing education regarding danger signs of high-risk pregnancy, and planning postpartum contraception.

RESULTS

Mrs. A was identified as a high-risk pregnancy involving grande multigravida status due to IUD failure, gestational diabetes, and a history of Cesarean section. Midwifery care was provided through three visits from January to April 2026, focusing on maternal and fetal

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monitoring, gestational diabetes management, dietary counseling, physical activity, education on pregnancy danger signs, and postpartum contraceptive planning. During the care period, the patient's condition showed positive progress. Random blood glucose (RBG) levels decreased, while hemoglobin remained stable at **14.4 g/dL**. The patient demonstrated improved understanding of her high-risk pregnancy and was able to follow recommendations regarding a low-carbohydrate and low-glucose diet, regular light physical activity such as walking, and avoidance of strenuous activities.

Overall, continuous midwifery care supported the control of gestational diabetes and maintained maternal health throughout the observation period. No additional outcome beyond the reported clinical improvement is stated in the LTA, so no further results are added here.

DISCUSSION

The present case involved Mrs. A, a pregnant woman with a **grande multigravida pregnancy resulting from IUD contraceptive failure, gestational diabetes, and a history of Cesarean section**. This combination placed the pregnancy in a high-risk category and required comprehensive and continuous midwifery care. The assessment was based on subjective and objective data, supporting examinations, and clinical monitoring to identify maternal and fetal risks and determine appropriate management. Grande multigravida pregnancy is considered a high-risk pregnancy because repeated pregnancies may increase the possibility of obstetric complications. According to Petricka et al. (2025), women with multiple previous pregnancies have a greater risk of complications such as bleeding, fetal malpresentation, anemia, and operative delivery. In this case, the risk was further increased by the presence of gestational diabetes and a previous Cesarean section. Therefore, the patient's condition required closer antenatal monitoring than that provided for a normal pregnancy.

The occurrence of pregnancy despite IUD use was another important aspect of this case. According to Andriyani et al. (2024), IUD failure may occur because of expulsion, malposition, or inappropriate insertion. Although IUDs have high contraceptive effectiveness, failure can still occur. In Mrs. A's case, the pregnancy resulting from IUD failure added complexity to the antenatal management because the pregnancy was already accompanied by other risk factors. Gestational diabetes was a major clinical concern in this case. The LTA explains that gestational diabetes is characterized by impaired glucose tolerance first identified during pregnancy and is associated with increased insulin resistance. If blood glucose is not properly controlled, it may increase the risk of maternal and fetal complications, including preeclampsia, macrosomia, polyhydramnios, neonatal hypoglycemia, and Cesarean delivery. Therefore, regular blood glucose monitoring was an essential component of the care provided.

The management of gestational diabetes in this case emphasized **non-pharmacological interventions**, particularly dietary regulation and physical activity. The dietary approach focused on high-fiber foods, adequate protein, and low-glycemic-index complex carbohydrates consumed in small and frequent portions. The mother was also advised to consume vegetables, legumes, and low-fat animal or plant protein while limiting sweet and processed foods to reduce rapid increases in blood glucose. Physical activity was also included as part of the management. The LTA recommends appropriate pregnancy exercise, including walking, aerobic exercise, or pregnancy exercise, because physical activity can support glucose control. Prenatal yoga was also discussed as a complementary intervention that may contribute to blood glucose

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regulation. In the case of Mrs. A, the management emphasized regular light physical activity and avoidance of strenuous activities according to her pregnancy condition.

The choice of lifestyle management was appropriate because pharmacological treatment was not immediately indicated when blood glucose could still be managed through dietary regulation and physical activity. The LTA states that medication is considered when lifestyle interventions are unable to adequately control blood glucose. This approach demonstrates the importance of individualized management based on the patient's clinical condition and response to intervention. The history of Cesarean section also required particular attention. A previous Cesarean delivery is associated with increased risks in subsequent pregnancies, including uterine rupture and placental complications such as placenta previa and placenta accreta. Therefore, the history of Cesarean section was considered when establishing the midwifery assessment and determining the need for more intensive antenatal monitoring. The combination of these risk factors demonstrates why the assessment could not focus on gestational diabetes alone. The midwifery diagnosis was established by considering the patient's obstetric history, contraceptive history, current pregnancy condition, physical examination, and supporting examinations. The assessment concluded that Mrs. A had a high-risk pregnancy due to the combination of grande multigravida status, IUD failure, gestational diabetes, and a history of Cesarean section. This comprehensive assessment provided the basis for planning individualized care.

The evaluation showed a positive clinical response to the care provided. The patient's random blood glucose level decreased, while her hemoglobin remained stable at **14.4 g/dL**. The patient also demonstrated better understanding of gestational diabetes management and was able to follow recommendations concerning dietary regulation and physical activity. These findings indicate that continuous education and monitoring supported the patient's ability to participate actively in managing her condition. Another important aspect of the care was education regarding pregnancy danger signs. Because Mrs. A had several risk factors, she needed to understand symptoms that required immediate medical attention. Education was intended to improve early recognition and encourage timely access to healthcare services if complications developed. This approach is consistent with the LTA's emphasis on early detection, regular antenatal care, birth planning, and planned referral for high-risk pregnancies. Postpartum contraceptive planning was also included in the management. This was particularly important because another pregnancy could potentially expose the mother to further high-risk conditions. The LTA emphasizes the importance of postpartum family planning for women with high-risk pregnancy characteristics. Appropriate contraceptive counseling allows the mother and family to consider a suitable long-term reproductive plan after delivery.

The case has particular clinical significance because several risk factors occurred simultaneously. The uniqueness was not simply the presence of gestational diabetes or grande multigravida status, but the combination of **IUD contraceptive failure, grande multigravida pregnancy, gestational diabetes, and previous Cesarean section**. Such a combination increases the complexity of midwifery care and requires more detailed assessment, closer monitoring, and collaboration with other healthcare professionals when necessary. Overall, the case demonstrates that individualized, comprehensive, and continuous midwifery care is important in managing high-risk pregnancies with multiple interacting risk factors. In Mrs. A's case, monitoring of maternal and fetal conditions, blood glucose control, dietary counseling, physical activity, danger-sign education, and postpartum contraceptive planning were integrated into the care plan. The reduction in random blood glucose and stable hemoglobin

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level suggest a favorable clinical response during the observation period. However, the findings represent the outcome of a single case, and therefore they should be interpreted as a description of the patient's response to comprehensive care rather than as evidence that one specific intervention alone caused the improvement.

CONCLUSION

The case of Mrs. A demonstrates that comprehensive and continuous midwifery care is essential in managing a high-risk pregnancy involving grande multigravida status due to IUD failure, gestational diabetes, and a history of Cesarean section. The care focused on maternal and fetal monitoring, blood glucose control, dietary management, appropriate physical activity, education on pregnancy danger signs, and postpartum contraceptive planning. During the observation period, the patient's condition showed positive progress, particularly through a decrease in random blood glucose levels and a stable hemoglobin level of 14.4 g/dL. The patient also demonstrated improved understanding and adherence to recommendations regarding a low-carbohydrate and low-glucose diet, regular light physical activity, and avoidance of strenuous activities.

Therefore, individualized and continuous midwifery care can support the management of gestational diabetes and maintain maternal well-being in high-risk pregnancy. Continued antenatal monitoring and appropriate postpartum family planning are recommended to reduce potential risks in future pregnancies.

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