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The effectiveness of reproductive midwifery care with the flour albus approach: A Case Study of handling vaginal discharge in women of childbearing age

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ABSTRACT

Introduction: Women of childbearing age have a higher risk of vaginal discharge than adolescents because of the frequent occurrence of pelvic inflammatory disease (PID). One of the symptoms of reproductive organ infections in women is vaginal discharge.

Objective: This study aims to apply midwifery care to cases of vaginal discharge (flour albus).

Methods: A descriptive method with a case study approach is used. Data was collected through primary data, including assessing and observing the patient's health status, interviews to obtain subjective data, and direct examination for objective data. Secondary data was obtained through patient records, registered books in the KIA room, and literature studies.

Result: The results showed that the symptoms of vaginal discharge in patients included thick white mucus, unpleasant odor, and itching in the genital area. The care provided uses red betel leaf water decoction as a treatment effort. After obstetric care was carried out from July 16 to 20, 2024, the results were obtained that the patient's vaginal discharge improved without signs of genetic infection.

Conclusion: The success of this care is also marked by an increase in patients' understanding of good personal hygiene, how to properly clean the feminine area from front to back, and the effective use of red betel leaf boiled water. Thus, the management of obstetric care applied to this case of vaginal discharge is quite successful and practical, with a decoction of red betel leaves providing a positive effect in reducing the incidence of pathological vaginal discharge.

Keywords: flour albus, women of childbearing age, vaginal discharge

INTRODUCTION

Women of childbearing age are women who are still in reproductive age (since getting their first menstruation and until menstruation stops), namely between the ages of 15 - 49 years, with unmarried status or married, who still have the potential to have children. Women of childbearing age have a higher risk of vaginal discharge than adolescents because in women of childbearing age often occur PID or pelvic inflammatory disease (Vishwakarma, Puri and Sharma, 2021). One of the symptoms and signs of female reproductive organ infection is the occurrence of vaginal discharge. According to the WHO, 75% of all women in the world will experience vaginal discharge at least once in their lifetime. As many as 45% will experience it two or more times, and candida albicans cause the most frequent vaginal discharge. In Indonesia, around 90% of women have the potential to have a vaginal discharge because Indonesia is a tropical climate, so fungi quickly develop, which results in many cases of vaginal discharge (Juniar *et al.*, 2023). Symptoms of vaginal discharge are also experienced by unmarried women or adolescent women aged 15-24 years, which is around 31.8%. Albus fluorine is the discharge of fluid from the genitalia apparatus, which is not blood but a clinical manifestation of various infections, malignancies, or benign tumors of the reproductive organs. More specifically, vaginal discharge is an infection of candida fungi in female genitalia and is caused by yeast-like organisms, namely candida albicans (Aklilu *et al.*, 2024).

According to data from the Indonesian Ministry of Health in 2010, as many as 75% of Indonesian women have experienced Flour Albus at least once, of which half have experienced Flour Albus twice or more. However, not many women know whether the Flour Albus experienced is normal. It is very important to recognize Flour Albus because Flour Albus is a symptom of almost all pregnancy diseases (Karo *et al.*, 2021). Based on the type, flour albus is divided into 2, namely physiological flour albus (normal) and pathological flour albus (abnormal/disease). Under normal conditions, a clear, misty white or yellowish vaginal discharge is seen when dry on clothes (Sharma and Singh, 2020).

There are two ways to overcome the problem of vaginal discharge, namely pharmacological and non-pharmacological methods. The treatment of vaginal discharge pharmacologically depends on the cause of the fungal, bacterial, or parasitic infection (Hu *et al.*, 2021). Generally, medications are given to overcome complaints and stop infection according to the cause. Drugs used to treat vaginal discharge usually come from the fluconazole group to treat candida infections and the metronidazole group to treat bacterial and parasitic infections (Pandey *et al.*, 2020). Fluconazole is for oral administration in capsules containing 50, 100, 150, and 200 mg. The recommended dosage is 100-400 mg per day. Betel leaves are believed to have various health benefits. One of them is for vaginal discharge and to maintain vaginal hygiene. Betel leaves contain a chemical compound called eugenol (Gupta, Guha and Srivastav, 2023). This compound is anti-fungal. This compound can ward off the fungus candida albicans, which is known to be one of the causes of vaginal discharge. In addition to being anti-fungal, betel leaves are also anti-bacterial.

One of these bacteria is named Neisseria gonorrhoeae. This anti-bacterial property is believed to be due to the presence of polyphenols and flavonoids in it. One of the complementary treatments using herbal plants that can reduce the use of medical drugs

such as antiseptics is red betel leaf (Piper crocatum). Red betel leaves have twice the antiseptic power of green betel leaves. This study aims to evaluate the effectiveness of reproductive health obstetric care with a flour albus approach in treating vaginal discharge in women of childbearing age.

RESEARCH METHODOLOGY

A case study of Reproductive Health Midwifery Care with *flour albus* (vaginal discharge) at the Pattingaloang Health Center in Makassar from June to July 2024. The research subject in this case study is Mrs. W with flour, Albus. The management was carried out by giving red betel leaf cebo, using a descriptive method with a case study approach. Adelman explained that case studies have a strong advantage in reading a reality or a case, generalizing even though it is difficult, representing a variety of viewpoints, and offering alternative interpretations. The results of case studies can be feedback for the institution and conduct formative evaluations [9]. The primary data collection is obtained by assessing and observing the patient's health status. Subjective data was obtained from the results of interviews using a study format. Meanwhile, objective data was obtained through observation and direct examination of patients. Secondary data was obtained by collecting data from patients and register books in the KIA room and literature studies related to reproductive health problems with flour albus.

RESULT

This research took place on Monday, July 15, 2024, which took place on Jl Barukang III Lr.1, then planned the midwifery care of Flour Albus (vaginal discharge), namely conducting a data review taking place at the Pattingaloang Makassar Health Center with complaints of vaginal discharge, on a physical examination it was obtained that the general condition was good, compliments awareness, TTV within normal limits. Based on subjective data and objective data, the results of vaginal discharge 5 days ago often come out thick white mucus, smell, and feel itchy in the genitalia. In the second monitoring, a home visit was carried out, and interviews were conducted about Flour Albus (vaginal discharge) and personal hygiene interviews; the care provided was a decoction of red betel leaf water and how to use it, observing vital signs, still experiencing flour albus (vaginal discharge) and conducting interviews about flour albus (vaginal discharge). In the second monitoring, a home visit was carried out, and an interview was conducted about Flour Albus (vaginal discharge) and a personal hygiene interview; the care I provided was a decoction of red betel leaf water and how to use it, observing vital signs, still experiencing flour albus (vaginal discharge). And interviewed flour albus (vaginal discharge). Teaching how to use red betel leaves to overcome vaginal discharge: Prepare 12 red betel leaves and wash them thoroughly then cook them for 10-15 minutes, then cool them down. After that, they are washed in the genital area from front to back. These results can explain that during experiencing flour albus (vaginal discharge), feeling uncomfortable and changing underwear 3 to 4 times a day, and experiencing flour albus (vaginal discharge) before and after menstruation. In the third and fourth monitoring, counselling was carried out on Flour Albus (Vaginal Discharge); as long as the mother used the boiled water of red betel leaf, ketuta leaves were reduced, slightly smelly, and not itchy. The care provided still advocates maintaining personal hygiene, avoiding excessive stress, and avoiding foods that can trigger vaginal discharge, and recommends reusing red betel leaf water decoction to get rid of vaginal discharge.

Evaluate the last visit by looking at any changes. Observing vital signs, general condition, composmentic awareness, vital signs within normal limits, evaluation results after carrying out obstetric care for 5 days from July 16 to July 20, 2024, administration of red betel leaf water decoction to reduce Flour Albus (vaginal discharge), the results were obtained that vaginal discharge had improved. There were no signs leading to genetic infection; the success of this care is also marked by a good and correct understanding of personal hygiene, how to clean the femininity correctly and well from front to back, and the way of using red betel leaf water decoction has been applied well so that the midwifery care management process applied to Mrs W" with Flour Albus (vaginal discharge) is quite successful and effective.

DISCUSSION

The effectiveness of red betel leaf is proven through the efficacy of red betel extract soap in reducing vaginal discharge symptoms also shows that the use of red betel extract soap used 2 times a day for 1 week is effective in reducing mucus in physiological vaginal discharge, without disturbing normal flora. The results of this mucus reduction are consistent both from the assessment of the researcher and the research subjects. The administration of boiled water of red betel leaves has a positive effect in reducing the incidence of pathological vaginal discharge in adolescent girls. Betel leaves are effective in treating vaginal discharge; this is due to the closure of the genitals (vagina) using betel leaf decoction water regularly with clean and warm water that can overcome vaginal discharge on the genitals. In addition, regular administration of red betel leaf decoction can reduce the symptoms of vaginal discharge in women of childbearing age. This supports the use of red betel leaves as an alternative method for overcoming vaginal discharge. The use of red betel leaves has been proven to be effective in treating vaginal discharge, as evidenced by the efficacy of red betel leaf soap, which can reduce the symptoms of vaginal discharge (Purwanti, Prihartanti and Lestari, 2022). The use of red betel extract soap twice a day for one week is effective in reducing mucus in physiological vaginal discharge without disturbing the average flora balance in the genital area. This suggests that red betel extract can be a safe and effective alternative in treating vaginal discharge, helping to maintain reproductive health without disrupting natural microorganisms that are important for the reproductive system (Beura and Raul, 2024).

Vaginal discharge or flour albus in women of childbearing age is often caused by various factors, including infections and improper personal hygiene habits. In the context of reproductive health, using natural ingredients such as red betel leaves as antiseptic and antibacterial agents has attracted attention (Das *et al.*, 2024). Red betel leaves contain active compounds such as flavonoids, tannins, and saponins that have antimicrobial and antioxidant effects, so they can help reduce symptoms of vaginal discharge without causing side effects that damage the normal flora of the genital area. The effectiveness of red betel leaf boiled water as an effort to reduce vaginal discharge. Based on the observation results, regular red betel leaf boiled water can reduce excessive mucus, unpleasant odor, and itching in the genital area. In addition, the use of red betel extract soap twice a day for one week showed a significant decrease in physiological vaginal mucus, which indicates the effectiveness of red betel leaf as an alternative treatment (Figueiredo *et al.*, 2024).

Using natural ingredients such as red betel leaves also have advantages in maintaining normal flora in the genital area. Unlike synthetic antiseptic products that can disrupt the balance of natural microorganisms, red betel leaf is an antiseptic that maintains normal flora, essential in protecting against bacterial and fungal infections (Hamilton *et al.*, 2024). This is important in preventing pathological vaginal discharge, which can continue to become a severe infection if the normal flora is disturbed. The success of midwifery care in this case of vaginal discharge is also marked by an increase in patient understanding of the importance of personal hygiene, including how to properly clean the genital area, namely from front to back, to prevent the spread of bacteria (Moore *et al.*, 2023). With the proper education, patients are expected to be able to maintain the cleanliness of the genital area independently and consistently, thereby minimizing the risk of

recurrent vaginal discharge. The use of red betel leaves, both in the form of decoctions and soap extracts, has been proven to be effective and safe in overcoming physiological vaginal discharge. This suggests that natural ingredient-based interventions can be an effective alternative in maintaining reproductive health in women of childbearing age. Further studies with larger samples and longer observation times are suggested to reinforce these findings as well as explore the potential use of red betel leaf in various forms to address other reproductive health problems (Immaru *et al.*, 2024).

Improving patients' understanding of personal hygiene also contributes significantly to healing. Education on how to properly clean the feminine area from front to back helps prevent bacterial contamination from the anal area to the vagina (Bapir *et al.*, 2023). Implementing these habits is important to avoid reinfection and to maintain long-term reproductive health. The effectiveness of red betel leaf is also supported by other studies that show that the use of red betel extract soap twice a day for one week is effective in reducing mucus in physiological vaginal discharge without disturbing the normal flora. This reinforces the finding that red betel leaves can be a safe and effective treatment alternative (Rojas Canadas *et al.*, 2023). However, it should be noted that this study had limitations, such as a limited sample and the absence of a control group to compare the effectiveness of the intervention. Further research with a more robust design and larger samples is needed to confirm these findings and evaluate the long-term effectiveness of the use of red betel leaves in the treatment of vaginal discharge. The use of red betel leaf water decoction shows excellent potential as an alternative treatment for vaginal discharge in women of childbearing age (Pinedo *et al.*, 2023). Combining herbal interventions and personal hygiene education can increase the effectiveness of midwifery care and contribute positively to women's reproductive health. Implementing these methods in clinical practice can be a progressive step in providing holistic and evidence-based care.

CONCLUSION

It can be concluded that vaginal discharge has improved, and there are no signs that lead to genetic infections; a good and correct understanding of personal hygiene also marks the success of this care. The use of red betel leaf decoction helps relieve vaginal discharge, eliminate unpleasant odors, and reduce itching in genitalia. The success of this care is also marked by an increase in patients' understanding of the importance of personal hygiene, including how to clean the feminine area properly. Thus, the application of this method is effective and can be an alternative in handling vaginal discharge, especially in improving reproductive health in women of childbearing age.

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