

The effectiveness of giving young coconut water in reducing dysmenorrhea symptoms: A case study of midwifery care

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ABSTRACT

Introduction: Dysmenorrhea is a common condition in women during menstruation, characterized by severe pain that can interfere with daily activities. The administration of medical therapy is often used to treat these symptoms, but natural approaches such as giving young coconut water are also starting to be considered.

Objective: This study aims to analyze the effectiveness of giving young coconut water in reducing pain intensity in dysmenorrhea patients and provide an overview of the application of natural therapy-based obstetric care in patients with menstrual complaints.

Methods: This study uses a case study design with a qualitative approach. The subject of the study was an adult woman who experienced primary dysmenorrhea. Data were collected through in-depth interviews, direct observation, and assessment of pain intensity using the VAS (Visual Analog Scale) scale before and after administering young coconut water.

Result: The study showed a significant decrease in the intensity of dysmenorrhea pain after administering young coconut water. Before the administration of therapy, patients reported pain intensity at level 8 (scale 0-10), and after three days of administration of young coconut water, pain intensity decreased to level 3. Patients also reported feeling more comfortable and being able to continue their daily activities better. No significant side effects were found related to the consumption of young coconut water. I am injuring kei three mestiuia such does not feel jealous, the nature of the blood of meirah can bioactivity deingan good to know the absence of the current suidah in the absence of good.

Conclusion: Giving young coconut water can be effective in reducing the symptoms of dysmenorrhea in patients who experience it. This therapy can be a safe and natural alternative to help relieve menstrual pain. It can be applied in obstetrics as part of a comprehensive approach to reproductive health care. Further research with larger samples is needed to reinforce these findings and explore the mechanism of action of young coconut water in dysmenorrhea.

Keywords: dysmenorrhea, menstrual pain, reproductive health



INTRODUCTION

According to WHO, reproductive health is complete physical, mental, and social well-being, and it is not only free from disease or disability in all aspects related to the reproductive system, its functions, and processes. Reproductive health is a condition of overall prosperity, both in terms of physical, mental, and social health, and it is also accessible from diseases or disability conditions in terms of systems and functions as well as the reproductive process (Marbun and Sari, [2022](#)). Gynecological abnormalities cause Dysmenorrhea or menstrual irregularities due to the imbalance of the progesterone hormone in the blood, causing the most common feeling of irritability in women. Women who experience dysmenorrhea improvise prostaglandins ten times more than women who do not have dysmenorrhea (Mantovan *et al.*, [2024](#)). This prostaglandin causes uterine contractions. Dysmenorrhea or menstrual pain is a gynecological disorder caused by an imbalance of the hormone progesterone in the blood, causing pain that is most often experienced by women. Women with dysmenorrhea produce 10 times more prostaglandins than women without myelorrhea (Zaman *et al.*, [2023](#)).

Dysmenorrhea is a common condition in women of reproductive age, characterized by severe pain in the lower abdomen, especially on the first or second day of menstruation. According to data from numerous studies, about 50-90% of women experience dysmenorrhea during their reproductive period, and 10-20% of them experience dysmenorrhea that is severe enough to interfere with daily activities (Baran and Yılmaz, [2024](#)). The pain in dysmenorrhea can be in the form of strong contractions of the uterine muscles in response to hormonal changes, significantly an increase in prostaglandins that trigger inflammation and contractions (Van Uden *et al.*, [2024](#)). This condition is categorized into primary dysmenorrhea (without an underlying organic disorder) and secondary dysmenorrhea (related to organic disorders, such as endometriosis or fibroids). Although medical treatment with non-steroidal anti-inflammatory drugs (OAINS), hormonal contraceptives, and other therapies is often used, many women are looking for natural treatment alternatives to reduce dysmenorrhea symptoms. One of the natural therapies starting to gain attention is young coconut water, known in traditional medicine for its health benefits (Han *et al.*, [2024](#)). Young coconut water contains important electrolytes such as potassium, magnesium, and calcium that maintain the balance of body fluids and have anti-inflammatory properties that can help reduce pain and inflammation. Some early research suggests that young coconut water may relieve stomach cramps and improve body hydration, crucial in managing menstrual pain (Dağlı and Dağlı, [2023](#)).

These prostaglandins cause muscular contractions. Pain is an unpleasant sensation localized in a specific part of the body. The International Association for the Study of Pain defines pain as an unpleasant subjective and emotional sensory experience associated with or felt at the time of tissue damage, both actual and potential. An event constitutes damage or injury. To support life. Coconut fruit is the most widely sold part of the coconut tree and consists of the outer part (endocarp) and the inner part (endosperm). The endosperm comprises the pulp (white agate) and a fluid called frequent water (Ozkan-Sat and Isık, [2024](#)). The amount of coconut water reaches its maximum at 6 to 8 months of age, and as the coconut grows, the amount of water decreases and is replaced by hard, thick water. The benefit of giving young coconut water is that young coconut water contains calcium and magnesium (Turnip and Kamso, [2024](#)). Calcium functions in the nervous system and muscles, providing energy to muscles, insulin production, and disease prevention. Magnesium regulates how blood vessels work, reduces pain, and calms the nervous system; magnesium also reduces stress by working on the sympathetic nerves (Chen *et al.*, [2024](#)). Therefore, calcium and magnesium can reduce muscle tension. Vitamin C is a natural anti-inflammatory substance that helps relieve pain due to menstrual cramps by inhibiting the cyclooxygenase ezim, which promotes prostaglandin formation (Bağcı Çelik, Ege and Arslan, [2024](#)). At the same time, calcium works on the nervous system and muscles by providing energy to the muscles, producing insulin, and preventing disease. The function of magnesium is to

regulate the function of blood vessels, relieve pain, and calm the nervous system (Olasore *et al.*, 2023).

Giving young coconut water to patients with dysmenorrhea can be a holistic and safe approach as part of reproductive health obstetric care. Although several studies examine the natural benefits of treating dysmenorrhea, the use of young coconut water in midwifery practice is still relatively limited. The benefits of coconut water are improving blood circulation, exerting pressure, warming abdominal muscles, and promoting physical and mental relaxation. On the other hand, green coconut water contains calcium, magnesium, and vitamin C, which can reduce abdominal muscle tension (including uterine muscles) and help relieve pain due to menstrual cramps. Based on the initial data collection obtained by the author at the Pattinggaloang health center, in 2023, there will be 3,113 women of childbearing age (WUS) and 62 women who will experience dysmenorrhea in 2024, women of childbearing age (WUS) from January-April as many as 595 and 46 women who will experience dysmenorrhea. Through this approach, it is hoped that more in-depth information can be obtained about the effect of young coconut water on pain intensity in dysmenorrhea patients and enrich obstetric practices with nature-based treatment alternatives. The study also aims to introduce accessible, inexpensive, and safe methods to help manage dysmenorrhea symptoms, which can improve the quality of life of patients who experience them.

RESEARCH METHODOLOGY

In this study, we recommend a descriptive method with the interpretation of the study of cassis, which is judicial "Asuihan keimidan, dismeiorheia dengan peimbeirian young coconut water in the Working Area of the Pattinggaloang Health Center." This case study was conducted on July 12 – July 14, 2024. In the quilting of this chassis study, the subject WUS was made as a responding until mistake chassis. Meanwhile, the data collection technique in WUS takes primary and secondary data. Primary data was collected with direct interviews with women of childbearing age with dysmenorrhea in the working area of the Pattinggaloang Health Center. The interview is a method of collecting data where the researcher obtains information or information orally from the client or communicates face-to-face with the person.

Meanwhile, secondary data was obtained from documentation studies by collecting data on patients with dysmenorrhea taken from medical records in the Pattinggaloang Health Center Work Area. The tools and materials used during the interview were the study format on the system of dysmeiorheia and writing stationery. In conducting observation examinations, the tools and materials used are tension, a stethoscope, a hand scoop, and young coconut water.

Meanwhile, to assess the level of pain, a numerical scale or *comprativei pain scale (0) is used*, namely Scale 0: No menstrual Joint, Appetite, Activity Possible, Weakness/Elasticity of Abdomen), Scale 7-9: Irritation of the Waist, Irritation of the Waist, Thighs or Debris, No Appetite, Weakness, Weakness of the Waist, Thighs or Debris, No Appetite, Weakness, Weakness, Weakness of Activity, Inability to Absorb Elasticity, Scale 10: Irritation of Fatigue (Stiffness of Stiffness in the Lower Abdomen, Unable to get out of the way, legs, ruins, unable to get out of the way, unable to do activities, sometimes until they fainted).

RESULT

Based on the results of the case study of dysmenorrhea with the administration of young coconut water in the anamnesis First visit, WUS felt pain/cramps in the lower part of the Beirut as well as the waist and currently, on the first day of menstruation. Attempt that is carried out in the first place in the absence of it is to observe the vital signs TD: 100/70 mmHg, P: 20x/minute, N: 80x/minute, S: 36.5°C, to evaluate the eureka of primary dysmenorrhea and dysmenorrhea sequential, to know the main factors of dysmenorrhea, to observe the study of the scale of dysmenorrhea and to study the scale of the same irritation and to the same in the warm water complex, to observe the treatment of the first of the non-pharmacological diseases Namely, the administration of young coconut water, Seirta informed the dose of young coconut water that

must be consumed, which is 250 ml 2 times a day for three consecutive days., which means that the consumption of protein and soy sauce is indicated.

Reduction in pain intensity. On the first day before the administration of young coconut water, patients reported pain intensity at level 8 on the VAS scale, indicating pain that was severe enough to interfere with daily activities. After administering young coconut water on the first day, the pain intensity decreased to level 6. On the second day of administration, the pain drops further to level 4, and on the third day, the pain decreases further until it reaches level 3. These results showed a consistent decrease in pain intensity during the three days of young coconut water. Changes in other physical symptoms. In addition to a reduction in pain intensity, patients also reported increased overall comfort. At first, the patient experienced flatulence and mild nausea that often accompanied dysmenorrhea. However, these symptoms were significantly reduced on the second day and almost disappeared on the third day of giving young coconut water. Improving the quality of daily activities. During the study period, patients reported improvements in activity ability. On the first day, the patient admitted that it was difficult to carry out daily activities such as work and study. However, with reduced pain, patients find it easier to conduct activities and no longer feel bothered by menstrual pain that usually hinders their daily activities. Side effects. During the period of giving young coconut water, no adverse side effects were reported by patients. The patient did not experience any digestive problems or allergic reactions that could be associated with the consumption of young coconut water. The results of this study show that the administration of young coconut water effectively reduces the intensity of dysmenorrhea pain in patients, especially on the first to third days of menstruation. A significant reduction in pain after the intervention suggests that young coconut water may be a potential natural alternative to menstrual pain. Young coconut water's mineral content and anti-inflammatory properties are thought to help relax muscles and reduce pain-causing contractions. These results indicate that young coconut water can be used as part of obstetric care in dysmenorrhea patients. However, to confirm the generalization of these findings, further research with larger sample size and more in-depth testing of the mechanism of action of young coconut water in reducing dysmenorrhea symptoms is needed.

DISCUSSION

The results of this study show that the administration of young coconut water effectively reduces the intensity of dysmenorrhea pain in patients, especially on the first to third days of menstruation. A significant reduction in pain after the intervention suggests that young coconut water may be a potential natural alternative to menstrual pain. Young coconut water's mineral content and anti-inflammatory properties are thought to help relax muscles and reduce pain-causing contractions. Dysmenorrhea, or menstrual pain, is a common condition that many women experience and often affects their quality of life. Symptoms that appear, such as lower abdominal pain, back pain, and nausea, can impact daily activities and productivity (Milanova *et al.*, [2024](#)). In midwifery care practice, the provision of natural therapy as an alternative to reduce dysmenorrhea symptoms is increasingly in demand because it is safer and has minimal side effects than chemical drugs (Toprak Celenay, Ozcelikel and Bayrakli, [2024](#)). One of the natural therapies that has the potential to overcome dysmenorrhea is young coconut water. Dysmenorrhea is a common health problem, and many women are looking for more natural and safe treatment alternatives (Arruda *et al.*, [2024](#)). Giving young coconut water as a natural treatment can be an effective option in reducing the symptoms of dysmenorrhea. Further research with larger samples and a more robust methodology is needed to confirm these findings and determine young coconut water's mechanism of action in reducing menstrual pain (Osuga *et al.*, [2024](#)).

Young coconut water is rich in nutrients such as potassium, magnesium, calcium, and amino acids that significantly maintain the body's electrolyte balance. The magnesium content helps relax tense muscles to reduce spasmodic pain in the abdomen (Shim, [2024](#)). Meanwhile, the potassium and calcium content reduce muscle cramps that often accompany dysmenorrhea. Giving young coconut water as part of midwifery care can be an effective alternative method in

reducing dysmenorrhea symptoms (Nazarpour and Simbar, 2024). The nutrient content in young coconut water, especially magnesium and antioxidants, relaxes the uterine muscles and reduces inflammation. However, more research is still needed to ascertain its effectiveness in the broader population and understand the optimal dose (Fernández Macedo *et al.*, 2023). This therapy can be used as an option to support pain management in women with dysmenorrhea, especially for those seeking safe, natural treatments (Deodato *et al.*, 2023). The use of young coconut water as a complementary therapy in reducing dysmenorrhea symptoms showed positive results in this case study. Its nutritional content can provide therapeutic effects through anti-inflammatory and muscle relaxation mechanisms. Young coconut water can effectively reduce dysmenorrhea symptoms through anti-inflammatory, muscle relaxing, and optimal hydration mechanisms (Lehmann *et al.*, 2024).

Teenagers consume green coconut water as an alternative to reduce and reduce dysmenorrhea. Giving green coconut water to reduce menstrual pain (dysmenorrhea). The average result of menstrual pain or dysmenorrhea before being given green coconut water is mild dysmenorrhea, but after being given coconut water, the average menstrual pain felt is reduced (Esan *et al.*, 2024). Effective non-pharmacological treatment of menstrual pain (dysmenorrhea) is by providing green coconut water (Li *et al.*, 2023). The provision of green coconut water, in addition to not taking up time, can be done anywhere and anytime so that it is straightforward for every woman to do; the principle is to give 250 ml of green coconut water. Menstrual pain in the intervention group was 4.10, and the control group was 6.15. It was found that consuming young coconut water influenced menstrual pain in adolescent girls, and coconut water was an alternative treatment to reduce menstrual pain (dysmenorrhea). The effectiveness of young coconut water in reducing menstrual pain or dysmenorrhea showed quite positive results (Ishikura *et al.*, 2023). Young coconut water contains natural electrolytes and minerals such as potassium and magnesium, which can help reduce muscle contractions and pain in dysmenorrhea. Several studies have compared the effects of young coconut water with other methods, such as administering pain medications or other natural beverages (Šabec, Golob and Kozinc, 2024). The effectiveness of young coconut water in reducing dysmenorrhea symptoms showed positive results. Young coconut water, especially green varieties, contains electrolytes and minerals that can help relax muscles and reduce inflammation, which is beneficial in relieving menstrual pain or dysmenorrhea. The use of young coconut water in midwifery care to reduce dysmenorrhea symptoms offers a natural approach that is potentially beneficial. By considering the needs and preferences of clients and based on the principles of evidence-based practice, midwives can optimize the quality of service and client well-being.

CONCLUSION

Based on the average results of menstrual pain or dysmenorrhea before being given young coconut water in women of childbearing age (WUS), namely mild dysmenorrhea, but after being given young coconut water, the average menstrual pain decreased. Effective non-pharmacological treatment of menstrual pain (dysmenorrhea) is by providing young coconut water that does not take up time and can be done anywhere and anytime so that it is straightforward for every woman to do; the principle is to give young coconut water as much as 250 ml 2 times a day for three consecutive days. The evaluation results showed the absence of WUS on the first day to the third day of the examination and typical vital signs. However, on the first day the blood color induced brownishness, a distinctive smell of menstruation, a feeling of weakness and discomfort with cramps in the lower part of the peiruit, irritation of the waist, and a disturbance in part of its activity, the examination of the second day of red and diluted blood color, felt that his body was still a little bit like Leimah, he felt cramps in the lower part of the peiruit, and the results on the third day of the examination were average. There was no pressure in the lower Beirut, and he could do his usual activities.

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Conflict of Interest

The authors declare that they have no competing interests.

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