

Section: Medical Surgical Nursing

Acupressure for patients with diarrhea

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Abstract

Diarrhea is characterized by the production of feces with increased frequency (three times a day or more) and a change in consistency to soft or watery, which may occur with or without blood or mucus. Managing diarrhea is not straightforward; while providing fluids that contain essential electrolytes is crucial for preventing dehydration, administering anti-diarrheal medications inappropriately can be dangerous. In nursing practice, several non-pharmacological techniques can be utilized for patients with diarrhea, one of which is acupressure. The aim of acupressure therapy at points CV12 and ST25 is to reduce the frequency of diarrhea, while stimulating point P6 is intended to alleviate nausea. This research was conducted at PKU Muhammadiyah Temanggung Hospital on a patient diagnosed with gastroenteritis. The results of applying acupressure therapy indicated a reduction in the frequency of diarrhea in the patient.

Keywords: Diarrhea; acupressure; nursing care; paediatric nursing; prevention

Introduction

Diarrhea is one of the leading causes of death worldwide. In Indonesia, it is a prevalent disease that affects individuals of all ages. Diarrhea remains a significant health problem in many countries, particularly in developing regions (Birhan et al., 2023). It is characterized by excessive loss of fluids and electrolytes, resulting from frequent bowel movements that produce watery stools (Chen et al., 2023). Specifically, diarrhea involves the excretion of feces with increased frequency (three times a day or more) and a change in consistency to soft or watery, potentially containing blood or mucus (Amaliah et al., 2021). The primary cause of death from diarrhea is dehydration, which can lead to severe complications if not treated promptly. These complications include varying degrees of dehydration (mild, moderate, severe, hypotonic, isotonic, or hypertonic), hypovolemic shock, hypokalemia, hypoglycemia, secondary intolerance due to damage to intestinal mucosal villi, and lactase enzyme deficiency. In severe cases, convulsions can occur due to hypertonic dehydration (Aranda-Michel & Giannella, 1999). Moreover, protein-energy malnutrition may develop as a result of vomiting and diarrhea. According to the World Health Organization (WHO), there are approximately two billion cases of diarrhea globally each year. Notably, 78% of diarrhea-related deaths occur in Southeast Africa and the Asian region. The Ministry of Health of the Republic of Indonesia has reported that Indonesia, as a developing country, has a high incidence of diarrhea, evidenced by frequent Extraordinary Events (KLB) related to diarrhea in various regions. In 2021, health facilities reported 279.484 cases of diarrhea, which represents 28.2% of the estimated total cases. The provinces with the highest reported cases of diarrhea in 2021 included West Java, East Java, Central Java, Banten, and DKI Jakarta. The diarrhea morbidity rate for all ages in Central Java Province was 270 per 1.000 population, indicating a rising trend across provinces and districts (Kementerian Kesehatan RI, 2023).

Diarrhea is endemic in Temanggung Regency and is often associated with outbreaks, sometimes resulting in fatalities. In 2022, the percentage of diarrhea cases treated in Temanggung Regency was reported at 102.4% (Dinas Kesehatan Kabupaten Temanggung Tahun 2018, 2022). Managing diarrhea is not straightforward. While administering fluids containing essential electrolytes is crucial for preventing dehydration, inappropriate use of anti-diarrheal medications can be dangerous (Casburn-Jones & Farthing, 2004). In nursing practice, several non-pharmacological techniques can be employed for patients with diarrhea. Common non-pharmacological therapies include increasing fluid intake, resting, avoiding foods that may stimulate diarrhea, consuming easily digestible foods, increasing fruit intake (particularly those containing pectin), boosting vitamin intake (especially vitamin A), and improving overall nutrition. Massage techniques have long been recognized in nursing care, yet they are often underutilized due to a lack of knowledge regarding their function, techniques, and applications. One effective massage technique is acupressure (Komariah et al., 2021). Acupressure involves using manual pressure applied to specific acupressure points on the body's surface. This technique is efficient and relatively safe, as it is non-invasive and does not harm the skin.

Stimulating these acupressure points makes it beneficial for treating various acute and chronic disorders. The ultimate goal of this treatment technique is to reactivate the body's self-healing mechanisms (Saudin & Nadhif, 2022).

Acupressure is a non-pharmacological technique that involves applying manual pressure to specific points on the body to alleviate symptoms, including diarrhea. With targeting acupressure points such as CV12 and ST25, nurses can help reduce the frequency of diarrhea and improve overall gastrointestinal function. This approach is particularly beneficial for patients who may be sensitive to medications or prefer alternative therapies. Nurses play a crucial role in educating patients about acupressure techniques, assessing their condition, and implementing these interventions as part of holistic care. Incorporating acupressure into nursing practice can enhance patient comfort, promote self-care, and support the body's natural healing processes. For this reason, the study aims to evaluate the use of acupressure in patient with diarrhea.

Case Description

The patient, Mrs. P, is a Muslim Javanese woman from Temanggung and currently works as an entrepreneur. She lives at home with her parents. Mrs. P reported experiencing diarrhea for the past two days, which she attributed to drinking goat's milk. She mentioned having diarrhea seven times a day, with liquid stools. During the assessment, objective data indicated that she had diarrhea seven times daily, with liquid feces. Mrs. P also reported feeling nauseous while eating, a decreased appetite, and was unable to finish a full portion of food. Her vital signs were as follows: blood pressure 110/80 mmHg, pulse 83 beats per minute, respiration 20 breaths per minute, temperature 37°C, and SpO₂ at 97%. Based on the assessment findings, the nursing diagnoses identified were diarrhea related to the infectious process and the risk of nutritional deficits related to nausea and vomiting. To address these issues, acupressure therapy was implemented at points CV12, ST25, and P6, conducted once daily for three days.

Discussion

Research conducted by Firmansyah (2020) indicates that acupressure therapy effectively helps stop diarrhea in patients. This finding aligns with the work of Low et al. (2020), which explains that acupressure at points CV12 and ST25 can reduce the frequency of diarrhea by massaging these points 30 times in a counterclockwise direction. In the case of Mrs. P, who presented with diarrhea, the intervention involved providing acupressure therapy at CV12 and ST25, using a thumb to massage these points 30 times counterclockwise. The author also taught Mrs. P how to perform this technique independently. From the case and supporting literature, it can be concluded that acupressure therapy positively impacts the frequency of diarrhea in Mrs. P and offers valuable knowledge to her family for managing diarrhea. Regarding the risk of nutritional deficits, nursing interventions were informed by research from Dan et al. (2020), which states that stimulating the P6 acupressure point can help reduce nausea. This was relevant for Mrs. P, who reported nausea; thus, the intervention involved acupressure therapy at P6, which successfully alleviated her nausea. In summary, the evidence suggests that acupressure therapy effectively addresses both Mrs. P's diarrhea and nausea, providing her family with new strategies for managing these symptoms. While acupressure therapy is beneficial, it is important to note that combining it with medication may enhance overall effectiveness.

Nurses play a crucial role in providing acupressure therapy for patients experiencing diarrhea by assessing their condition and identifying appropriate acupressure points (Angraini & Kumala, 2022). This holistic approach allows nurses to address not only the physical symptoms but also the emotional and psychological aspects of the patient's experience (Hutasoit, Susilowati, & Hapzah, 2020). By educating patients about the benefits and techniques of acupressure, nurses empower them to take an active role in their own care. This education includes demonstrating how to locate and apply pressure to specific points, such as CV12 and ST25, which are known to alleviate diarrhea. Additionally, nurses can monitor the effectiveness of the therapy and make necessary adjustments to the treatment plan based on the patient's response. Furthermore, nurses serve as advocates for integrating complementary therapies like acupressure into standard care practices. They can collaborate with healthcare teams to ensure that acupressure is included as part of a comprehensive management plan for diarrhea, especially in cases where patients may be reluctant to use medications or have contraindications. By documenting the outcomes of acupressure therapy, nurses contribute to the growing body of evidence supporting its efficacy, which can influence future practice and policy. The role of nurses in providing acupressure not only enhances patient comfort and recovery but also fosters a more holistic approach to healthcare that values patient education and self-management.

Healthcare policy plays a pivotal role in shaping the integration and practice of complementary therapies, such as acupressure, within the broader healthcare system. Policymakers are responsible for establishing guidelines and regulations that govern the use of alternative treatments, ensuring they are evidence-based and safe for patient use. Promoting research and funding studies can facilitate the development of a robust evidence base. This research not only helps to validate the effectiveness of such therapies in managing conditions like diarrhea but also informs best practices for their implementation in clinical settings. As evidence accumulates, healthcare policies can evolve to incorporate these therapies into standard treatment protocols, thereby expanding the options available to healthcare providers and patients alike. Moreover, healthcare policy influences the education and training of healthcare professionals regarding complementary therapies. By incorporating acupressure and similar modalities into nursing

and medical curricula, policymakers can ensure that future healthcare providers are equipped with the knowledge and skills necessary to offer these treatments competently. This education fosters a more inclusive approach to patient care, where nurses and other practitioners can confidently recommend and perform acupressure as part of a comprehensive treatment plan. Additionally, policies that support interprofessional collaboration can enhance the integration of acupressure into multidisciplinary care teams, allowing for a more holistic approach to patient management. Ultimately, effective healthcare policies can bridge the gap between traditional medical practices and complementary therapies, promoting a more patient-centered model of care that respects diverse treatment preferences and enhances overall health outcomes.

Conclusion

Based on the nursing care provided to Mrs. P, who was diagnosed with diarrhea in Sofa Room 2 of PKU Muhammadiyah Temanggung Hospital, it can be concluded that her nutritional deficit is related to her inability to swallow food. This diagnosis was confirmed through a thorough analysis of the case, where the data collected from the client aligned accurately with both minor and major indicators for each diagnosis. The implementation of acupressure therapy at points CV12 and ST25 was found to effectively reduce the frequency of defecation in patients with diarrhea. Additionally, acupressure therapy at point P6 significantly alleviated feelings of nausea. The findings from this case are supported by various nursing journals that discuss the effects of acupressure therapy on patients experiencing diarrhea, highlighting its potential as a beneficial intervention in nursing practice.

References

- Amaliah, N., Mumthi'ah Al Kautsar, A., & Syatirah, S. (2021). Manajemen Asuhan Kebidanan Pada Balita Dengan Diare Akut Disertai Dengan Dehidrasi Berat (Literatur Review). *Jurnal Midwifery*, 3(1), 1–15. <https://doi.org/10.24252/jmw.v3i1.20291>
- Anggraini, D., & Kumala, O. (2022). Diare Pada Anak. *Scientific Journal*, 1(4), 309–317. <https://doi.org/10.56260/sciena.v1i4.60>
- Aranda-Michel, J., & Giannella, R. A. (1999). Acute diarrhea: a practical review. *The American journal of medicine*, 106(6), 670–676. [https://doi.org/10.1016/s0002-9343\(99\)00128-x](https://doi.org/10.1016/s0002-9343(99)00128-x)
- Birhan, T. A., Bitew, B. D., Dagne, H., Amare, D. E., Azanaw, J., Genet, M., Engdaw, G. T., Tesfaye, A. H., Yirdaw, G., & Maru, T. (2023). Prevalence of diarrheal disease and associated factors among under-five children in flood-prone settlements of Northwest Ethiopia: A cross-sectional community-based study. *Frontiers in pediatrics*, 11, 1056129. <https://doi.org/10.3389/fped.2023.1056129>
- Casburn-Jones, A. C., & Farthing, M. J. (2004). Management of infectious diarrhoea. *Gut*, 53(2), 296–305. <https://doi.org/10.1136/gut.2003.022103>
- Chen, L., Jiao, J., Liu, S., Liu, L., & Liu, P. (2023). Mapping the global, regional, and national burden of diarrheal diseases attributable to unsafe water. *Frontiers in public health*, 11, 1302748. <https://doi.org/10.3389/fpubh.2023.1302748>
- Dan, M., Pada, M., Maheswara, A. N., Wahyuni, E. S., & Kustiyati, S. (2020). Literature Review : Terapi Komplementer Akupresur Pada Titik Perikardium 6 Dalam Mengatasi Mual. 315–327.
- Dinas Kesehatan Kabupaten Temanggung Tahun 2018. (2022). Profil Kesehatan Temanggung 2022. Profil Kesehatan Kabupaten Temanggung, 1(1), 1689–1699.
- Firmansyah, 2017. (2020). Penanganan Nyeri Gastritis Menggunakan Terapi Akupresur Pada Titik Gongsun (SP 4), Sanyinjau (SP 6), Zhongwau (CV 12), Dan Pemberian Herbal Pegangan. Ir-Perpustakaan Universitas AIRLANGGA, 74, 12–31.
- Hutasoit, M., Susilowati, L., & Hapzah, I. A. N. (2020). Hubungan Pengetahuan Ibu Tentang Pengelolaan Diare Dengan Klasifikasi Diare Di Puskesmas Kasihan Bantul. *Medika Respati: Jurnal Ilmiah Kesehatan*, 14(3), 265. <https://doi.org/10.35842/mr.v14i3.252>
- Kementerian Kesehatan RI. (2023). Rencana aksi nasional penanggulangan diare di indonesia 2023-2030. Accessed https://p2p.kemkes.go.id/wp-content/uploads/2023/12/NAPPD_2023-2030-compressed.pdf (5 March 2024)
- Komariah, M., Mulyana, A. M., Maulana, S., Rachmah, A. D., & Nuraeni, F. (2021). Literature Review Terkait Manfaat Terapi Akupresur Dalam Mengatasi Berbagai Masalah Kesehatan. *Jurnal Medika Utama*, 02(01), 402–406.
- Low, T., Pain, B., & Swedish, W. (2020). Journal of Vocational Health Studies ACUPRESSURE AND TURMERIC. 04, 29–34. <https://doi.org/10.20473/jvhs.V4I1.2020.29-34>
- Saudin, D., & Nadhif, A. (2022). Pengaruh Akupresure Terhadap Berhentinya Diare Pada Anak. Prosiding Seminas. <http://journal.unipdu.ac.id/index.php/seminas/article/view/159>