



Local beliefs (Sanro) in traditional medicine of the Bugis tribe: a study of culture-based physical therapy

Naila Resqiyah

Universitas Islam Negeri Sunan Kalijaga, Yogyakarta

nailaresqiyah@gmail.com

Abstract

Traditional Bugis medicine, particularly Sanro's role as a healer, has become an integral part of South Sulawesi's public health system. This research is a narrative literature review that synthesizes resources about culture-based physical therapy in Sanro practice, such as traditional massage (massage) and herbal application (pappasilan). Based on a reference analysis from anthropology and ethnomedicine journals, it was found that Sanro's physical therapy not only relies on manual techniques to deal with bone injuries, but is also embedded in Bugis cosmology such as the concept of balance and siri' (self-esteem). Although socioculturally effective, there are modernization challenges such as conflicts with biomedical demanding the integration of medical pluralism. These results highlight Sanro's potential for preservation through documentation and advanced clinical research, with implications for culture-based health policy in Indonesia.

Keywords: *Sanro, traditional medicine, Bugis tribe, physical therapy, Cultural therapy.*

Abstrak

Pengobatan tradisional suku Bugis, khususnya peran Sanro sebagai penyembuh, telah menjadi bagian integral dari sistem kesehatan masyarakat Sulawesi Selatan. Penelitian ini merupakan literature review naratif yang mensintesis sumber-sumber tentang terapi fisik berbasis budaya dalam praktik Sanro, seperti pijat tradisional (urut) dan aplikasi herbal (pappasilan). Berdasarkan analisis referensi dari jurnal antropologi dan etnomedisin, ditemukan bahwa terapi fisik Sanro tidak hanya mengandalkan teknik manual untuk mengatasi cedera tulang, tetapi juga tertanam dalam kosmologi Bugis seperti konsep keseimbangan dan siri' (harga diri). Meskipun efektif secara sosiokultural, terdapat tantangan modernisasi seperti konflik dengan biomedis menuntut integrasi pluralisme medis. Hasil ini menyoroti potensi pelestarian Sanro melalui dokumentasi dan penelitian klinis lanjutan, dengan implikasi bagi kebijakan kesehatan berbasis budaya di Indonesia.

Kata Kunci: *Sanro, pengobatan tradisional, suku Bugis, terapi fisik, terapi Budaya.*

INTRODUCTION

The rapid advancement of modern medical science does not necessarily eliminate traditional medicine systems that have existed since ancient times, which have proven to have extraordinary durability in various regions. Indonesia, thanks to its ethnic plurality, is the source of a diverse local wisdom of health whose healing is passed down through

practical experience from generation to generation. In South Sulawesi, one of them, the Bugis still rely heavily on this system of medicine, where Sanro figures are known as the main healers in their society.

As a traditional shaman or healer in the Bugis community, Sanro plays a crucial role in treating a wide spectrum of ailments ranging from physical problems to non-medical disorders. The uniqueness of Sanro lies in the holistic method they use, which combines elements of physical medicine, herbal medicine, and spiritual rituals. This knowledge is generally sourced from ancestral inheritance recorded in the lontara' papbura manuscript, which contains detailed recipes and healing procedures. (Abbas and Nurfan 2024)

Sanro has a unique position in society; He was not only a physician, but also an important figure who carried out several roles, namely healer, spiritual advisor, and maintainer of social harmony. In particular, Sanro's expertise in dealing with physical injuries, such as fractures, joint dislocations, and sprains, remains the main attraction and reason people seek them out, even today.

This expertise is the focus of the researcher in this study. Sanro's practice of correcting bones (*Sanro Topolo* or fracture expert) and massage techniques (*ma'uru*) is a phenomenon that can be categorized as culture-based physical therapy. It is a unique system, in which diagnosis and intervention are based not only on honed manual skills (*palpation or touch*), but also are inseparable from the use of herbal herbs, the recitation of prayers or mantras from sanro (*jappi*), and a deep understanding of cosmology and Bugis customs. In the era of modernization, this practice is in danger of extinction because the younger generation is more dominant in choosing conventional medicine, so this research can help with documentation and revitalization to prevent the loss of cultural heritage. (Ratu, Syahrani, and Asrina 2022) (Rafid 2022) Because the literature shows that sanro plays a key role in the health rituals of the Bugis tribe, but there is a lack of in-depth exploration of physical adaptation in the midst of urbanization.

Sanro culture-based physical therapy is becoming increasingly popular as an alternative or complement to biomedical medicine, especially in the context of today's medical diversity, where these local traditions can collaborate with modern knowledge while maintaining cultural identity. The study collects previous research and looks at how Sanro's physical therapy reinforces Bugis cultural values in addition to physical healing.

The purpose of this article is to study the practice of sanro in the Bugis Tribe from the perspective of physical therapy. Researchers found that Sanro is more than just an alternative medicine, it offers a comprehensive therapeutic method in which the physical and psychological healing of the patient is integrated. This research is expected to fill the knowledge gap while providing practical benefits because, based on the literature review conducted by the author, this topic is still rarely discussed and studied thoroughly in today's world.

In addition to increasing academic knowledge, this research also has a real effect. These include policy recommendations for the South Sulawesi health office or collaboration between sanro and medical professionals to improve the accessibility of health services in rural areas; explore patients' methods, cultural values, and perceptions of Sanro's physical therapy; and opened a discussion on how Sanro could be incorporated into the welfare service system.

METHOD

The research method used in this study is Library Research. This research method is literature, to collect data and information by examining written sources such as books, journals, encyclopedias, and other documents in the library without conducting field reviews. This research focuses on the analysis of existing texts, theories, concepts, and findings to solve or answer research questions.

The data collection method uses Literature Review. According to Arksey O'Malley (2005), in compiling a literature review there are several stages that must be done. These stages are, identifying research questions, identifying relevant studies, mapping the data obtained, and compiling, summarizing, and reporting the results. The articles obtained are a review of scientific articles from references Titles, abstracts, and the content of scientific articles are filtered based on inclusion and exclusion criteria that have been determined by the author (Arksey & O'Malley, 2005). Literature synthesis is a critical process of combining information from various sources (such as theories, views, and research results) to form a new understanding, rather than simply summarizing. This synthesis highlights patterns, gaps, or relationships between studies, and produces a coherent and in-depth narrative or argument on a topic.

The data collected in this type of research does not come from numbers, but from field records, documents, interviews, and other sources. The purpose of this qualitative descriptive research is to describe the facts behind social phenomena in depth, detail, and comprehensively. Therefore, a qualitative approach is used in this study to match the facts of society with existing theories.

RESULT AND DISCUSSION

Judging from the knowledge of the people of Sulawesi in utilizing nature, it can be said that the people of Sulawesi have a broad insight into the environment, more deeply covering the cultural and social dimensions. This means that their affairs are not limited to the visible world, but include the small world and the big world, the harmony between the micro world and the macro world, there is an interconnectedness between the two. The ability to utilize various plants that are thought to cure various diseases in humans has been inherited from generation to generation. Therefore, it is not surprising that we find so many treatment systems that use plants. The Bugis tribe, which originates from the South Sulawesi Province area, also has a tradition of medicine that uses plants as ingredients, and until now it is still functional in the daily lives of its people.

The Bugis people still hold fast to the knowledge of traditional medicine as part of their cultural system. In their lives, they are known to have three kinds of diseases, namely physical diseases, diseases due to use, and diseases due to disturbances of spirit beings. Physical diseases are caused by an imbalance in the physical organism because the organs of the body cannot function normally, or due to natural disturbances such as temperature, air and the circulation of seasons. Diseases caused by *guna-gunas* are diseases made by humans by utilizing supernatural powers and subtle beings. This disease is known in the world of anthropology as *magi*, both white and black *magi*. Meanwhile, diseases caused by the disturbance of spirit creatures occur because humans are considered to violate taboos, taboos or other things that are not to be done.

Sanro traditional medicine still functions as a person who is asked for help by the community to cure the disease he suffers from. The treatment model carried out by traditional healers is categorized into three types, namely first, by using medicinal herbs derived from certain plants, the procedure is applied or applied to the diseased part of the body. Second, by massaging or massaging, it is equipped with medicinal herbs. Third, with

prayers or mantras as a complement to the treatment procedure. By utilizing plants or medicinal plants for the prevention of various diseases as well as public health care, it is actually an appropriate technology that has the potential to support the development of the health sector.

Local Beliefs

Local beliefs are the original knowledge or local genius of a society, which is derived from the noble values of cultural traditions, and is used in community life to achieve social progress both in creating peace and improving the welfare of the community. Similarly, the Bugis tribe of South Sulawesi still believe in sanro or shamans as a belief in traditional medicine in the healing process. (Abbas and Nurfan 2024)

The term shaman is often associated with things that have a negative impact on society. In addition, the role of shamans is often considered unbeneficial to many people. (Iswanto 2021) For the Bugis people themselves, people who are considered shamans are people who are able to treat medical and non-medical diseases through traditional medicine, in this case the Bugis people often call them sanro. It is called sanro not because of a mere coincidence but because there are various advantages that it has.

Sanro is considered by the Bugis people as a local teacher who helps and heals the sick (traditional medicine). In the Bugis society, sanro knowledge is passed down from the family. This is because the local community assumes that knowledge is hereditary inheritance from ancestors and should not be inherited or passed down to anyone other than family members. This is due to the fact that this traditional knowledge is a form of family honor and pride, so it is usually tried so that the understanding of mastery of the profession of a sanro is limited to certain families, not other families. This knowledge is obtained through a learning process that takes place from generation to generation, through various stages of experience and learning, as well as the results of trials from various disease complaints from the patients they face. (Abbas and Nurfan 2024) Because it has extraordinary benefits for humans and remains relevant to the modern world, the knowledge of traditional medicine which is the local wisdom of the Bugis people must be maintained and preserved.

Sanro falls into several categories, such as baby hair clippers or Sanro pekdektek tolo, according to local people. Sanro pabbura-bura, also referred to as an expert, treats

various diseases with medicinal plant herbs. Sanro pajjappi, or treating through the recitation of mantras. Sanro tapolo, or expert in the treatment and healing of fractures through the practice of massage and mantra reading. Sanro pattirotiro, a traditional medicine that focuses on healing through divination and divination. (Kusumah 2017) In this study, it will focus on physical therapy.

Sanro Topolo

Sanro Topolo is a type of physical therapy used by the Bugis tribe in South Sulawesi, Indonesia. As previously explained, Sanro refers to traditional healers or shamans who have knowledge of medicine that has been passed down from generation to generation. On the other hand, Topolo (or a variation of the spelling Tapolo) refers to the therapy or treatment of bones, specifically fractures. Sanro Topolo is known as an expert who heals patients without relying entirely on modern medicine by combining manual physical techniques with elements of Bugis culture, such as an understanding of the balance of the body (heat and cold) and the harmony of nature. (Herb, Culture, and Society 2016), (Sulfiana et al. 2018)

Sanro Topolo is a specialist in traditional orthopedics in the Bugis community. They are often contacted for problems such as fractures (fractures), sprains, joint dislocations, or persistent muscle and bone pain. Sanro Topolo places more emphasis on direct physical intervention than prayer or mantras. This distinguishes it from other types of sanro, such as Sanro Pakdettek Tolo, which works as a childbirth assistant, or Sanro Pabbura-bura, which works as a herbalist. They spread their knowledge orally through lineage, and they are revered for their ability to heal patients without invasive procedures, which are in line with Bugis values such as siri' (self-esteem) and paccing (life balance).

Sanro Topolo Practice

One of the main approaches in Sanro Topolo's culture-based physical therapy is massage or manual manipulation, which is a special massage technique on the injured area to help restore bone or joint position. This is done with gentle but firm movements, often using herbal oils, bandages, and fixation of broken bones with natural ingredients to aid in the natural healing process while avoiding excessive movement. Furthermore, sanro therapy helps by incorporating simple rituals, such as reciting a short prayer to remove the bad wind that causes the injury, although the main focus remains physical. Depending on the severity

of the process, it can take anywhere from a few sessions to a few weeks. (Firman Saleh, S.S., S.Pd. 2019)

According to Sanro Topolo, a fracture expert of the Bugis Tribe, fracture treatment is a ritual process that includes both physical and spiritual aspects using mantras (jappi-jappi or pajjappi) along with physical rituals such as massage or balut. Usually read in Bugis, these mantras contain Islamic elements (such as Barakahlailahailallah for blessings or La ilaha illallah), and are intended to remove bad energy or ask for healing from God. (February 2021)

Although modern medical science is advancing, the traditional medicine system of the Bugis Tribe in South Sulawesi, centered on Sanro figures, remains solid and is the first choice. Sanro is not just a healer, but a social institution that combines the role of healer, spiritual advisor, and guardian of community harmony. Sanro's expertise in dealing with physical injuries such as fractures and sprains, using a holistic approach that integrates physical, herbal, and spiritual elements, is highly sought-after. Their practice is rooted in hereditary knowledge documented in the ancient manuscript of lontara' pabbura. Sanro's treatment procedure begins with a tactile diagnosis to detect occult elements, followed by concocting massage herbs (parem). The main ritual involves the recitation of the pajappi mantra (a combination of prayer and Qur'anic verses) to invoke blessings, followed by massage and bone manipulation that resembles physiotherapy. This process ends with abstinence instructions and the provision of prayer water, while medical expenses are generally voluntary. (Herb, Culture, and Society 2016)

These mantras reflect the syncretism of Bugis-Islamic culture, where the spiritual element reinforces physical therapy. Its effectiveness depends on the patient's belief in sanro, and variations can vary between regions, depending on the beliefs and customs of the Bugis tribe in their respective regions in South Sulawesi.

The Meaning of Sanro Topolo Cultural Therapy

Sanro Topolo not only offers physical therapy, but also contains deep cultural significance in Bugis society. This practice represents local wisdom and the concept of harmony between humans, nature, and the spiritual world. This meaning affirms the Bugis holistic view of health as a balance between the physical body and the supernatural elements. When balance is disturbed it is often interpreted as a bone disease due to an incoming wind

or spiritual disturbance the Sanro Topolo intervention serves as a restoration, which combines physical manipulation with ritual. In the context of Bugis culture, Sanro Topolo symbolizes the values of siri' (self-esteem) and paccing (life balance), where these healers act as guardians of social harmony and communal identity.

The practice, which often involves natural materials, represents the close relationship between humans and the natural environment, in accordance with Bugis cosmology which views the body as a micro and cosmos in harmony with the macro and cosmos. (Abbas and Nurfan 2024) Symbolically, Sanro Topolo also plays a role in life transition rituals, such as post-traumatic healing that strengthens community resilience, as well as maintaining the oral heritage of lontara' as a form of cultural preservation in the midst of modernization. This interpretation confirms that Sanro Topolo is not just a physical therapist, but a guardian of holistic cultural values, where bone healing is a metaphor for restoring the backbone of the Bugis community in facing life's challenges.

Sanro Topolo as a Culture-Based Therapy

From a biomedical perspective, Sanro physical therapies such as massage or traditional massage show a mechanism of action similar to modern physiotherapy, where manual manipulation of muscles and joints can stimulate blood circulation as well as reduce inflammation, as seen in Sanro Topolo's practice of treating fractures through gentle massage techniques. Herbal applications in the form of herbs or wraps, such as those carried out by Sanro Pabbura-bura using local herbs for skin ailments or fevers, have natural pharmacological potential that parallels those of contemporary herbal medicine, where active ingredients such as anti-inflammatory substances from spices aid recovery without chemical side effects. (Rafid 2022)

However, in the modern era, the practice faces challenges such as conflicts with biomedical medicine, government regulation and the decline of successors due to urbanization. Some Sanro Topolo are now integrating their knowledge with contemporary physiotherapy for adaptation. Overall, Sanro Topolo represents the rich heritage of the Bugis tribe in ethnomedic, which emphasizes a holistic and sustainable approach.

Modernization has threatened the sustainability of Sanro practices, mainly through the systematic loss of oral knowledge, where the younger generation of Bugis is more predominantly opting for biomedical medicine over traditional heritage, leading to a decline

in the number of active Sanro. Conflicts with national health regulations, such as certification requirements from the Ministry of Health, often hamper this practice due to a lack of standardization, although the potential for the integration of medical pluralism such as collaboration between Sanro and physicians could create a hybrid model that enriches the public health system. This approach not only preserves elements of Bugis culture, but also improves the accessibility of treatment in rural areas, where Sanro's physical therapy remains a top choice for low-income communities.

Integration of sanro values and modern Health

Sanro topolo does not see fractures as just a physical problem. They treat patients as a whole, which includes physicality through massage, massage, and bone repositioning techniques. Herbs use herbs (leaves, oils) to reduce swelling and pain. Spiritual through prayer, mantras (jappi) to summon the spirit and beg for healing, which provides great psychological calm to the patient. Sanro is a respected figure in his community. Patients come not only because of their expertise, but because of the trust factor that has been built up from generation to generation. This relationship is personal, not transactional. In addition, Sanro Topolo is more accessible (in terms of location and time) and its cost is considered more affordable or even voluntary, which is an important factor for many walks of life. The patient's full faith in sanro and the spiritual processes that accompany it can create a positive placebo effect, which is scientifically proven to aid in pain management and speed recovery.

The integration of sanro topolo cannot be done by admitting them directly to the hospital. The most realistic and proven successful model in Indonesia is the partnership model. In this model, the role is redefined from the primary handler to the strategic partner of the medical personnel. By ensuring patients get the right treatment at the right time, from Sanro Topolo to medical (health center or hospital). The health office provides training to sanro topolo to identify red flags. Examples of cases are those that must be referred to, for example an open fracture, severe head injury, suspected internal bleeding, or complex fractures that must be referred immediately to the Emergency Installation (IGD). Sanro Topolo's role is to be the first filter and motivator so that patients want to go to the hospital. Then post-medical care, i.e. after the patient has been operated on and the condition of the bones is stable (for example, after the insertion of the pen), the doctor may allow the patient to receive supportive care from sanro. For example, Sanro Topolo can help with

rehabilitation (reducing muscle stiffness after the cast is opened), pain management (with a safe topical concoction), and psychological or spiritual support for recovery.

This integration is not easy and has great challenges. The paradigm difference, for example, is because modern medicine relies on x-rays for a definitive diagnosis. While Sanro topolo relies on palpation (touch). There is a great risk that Sanro misdiagnoses complex fractures as simple fractures, which if treated without surgery can result in permanent disability (malunion). The risk of intervention also in massage techniques or incorrect repositioning of fractures can aggravate the injury, damage blood vessels or nerves, and cause infection (if using non-sterile tools or herbs). Standardization and regulation are also considered because sanro's expertise is inherited and very individual. It is difficult to create competency standards or provide uniform certifications. There is also a possibility of reluctance from both sides between medical personnel who consider Sanro unscientific, and Sanro who feel that their authority is threatened.

The integration of sanro topolo values in the modern healthcare system is most effectively realized through a respectful partnership. The focus is on putting patient safety at the top of the list, where modern systems handle emergency cases and definitive diagnoses, while sanro topolo plays the role of a partner in early detection, referral, and spiritual psychosocial rehabilitation support after medical procedures.

CONCLUSION

A synthesis of the literature shows that Sanro represents a holistic form of culture-based physical therapy in traditional medicine of the Bugis tribe, where techniques such as massage and herbal application not only address physical symptoms but also strengthen the sociocultural balance of the community through values such as siri' and paccing. Its effectiveness is proven socioculturally, especially in rural areas of South Sulawesi, where Sanro plays a role as a primary healer for bone injuries, postpartum pain, and so on although biomedical evidence still relies on ethnography rather than clinical data. This approach emphasizes the importance of ethnomedicine in maintaining Bugis cultural identity in the midst of globalization.

The implication of this review is the need for active support for the preservation of Sanro's practices through systematic documentation, such as the creation of a digital database of herbal recipes and physical techniques, as well as integration into Indonesia's national

health system to create a model of medical pluralism. This can improve the accessibility of treatment for the Bugis people, reduce dependence on imported medicines, and enrich modern physiotherapy with cultural elements, thereby supporting the SDGs goals related to health and the preservation of cultural heritage. This kind of integration also has the potential to reduce conflicts between traditional and biomedical, promoting mutually beneficial collaboration.

SUGGESTIONS

The literature on Sanro physical therapy reveals significant gaps in the scientific evidence, where most studies still rely on qualitative ethnographic approaches without controlled clinical trials that quantitatively measure the effectiveness of massage or herbal applications, thus limiting biomedical validation. Recommendations for further research include the design of mixedmethods that combine field observations with physiological measurements, such as the use of MRI or blood tests to evaluate the impact of therapy on the Bugis musculoskeletal system. This approach will not only fill knowledge gaps, but also support cultural preservation policies, ensuring that Sanro's practices remain relevant in an increasingly diverse global health context.

Suggestions for follow-up research include conducting controlled clinical trials to test the effectiveness of Sanro's physical therapies, such as massage and herbal wraps, with biomedical metrics such as measurements of inflammation or joint mobility, in order to build stronger empirical evidence. In addition, government policies are required for Sanro certification through formal training programs, such as cooperation with the Ministry of Health and local universities, to ensure standardization without eliminating cultural essence. This approach will help preserve traditional knowledge while encouraging innovation, including comparative studies with other indigenous medicine systems in Indonesia.

REFERENCES

- Akker, J. van den. (2013). Curriculum design research. *Educational Design Research*, 1(1), 37–52.
- Al-Qahtani, M. (2020). The effectiveness of multimedia in teaching Arabic grammar. *International Journal of Emerging Technologies in Learning*, 15(10), 102–118.

- Awwiby, W., Nashoih, A. K., & Aisa, A. (2021). Pengembangan media pembelajaran nahwu berbasis Macromedia Flash 8 untuk meningkatkan hasil belajar santri. *Al-Lahjah: Jurnal Pendidikan, Bahasa Arab, dan Kajian Linguistik Arab*, 2(1), 45–60.
- Awalia, S. N., & Nurhidayati. (2023). Video pembelajaran bahasa Arab materi nahwu. *Journal of Language Literature and Arts*, 3(11), 1524–1538.
- Borg, W. R., & Gall, M. D. (2003). *Educational research: An introduction* (pp. 569–575). Longman.
- Cholidah, Z., & Muid, F. A. (2025). Inovasi pembelajaran nahwu dalam kurikulum bahasa Arab modern. *Journal of Practice Learning and Educational Development*, 5(1), 85–99.
- Darmawati, G., Wahyuni, W., & Hanafi, I. (2025). Pengembangan media pembelajaran nahwu berbasis game edukasi. *Intellect: Indonesian Journal of Learning and Technological Innovation*, 4(2), 105–120.
- Gall, M. D., Gall, J. P., & Borg, W. R. (2007). *Educational research: An introduction* (pp. 590–600). Pearson.
- Hindarto. (2025). Aplikasi pembelajaran nahwu sharaf berbasis mobile. *Multitek Indonesia: Jurnal Ilmiah*, 19(1), 1–10.
- Jonassen, D. H. (1997). Computers as mindtools for schools. *Educational Technology Research and Development*, 45(1), 67–80.
- Li, C., & Yang, M. (2021). Interactive digital publishing in education. *Journal of Educational Multimedia and Hypermedia*, 30(4), 411–427.
- Mabruroh, R. (2025). Pengembangan bahan ajar nahwu dengan pendekatan saintifik. *Prophetik: Jurnal Kajian Keislaman*, 4(1), 33–47.
- Mayer, R. E. (2009). *Multimedia learning* (2nd ed., pp. 1–45). Cambridge University Press.
- Mayer, R. E. (2011). Applying the science of learning. *Educational Psychology Review*, 23(1), 1–41.
- Mayer, R. E., & Moreno, R. (2003). Nine ways to reduce cognitive load in multimedia learning. *Educational Psychologist*, 38(1), 43–52.
- Moreno, R., & Mayer, R. E. (2007). Interactive multimodal learning environments. *Educational Psychology Review*, 19(3), 309–326.



- Muradi, A. (2023). Digital transformation in Arabic language education. *International Journal of Language Education*, 7(2), 145–156.
- Putri, L. R. F., & Fatkhurrohman. (2024). Pembelajaran bahasa Arab dalam buku teori dasar nahwu dan sharaf tingkat pemula. *Spesifik: Jurnal Pendidikan dan Pembelajaran*, 2(1), 12–25.
- Sugiyono. (2019). *Metode penelitian dan pengembangan (Research and Development/R&D)* (pp. 28–35). Alfabeta.
- Sweller, J. (1988). Cognitive load during problem solving. *Cognitive Science*, 12(2), 257–285.
- Warschauer, M., & Healey, D. (1998). Computers and language learning. *Language Teaching*, 31(2), 57–71.
- Yunus, M. M., & Suliman, A. (2020). Digital learning tools in Arabic language education. *Universal Journal of Educational Research*, 8(12), 6782–6791.