

## *Bimanese Traditional Healing Practices in Patients with Hypertension in West Nusa Tenggara, Indonesia*

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### ABSTRACT

**Background:** Incorporating cultural factors into nursing care can support the achievement of therapeutic goals. The use of traditional medicine alongside conventional treatment has gained attention in managing hypertension, especially in culturally diverse settings. **Purpose:** This study aims to explore the medication practices of patients with hypertension from a nursing perspective, emphasizing cultural influences and traditional medicine use. **Methods:** Employing a qualitative ethnographic design, the research was conducted at three public health centers in rural and urban Bima, Sumbawa Island, West Nusa Tenggara, from February to August 2024. Sixteen patients with hypertension, purposively selected via snowball sampling, participated through in-depth interviews and participant observation. Data analysis involved thematic analysis and triangulation, with validation from informants and experts. **Results:** Findings reveal that patients often combine prescribed antihypertensive medications with traditional remedies. Three main themes emerged. The first, cultural care practices in medication, includes six subthemes: oral traditional medicine, traditional body scrubs for warming, Bimanese munching-spraying medicine, and treatments applied to the head. The second theme highlights the combination of Bimanese traditional treatments with hypertension medication, divided into two subthemes. The third emphasizes belief in the effectiveness of Bimanese treatments. These practices are deeply rooted in local cultural beliefs and traditions. **Conclusions:** Recognizing and integrating traditional treatments into nursing care can improve medication adherence among hypertensive patients. Respecting cultural practices and fostering trust in traditional medicine are essential for culturally competent care. Healthcare providers should consider these factors to enhance treatment outcomes and patient satisfaction.

**Keywords:** Culturally Competent Care, Hypertension, Medication Adherence, Nurses, Traditional Medicine.

### INTRODUCTION

Hypertension is commonly referred to as "the silent killer" due to its role as a risk factor for damage to vital organs such as the brain, heart, kidneys, and blood vessels, ultimately leading to death (Indonesia Society of Hypertension, 2021; Krist, 2021). In its early stages, hypertension often presents with no clinical symptoms, leaving individuals unaware of their condition (Fuchs & Whelton 2020). Clinical symptoms typically emerge only after damage to blood vessels has occurred, manifesting in ways that correspond to the specific organ systems

affected by vascular damage (Lewis, 2020).

The number of patients with hypertension worldwide is increasing, with the majority residing in low- and middle-income countries (Zhou *et al.*, 2021). The incidence rate of new hypertension cases rose from 2.11 per 100 individuals in 2017-2019 to 5.20 in 2020-2022, and further increased to 6.76 in 2023 (Trimarco *et al.*, 2024). In Indonesia, one in three individuals is affected by hypertension (Rukom Kemenkes, 2023). Similarly, in Bima, West Nusa Tenggara (NTB), there has been a notable rise in hypertension cases, making it the leading cause of patient visits at Public Health Centers (Dinkes NTB,

2023). This high prevalence highlights hypertension's significance as a risk factor for complications such as cardiovascular disease (CVD) and stroke (Martiningsih and Haris, 2019). This trend is also reflected in the high number of hospitalizations due to heart disease and stroke, which rank as the third and sixth leading causes of hospitalization at Bima General Hospital (Pemda, Kab. Bima, 2023).

Bima is located in the eastern region of Sumbawa Island, West Nusa Tenggara, Indonesia, and is known for its rich culture, including the use of traditional medicine. Based on interviews with patients from the Bima ethnic group with hypertension, the results reveal that they typically take medication only when they experience symptoms, to alleviate physical complaints, or when they still have a supply of medication. Non-adherence to regular medication is common, largely due to fears that taking medication daily for life may lead to overdose. One patient reported taking their medicine but seeing no change, as their blood pressure fluctuated between high and low. In such cases, patients are often quickly influenced to try traditional medicine, despite the uncertain effectiveness of such treatments for hypertension. This phenomenon highlights that hypertensive patients in Bima have cultural perceptions and practices regarding traditional medicine, which may contribute to non-compliance with professional medical management and create uncertainty about adhering to prescribed treatments.

Studies on Dayak ethnic patients with hypertension living in Samarinda have shown that cultural factors can pose significant obstacles to effective hypertension management (Nurbaya and Burhanto, 2020). Culture plays a critical role in self-care, especially in maintaining self-care behaviors (Self-Care Maintenance) and in how individuals interpret and respond to their symptoms (Yatim et al., 2019; (Henry Osokpo, James and Riegel, 2021). Recognizing cultural values can serve as a supporting factor in achieving therapeutic goals within nurse-patient interactions. According to Leininger's theory, the cultural care perspective emphasizes that individuals are influenced by social and cultural dimensions that shape their behaviors and affect how they maintain their well-being

in both health and illness contexts (McFarland and Wehbe-Alamah, 2019).

Our literature review, conducted to explore the cultural and management aspects of hypertension from 2018 to 2024 across several countries and ethnic groups in Indonesia, reveals several significant findings. The use of herbal and traditional medicines in Indonesia has been reported to range between 54% and 78% (Darozah and Ramdini, 2024). A study in Sulawesi highlighted a lack of knowledge about hypertension among informants, with treatment primarily guided by recommendations from local health workers (Metriani et al., 2022). Meanwhile, a review in Asia noted that the use of herbs without a prescription requires both internal and external efforts to improve hypertension self-care management (Irwan, 2021). Studies in Malaysia have also shown that cultural and religious factors contribute to treatment compliance (Wijayati *et al.*, 2021). A review of African immigrants in the United States, Australia, Sweden, and the Netherlands found that non-Western approaches to interpreting and treating hypertension—including the use of herbs—play a significant role (Henry Osokpo, James and Riegel, 2021). Similarly, in Ethiopia, cultural differences significantly shape self-care practices related to hypertension (Tebelu *et al.*, 2023).

Several studies have highlighted the influence of culture, as well as the use of herbal and traditional medicine, in managing hypertension. However, no study has specifically explored the efforts made by hypertensive patients in combining traditional medicine with medical treatment in Bima. This study aims to bridge that gap from a nursing perspective, using an ethnographic approach to explore patients' medication habits. The goal is to understand how cultural meanings, patterns, and practices related to traditional and modern medications influence hypertension management. Such insights can serve as a basis for culturally sensitive nursing interventions in hypertension care. Ultimately, this understanding can inform current and future nursing practices (Wehbe-Alamah and McFarland, 2020). Exploring treatment habits within the cultural context and lifestyle of the Bima community can provide evidence-based insights into health behaviors among hypertensive

patients in Bima, which can be utilized in health promotion efforts.

## METHODS

This research employed a qualitative ethnography design to explore cultural care in patients with hypertension, specifically focusing on their medication habits. The study was guided by the Cultural Care Theory (Wehbe-Alamah and McFarland, 2020). The domain of inquiry (DOI) examined the medication habits of hypertension patients from the Bima ethnic group to understand the cultural practices of the Bima people in managing hypertension. The study adhered to the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist for report writing (Tong, Sainsbury and Craig, 2007).

The research was conducted in Bima, West Nusa Tenggara, Indonesia. Three public health centers (PHCs) were selected to obtain diverse data representation. The urban area was represented by Paruga PHC in Dara sub-district, while the rural areas were represented by Soromandi PHC in Bajo Hamlet, which reflects the coastal sub-culture, and Donggo PHC in Doridungga Hamlet, representing the mountain sub-culture and the indigenous Bima tribe.

Proposals, preliminary studies, and protocols were implemented in 2023, with ethical approval obtained in January 2024. Data collection took place from February to August 2024. To facilitate in-depth exploration, informants with maximum variation were selected from diverse backgrounds and age groups to capture the phenomenon's essence (Speziale, Streubert and Carpenter, 2011). The study involved sixteen hypertensive informants. Informants were selected based on the following inclusion criteria: diagnosed with hypertension by a doctor for at least six months; of Bima ethnicity; currently receiving antihypertensive medication; and willing to participate as research informants. Participants were recruited using purposive sampling. The selection process began with initial observations at the PHC and introductions by the gatekeeper, followed by home visits. The sample size was determined based on data saturation. Researchers were already familiar with several informants, having

conducted previous research on self-care among patients with hypertension.

In qualitative research, the researcher serves as the primary instrument for data collection (Creswell, 2013; Creswell, 2014). As active instruments, researchers engaged in "cultural immersions" throughout the data collection process, which was conducted iteratively to achieve comprehensive and nuanced "thick descriptions" of the research context. Field observations of informants were carried out through participant observation (PO), enabling the researcher to collect data by observing and interacting with participants in their daily lives (McFarland and Wehbe-Alamah, 2019); (Wehbe-Alamah and McFarland, 2020). To establish the informants' trust, the researcher was assisted by a gatekeeper—a trusted community member, typically the director of a primary healthcare center (PHC) and a nurse responsible for non-communicable disease programs. In-depth interviews were conducted at a time and place convenient for the informant, after obtaining informed consent and establishing a therapeutic relationship. Each interview lasted approximately 45 to 60 minutes, with three sessions conducted per informant. Bahasa Indonesia and Bima language were used, with one researcher, M.M., conducting the interviews, and an interpreter assisting the other researchers for clarity and further discussion. The interviews followed a semi-structured format, based on guidelines designed to explore cultural practices and treatment habits related to healthcare.

The interviews were recorded using audio devices, and supplementary data were collected through observation sheets and smartphone video recordings documenting the activities of patients with hypertension. The interview recordings were transcribed verbatim by researchers M.M. and A.Y., through repeated listening and manual transcription in Word documents. The research team cross-checked the transcripts, analyzed the data, and engaged in discussions regarding the findings. No informants withdrew from the study.

Systematic thematic data analysis employed four stages of the ERM process: (1) Data were collected from all informants and documented through raw data (interview results, observations, field

notes). These were transcribed verbatim into a Word document to analyze initial meanings and select meaningful quotes aligned with the research objectives. (2) Significant statements from the verbatim transcripts were coded, categorized, and organized into sub-themes and themes by the research team. The initial interpretation was classified according to the domain of inquiry (DOI), and coding was managed using Excel worksheets. A total of 34 codes, 14 categories, 10 sub-themes, and 3 themes were identified. For example, the habit of taking hypertension medication only when symptoms arise, followed by the use of traditional medicine, was categorized under the theme of combining hypertension medication with traditional medicine. (3) The data were examined for repeating patterns, encompassing similar or different meanings, and the context was analyzed for deeper significance. These three phases continued throughout the data collection process until saturation was reached. Saturation was achieved by the 16th informant when no new information or coding findings emerged. (4) The researcher conducted a synthesis to identify the main themes and provide cultural care recommendations (McFarland and Wehbe-Alamah, 2019).

All data collected in the Bima language were translated into Bahasa Indonesia by MM researchers, who are native Bima speakers. The research and manuscripts were initially written in Indonesian to preserve meaning and context, then subsequently translated into English for publication by a native Bima translator proficient in both languages. The translated manuscript was reviewed through a forward and backward translation process by the first researcher, who also serves as a co-author.

Credibility was ensured through multiple interviews and field observations, as well as active involvement in the daily activities of informants. Data triangulation was performed based on the framework outlined by Lincoln and Guba (1985). To ensure accuracy and reliability, member checks were conducted with the research team, including audits and confirmation of information provided by the informants and qualitative research experts to validate the findings. Researchers visited and stayed at the research sites for at least three days each week, engaging in daily

activities with the informants to foster immersion and build trust. Informants were visited at different times to capture various perspectives, and in-depth interviews were repeated to validate the data.

This research received approval from the Ethical Review Committee of the Faculty of Nursing, Universitas Indonesia (KET-050/UN2.F12.D1.2.1/PPM.00.02/2024). Prior to participation, all eligible informants were provided with an information sheet and gave written informed consent. All research data were kept confidential and published in an anonymous format.

## RESULTS AND DISCUSSION

The results are presented in two sections: informants' characteristics and medication habits. Direct quotations from data collected at the three research sites are coded as follows: "D" for Donggo, "S" for Soromandi, and "P" for Paruga.

### Characteristics of the Informants

The key informants in this study were 16 patients with hypertension. The informants (IF) came from three research sites: 10 IFs from the rural areas of Donggo (D) and Soromandi (S), and 6 IFs from the urban area of Paruga (P). Among the 16 informants, five were male and 11 were female. The participants' education levels ranged from no formal schooling to higher education. Most informants were farmers, and their age ranged from 45 to 70 years. They were diagnosed with grade 2 hypertension. The most commonly prescribed antihypertensive medications were captopril and amlodipine, and prevalent comorbidities included lipidemia and arthritis.

### Cultural Care and Medication Habits among Patients with Hypertension

Research findings on medication practices among patients with hypertension indicate a habit of combining medical drugs with traditional medicine. Based on interviews and observations, it was found that patients utilize a variety of traditional medicines.

#### Pattern 1. Cultural Care Practices in Medication

The Bimanese traditional treatment approach, deeply rooted in cultural

heritage, has been passed down through generations and is practiced according to community customs.

#### Oral Traditional medicine

Traditional Bima medicine consists of a blend of various spices, rhizomes, and tree bark, often complemented by a variety of leaves and young pomegranates. Complete traditional remedies are typically sourced from different tree barks found in mountainous forests, such as those in Donggo. As one informant stated:

*"The habit of the Donggo people is taking Bima medicine. Yesterday, I consumed. The ingredients are Java chili, ginger, garlic, turmeric, and little bit of rice; add more with various tree barks: mango tree bark, candlenut tree bark, bitter tree bark, kandondo tree bark" (IF4D).*

The informant IF4D explained that a complete set of medicinal ingredients could consist of 30-40 types of spices, rhizomes, tree bark, leaves, and certain fruits or seeds.

*"Sometimes, I take bitter Bimanese medicine, if I am strong enough, I make it myself, and the ingredients are made from various tree barks: Sambi tree bark, Tude tree bark, sour fruit mixed with ginger, Java ginger, and complete spice" (IF10).*

*"...I still take Bimanese traditional medicine. Previously, I made it myself; now, I buy it because sourcing the ingredients has become too challenging. The bark and leaves were hard to find, whereas they were previously available for purchase." (IF12P).*

**Figure 2:** Ingredients and the Procedure for Preparing Bimanese Traditional Medicine



Source: research documentation with permission

Interviews and observations showed that informants used a variety of ingredients for oral medicine.

#### Traditional Scraping for warming the body

Herbal scraping is a common traditional treatment employed by many patients with hypertension to warm the body. Several informants stated that this practice is often combined with other traditional remedies to achieve better outcomes. The following statements from an informant illustrate this:

*"I take care of myself using herbal scrub-warming medicine and washing my hair-head with chilies" (IF3D).*

*"The habit of the Donggo people is to drink traditional medicine, then use it on their bodies with crystalizing medicine. ...Refresh body, after drinking traditional medicine and then use crystalizing medicine again" (IF4D).*

*"I use warming medicine too; if your body doesn't feel good, use warming medicine after praying dhuhur; the following morning, take a shower with warm water" (IF10S).*

#### Bimanese traditional munching-spraying medicine

The tradition of munching and spraying is a treatment that must be administrated by another person, who sprays the prepared medicine onto the patient's body. This practice is typically carried out by a traditional healer, often referred to as a "sando", a person trained in this healing method passed down through generations. One informant said:

*"Ingredients: betel leaf, cloves, pepper, ginger, nutmeg, small garlic. Then sprayed, not pounded, chewed in the mouth, and spit out. After drinking traditional medicine, must be continued with spices sprayed" (IF15P).*

#### Traditional treatment applied to the head

Another traditional treatment involves applying a substance or medicine to the scalp. This treatment includes rubbing Isu-Cena onto the head, spreading it evenly, massaging it in, and allowing it to seep into the pores. The head is then wrapped in cloth and left for approximately 30 minutes; in some

communities, it is left overnight. The following day, the treatment continues with a warm shower and the application of herbal scrub medicine. This approach is often part of a self-care package that combines various traditional medicines. One of the informants described the process as follows:

*"Once, I also prepared Cena here (Donggo). A fruit called Maja can also use rotting banana stems. The fronds are chopped in the morning and crushed by squeezing, and the water is mixed with coconut. The coconut is roasted before being grated, kept overnight (Cena), and used in the morning. At night, it is left to store near the Muja (a hand-made jar made from clay for storage), kept in cool and open place." (IF3D)*

In patients with hypertension, particularly within Bima ethnic group, there is a common belief that the cause of increased blood pressure is the rise in "yellow blood". As stated by the following informant:

*"...rubbing the hair with grated coconut oil and ginger, extracting the water and oil, then applying it to the hair. It aims at impeding the increase of yellow blood, which causes high blood pressure and headaches" (IF7S).*

Another informant said that they used burnt straw to rub the hair;

*"I just took a bath using a burnt straw this morning. It can help me reduce the headaches" (IF4D).*

#### **Pattern 2. A combination of Bimanese treatment and hypertension Medication** The use of hypertension medicine as a response to symptoms, in conjunction with traditional treatment

The concurrent use of prescribed hypertension medications and traditional remedies characterizes treatment patterns among patients with hypertension in Bima. Some patients take antihypertensive medications only when experiencing symptoms, while others adhere to daily medication regimens alongside the ongoing use of traditional therapeutic practices. Additionally, some patients describe experiencing symptoms of elevated blood pressure, which manifest in various signs:

*"I only felt problems in my eyes; my vision was like running and spinning*

*(vertigo), and when I walked, it was like moving, spinning; I drank traditional Bima medicine, and I went to the public health center to get the medicine" (IF1D).*

Another informant stated that he only took medicine for three days and continued with traditional treatment:

*"... on the third day, I stopped (taking hypertension medicine), I did not check it anymore. So, it depends on how to manage dietary habits only to lower blood pressure (with) eating cucumber, that is all" (IF2D).*

#### **The daily use of hypertension medication, in combination with traditional treatment**

The practice of using hypertension medication among patients in Bima shows a pattern of daily, routine medication use, accompanied by periodic traditional treatments, typically administered weekly or monthly. Some patients, particularly those with a history of stroke complications who have recovered and returned to normal activities, or those who have experienced serious illness and hospitalization, follow this regimen. This approach was highlighted by informants who had experienced a stroke and were hospitalized about 5-6 months ago, as described below:

*".. still taking medicine (hypertension) once a day (amlodipine or captopril), if there is a bit body sigh, I immediately take a hot bath and crystalizing the warm medicine, that's all" (IF6S).*

The same statement was also delivered as follows:

*"I also consume the Bima medicine too, two hours after that I took the hypertension medicine" (IF7S).*

#### **Pattern 3. Believed in the efficacy of traditional medicine**

There are various perceived benefits associated with the use of traditional medicine. Patients reported that after using traditional remedies, they felt physically stronger, experienced improved appetite and sleep, and generally felt more comfortable. As one informant mentioned, the use of traditional medicine was believed to alleviate physical complaints:

*"There are changes; it is fresher. More influence of traditional medicine. It is good to eat and sleep." (IF1D).*

*"Use scrub medicine, bath in hot water, and add salt to strengthen the veins, and blood circulation" (IF7S).*

The other informant saying that using traditional medicine could help reduce psychological complaints;

*"I felt better after sweaty. The spicy taste was like being stabbed with a spicy prick, light on the body, and reduced pain" (IF12P).*

## Discussion

Exploratory findings from sixteen patients with hypertension in both rural and urban areas of this study showed similarities in medication use involving Bimanese traditional treatments. This tradition, passed down through generations and rooted in the customs of the Bima community, has long served as a treatment option for a wide range of health conditions. While there are no fundamental differences in the types of traditional medicine used, variations exist in the specific medicinal materials. For instance, certain materials, such as tree bark, are more readily available in mountainous rural areas like Donggo but are harder to obtain in urban areas such as Paruga, Bima City. In rural areas, patients often prepare and create their own medicine, whereas in urban areas, traditional medicines are more commonly purchased from vendors in local traditional markets.

Cultural care practices using Bimanese traditional treatments utilize a variety of materials and methods. These results align with previous qualitative research on traditional medicine among the Bima people, which shows that treatment modalities include traditional herbal concoctions, either ingested or applied topically (Sila, M.A., 2022). Additionally, a review of self-care practices among African immigrants with hypertension in the United States, Australia, Sweden, and the Netherlands highlights non-Western approaches to interpreting and treating hypertension, including themes of herbal medicine, symptom interpretation, and traditional methods in responding to illness (Rasny et al., 2014; Osokpo & Riegel, 2021).

The utilization of traditional medicine is a universal theme, especially

in Indonesian society, which is characterized as a multicultural and multiethnic country. Previous research on the influence of culture on hypertension treatment has shown that cultural factors can pose challenges in managing hypertension, as evidenced among Dayak ethnic patients in Samarinda (Nurbaya & Burhanto, 2020). Culture plays a significant role in self-care, particularly in maintaining health practices and in how individuals interpret and respond to illness symptoms (Yatim et al., 2019; Osokpo & Riegel, 2021). This finding aligns with the CCT perspective, which posits that individuals are influenced by dimensions of social structure and culture, affecting how they behave and manage their well-being in health and illness (Leininger & McFarland, 2012).

Bima traditional medicine is distinctive due to the influence of Islamic values and beliefs, which are predominant among the Bima people. Religious practices significantly shape medicinal traditions. For example, the number or quantity of ingredients used in treatment often adheres to odd numbers, such as 3, 5, or 7, in alignment with Islamic teachings that favor odd numbers. During the preparation of medicinal ingredients, practitioners often recite "shalawat" (Islamic prayers), and the process—from preparation to application—typically begins with the invocation of "bismillah" and "shalawat," accompanied by intentions and prayers, which frequently include a mix of Bima and Arabic languages. These findings are consistent with ethnographic research conducted in Thailand, which shows that health practices are intertwined with religion, family, and community support (Songwathana et al., 2023).

The use of Bimanese traditional treatment is often the first choice when individuals experience symptoms such as headaches or dizziness. Many patients have access to ingredients readily available at home or within their community, allowing them to prepare traditional medicine, often applied to areas like the forehead. Some informants said they used traditional medicine because they believed in its efficacy and based on their direct experience of its benefits, such as lowering blood pressure, relieving headaches, improving sleep and appetite, and strengthening the body. The use of

Bimanese traditional medicine can offer value by utilizing various forms of local wisdom in initial treatment efforts. However, it is important to highlight that the symptoms experienced may be clinical manifestations of hypertension, which carry a risk of complications if blood pressure remains uncontrolled. Nurses must provide adequate education related to the pathophysiology of hypertension and its clinical manifestations. Additionally, it is essential to enhance patients' ability to manage hypertension treatment independently, considering the culture of traditional medicine.

The emic perspective of patients with hypertension states that traditional medicine includes all treatments outside of conventional medical approaches. The treatment habits among hypertensive patients in rural and urban areas of Bima reveal a similar pattern, where traditional medicine is combined with antihypertensive drugs. These findings align with the literature on hypertension in Asia, which suggests that traditional self-care practices are limited among hypertensive populations in Southeast Asia. Furthermore, the use of non-prescription herbs as medicine (Irwan et al., 2022) indicates how cultural norms influence adherence to hypertension treatment (Azizah et al., 2021).

Hypertension treatment for patients at three primary health care (PHC) centers in rural and urban areas has been provided based on the Ministry of Health guidelines for managing hypertension in PHC facilities. Interviews and observations with informants from the three research sites revealed that the antihypertensive medicines commonly used by patients include amlodipine, captopril, and nifedipine. These results were confirmed by the doctors at the respective PHCs, with medications being administered based on the availability of drugs at each facility. Patients received hypertension medication during treatment at the PHC centers, through monthly check-ups, or during Posyandu (Integrated Service Post) activities. Some informants said they received medicines during check-ups at independent doctors' or nurses' practices. Policies related to the provision of medicines at Posyandu have also been adjusted based on the availability of medicines at the public health centers. Patients are typically given only 1-2 days'

worth of medication, with instructions to continue treatment at the PHC. These findings align with a review article that identifies factors contributing to non-adherence to treatment among hypertensive patients, including the availability of medicines at health facilities and the requirement for lifelong medication (Kurnia et al., 2018; Berek & Fouk, 2020).

The treatment choices made by informants in rural and urban areas of this study were consistent, with most hypertensive patients opting for these methods when experiencing physical symptoms. In cases of mild symptoms, patients often relied on traditional medicine or rest, assuming the condition would resolve on its own. Some informants reported using antihypertensive medications only if they had a supply available at home. Traditional medicine is frequently chosen as the initial treatment, utilizing resources available in the local environment. Traditional medicine is often preferred because patients report experiencing positive effects on acute symptoms associated with hypertension compared to antihypertensive medications. However, if symptoms persist or worsen, patients seek further treatment by visiting the nearest health facility or independent nurse practice. These results are consistent with phenomenological research on traditional Balinese medicine, which shows that traditional medicine is often viewed as the first choice before seeking hospital care (Mulyani, 2018). Additionally, studies have demonstrated that patients perceive an improvement in symptoms with traditional therapy (Sundararajan *et al.*, 2023).

The observations of several patients with a history of strokes indicate that they routinely used medical treatment while continuing to incorporate traditional medicine to prevent severe symptoms, taking traditional medicine weekly. Meanwhile, patients without a history of complications reported that they regularly took medication out of concern for uncontrollable blood pressure or the risk of stroke. These findings align with research conducted on hypertension patients in Belitung, Indonesia, and 12 African countries, which identified themes of non-adherence to treatment due to the use of traditional medicine, limited use of prescribed medications, and a combination

of medical and traditional treatments (Aunguroch et al., 2021; Lassale et al., 2022). These results suggest that nurses must offer direct and personalized education regarding self-care, especially in managing hypertension, supported by follow-up through telephone or home visits (Martiningsih et al., 2023).

The use of Bimanese traditional treatments, along with various cultural care practices, in this study reflects common treatment approaches employed by the people of Bima for diseases beyond hypertension. Therefore, further research is needed to focus on specific treatment types, involving a broader geographical scope and a larger sample of informants, as well as incorporating additional sources of information.

This study highlights the use of various traditional treatments and their combination with hypertension medications. These findings underscore the importance of culture-based nursing education for patients with hypertension, aiming to improve both hypertension management and treatment adherence. Integrating traditional Bima treatments with conventional approaches can enhance patient outcomes. Nurses must understand patients' cultural care practices to provide appropriate education and support treatment-seeking efforts.

## CONCLUSION

The results of exploring hypertension medication habits among the Bima tribe, based on Leininger's Cultural Care Theory (CCT) perspective, reveal that these habits are influenced by the dimensions of religion, spirituality, and the lifestyle of the predominantly Muslim Bima community. These factors are encapsulated in the central theme of Bimanese traditional treatment. These findings emphasize the importance of preserving cultural care practices. This research recommends that nurses engage in discussions with patients to integrate traditional medicine with ongoing medical treatment for hypertension. By providing education and counseling, nurses can guide patients in using traditional medicines safely and ensure sufficient time between traditional and medical treatments to prevent drug interactions. Interprofessional collaboration is essential

to ensure that patients receive safe and effective treatment outcomes.

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