

A NARRATIVE INQUIRY OF PATIENTS' ACCOUNTS ON TRADITIONAL BONE SETTING WITH INTEGRATIVE CHIROPRACTIC CARE

Edson B. Bilocura, LPT¹, Mauricio S. Adlaon, PhD¹, LP, Amor P. Paqueo, PTRP, MAC², Ryan Mark M. Esnardo, LPT³

ABSTRACT

Objective: Traditional, Complementary, and Alternative Medicine (TCAM) care, such as the Traditional Bone Setting (TBS) technique, has been integrated into the community. However, TBS with integrative chiropractic-like care remains relatively controversial, especially when performed by a traditional bonesetter. This has led to an investigation into why several Filipino patients seek unorthodox treatment from traditional medicine practitioners as a primary approach to managing musculoskeletal pain. It further aimed at understanding patients' influences, health outcomes, and their experiential evaluation on the said TCAM care.

Design: A qualitative semi-structured interview is utilized in this narrative inquiry research.

Methods: Six informants were identified through a snowball sampling protocol with interviews conducted online. A reflexive thematic analysis was preferred, while coding and generating themes were performed in NVIVO15 software.

Results: Patients reported that their key influencing factors that led them to TCAM care utilization, include peer-endorsed care, social media exposure to therapy, and patient-provider spiritual affiliation alignment. Patients further revealed satisfaction on the procedure while some raised post-care concerns. Moreover, patients' experiential evaluation to TCAM care include service provider care quality, skepticism to future treatment, expense of care, and perceived treatment risks.

Conclusion: Despite the therapeutic benefits received among patients, such as temporary pain relief, there remains an underlying skepticism regarding the long-term effectiveness of the therapy. The patients' firsthand experiences, financial and spiritual aspects, are certain considerations over future TCAM utilization. Consequently, the promotion of health literacy is vital to empower Filipino consumers in making informed decisions about accessing appropriate primary healthcare services. (*J Contemporary Chiropr* 2025;8:193-204)

Key Indexing Terms: Traditional Complementary and Alternative Medicine; Traditional Bone Setting; Chiropractic; Traditional Medicine Practitioners; Musculoskeletal Pain

INTRODUCTION

Access to standard and quality healthcare is a fundamental right everyone is entitled to irrespective of race and color, political ideology, and socio-economic conditions. The World Health Organization (WHO), in fact, places weight and relevance on the core of people-centered and comprehensive care, which embodies human rights in the practice of care. (1) In efforts to attain the highest standard of healthcare and expand health coverage among Filipinos, the Philippines has developed health service reforms, from policy to practice, to strengthen the system's capacity and ensure adequate availability of services across and within regions.

One major revolutionized health reform in the country is the conception of the Universal Health Care (UHC) Act, also referred to as Republic Act 11223, legislated

¹ Surigao del Norte State University, ² Department of Health – Center for Health Development CARAGA, ³ Don Jose Ecleo Memorial College

by President Rodrigo Roa Duterte on February 20, 2019, anchored in the WHO three-dimensional framework of universal health coverage, namely service coverage, population-based coverage, and financial coverage. (2) UHC mandates to weave health sectors from Primary Care Provider Networks (PCPNs) into health care provider networks (HCPNs) constituting primary, secondary, and tertiary levels of care as the core of comprehensive and integrated health systems, thereby alleviating lives of people and communities through a coordinated, equitable, people-oriented health approach. To increase provision of health services in the community, the Department of Health (DOH) deployed manpower through Human Resources for Health (HRH) under the National Health Workforce Support Systems (NHWSS), composing nurses, dentists, medical technologists, physical therapists, and other cadres alongside Doctors to the Barrios (DTTBs). UHC policy also envisions sustainable and universal PhilHealth memberships, upgrading and expanding health facilities through the Health Facilities Enhancement Program (HFEP), fortifying to achieve the Millennium Development Goal (MDG) targets (3), promoting health literacy, and integrating monitoring to the functionality of systems. Furthermore, in this policy, Filipinos are granted immediate eligibility to benefits of care services, including preventive, promotive, curative, rehabilitative, and palliative care for medical, dental, mental, and emergency health services as stated under Rule II, Section 6 of UHC. (4)

Despite UHC offers improved management and modern treatment among Filipinos in an integrated approach, WHO statistics show that 80% of the population in developing countries like Philippines is still reliant on traditional, complementary, and alternative medicine (TCAM) practices for their primary care (5,6) due to (1) dissatisfaction with conventional medicine (because of high costs, long wait lines, invasive nature, adverse/side effects); (2) inaccessibility of physicians and medical facilities, especially in rural and remote areas; (3) global new-age allure for natural remedies (7); and (4) vast economic potential of a \$250-million global market for medicinal plants as a demand-side factors. (8) In fact, CAM use has found prevalent among respondents from rural areas with 68.4% higher compared to urban areas with 51.5% during a community-based survey conducted in 2012, indicating that the demands of CAM use in the country are in flux. (9) This is because traditional medicines had long been embedded in Filipino cultures (10), and Filipinos have found to be driven to seek these alternatives due to financial constraints and poor health literacy despite concerns on regulations and safety on

TCAM.

This has pushed the Philippine government for the development and regulatory management of traditional and alternative health care through the Republic Act No. 8423, otherwise known as the Traditional and Alternative Medicine Act (TAMA) of 1997, regulating the practices of TCAM in the country. (11)

TCAM is a broad term which encompasses complementary, alternative, and traditional healing modalities with Traditional Medicine (TM) practitioners, including *manghihilot* (or traditional bonesetter (TBS) or *partera*), *albularyo* (herbalist), *mangtatawas* (diagnostician, user of potassium alum), and *faith healers* or *espiritista*, while CAM practitioners, include chiropractors, acupuncturist, massage therapist, and others. (12) While, Complementary Medicine (CM) or alternative medicine is used interchangeably with Traditional Medicine (TM) in countries like Philippines (12), more recently, 'integrative medicine' adds a new concept of health and healthcare which describes the combined use of conventional and traditional, complementary and alternative medicine (TCAM) approaches in a patient-focused manner to achieve patient's optimal health outcomes. (13) This underscores that healing modalities, including products, practices, and practitioners can be merged as treatment for an individual patient. For example, a traditional bone setting coexists with an orthopedic care, where traditional bonesetters treat musculoskeletal injuries, which is a widespread practice in developing nations, particularly in Asia, Africa, and South America. (14,15, 16,17) Another example, in particular for heart failure treatment, where Traditional Chinese Medicine is combined "with allopathic medicine which has shown several advantages, such as multi-target treatment, dialectical logic, personalized therapy, and reduction of side effects". (18)

However, in the Philippines, concerns on the practice of traditional bone setting with integrative techniques of chiropractic, without proper licensing or regulations sparks alarm, especially one recent case in the Philippines that highlights the devastating outcomes of unlicensed manual bone adjustment therapies, was a man from Cagayan de Oro who suffered a fractured leg after undergoing a session with an untrained chiropractor and died in November 2024, per report by GMA Regional TV. (19)

While chiropractic is a relatively recent addition to the Philippines healthcare system regulated by the

Philippine Institute of Traditional and Alternative Health Care (PITAHC), a DOH-attached agency, a call for the country to have stricter regulations for massage and chiropractic professionals highlight a need for greater oversight and standardization. (20) This is particularly important as the country currently lacks institutions offering chiropractic programs and most accredited chiropractors are licensed in the US. (21) As a result, some unlicensed practitioners may take advantage of the emerging field, noting that Filipinos in underserved communities tend to rely on TCAM practices, in response to the absence of accessible and affordable therapies. (22)

Given these circumstances, an exploratory investigation is required to look into the underlying reasons why several Filipino patients living in rural outskirts, particularly in the Dinagat Islands, continue to seek traditional bone setting paired with adjustment therapies. This inquiry is grounded in the observation that many individuals pursue such treatments despite limited knowledge of the procedures, their therapeutic benefits, and the potential long-term health implications. Furthermore, this narrative review sought to uncover influences, health outcomes, and experiential evaluation of patients on the utilization to TCAM care, especially a blend of traditional healing and chiropractic therapy. The outlined results of the narrative review could add to the expanding body of knowledge about chiropractic care in the Philippines and possibly help policymakers tighten and improve regulatory procedures pertaining to the safe practice of chiropractic care for Filipino patients.

METHODS

Qualitative Approach

To capture in-depth and comprehensive understanding on the influences under Filipino patients in rural outskirts who sought treatment from traditional bonesetters (TBS), a qualitative-narrative inquiry method is adopted where qualitative reporting was guided by the COREQ (COnsolidated criteria for REporting Qualitative research) checklist. The employability of COREQ in the method is intended to assist in providing clarity, critical appraisal, and transparency of reporting for qualitative research. (23)

Research team characteristics and reflexivity

The research team is composed of a qualitative researcher, a science education expert adviser alongside two (2) specialist validators in the field of

physical therapy, whose expertise is central to public health, having tenured in the Department of Health (DOH) under the National Health Workforce Support System (NHWSS) through Human Resources for Health (HRH). Analysis of data derived during collection is interpreted and analyzed within the team to arrive at the research's consensus. The validators evaluated the development of the semi-structured interview and assessed the chiropractic-like treatment practices using video samples obtained from traditional bonesetters, as presented on their social media platforms.

Setting, Participants, and Sampling Procedure

Investigators purposefully selected Dinagat Islands, Philippines, as the site for data collection, as the province is characterized by their rural communities with current health facilities classified at an infirmary level (24), indicating that Dinagatnons may lack access to optimal healthcare. Geographically, Dinagat Islands, Philippines, is a group of islands constituting a province in the Caraga region in the Philippines on the south side of Leyte Gulf and is one of the smallest provinces in the country.

Through local network in the islands and social media access, patients who had undergone manual adjustment therapies over multiple sessions were easily identified. The selection criteria framework for patient informants was detailed and determined in a snowball sampling procedure, to wit: (1) a community member who has lived in Dinagat Islands for 10 years or more, (2) having had experience of receiving treatment, (3) at least one or more sessions of TBS with chiropractic-like treatments had in the last 12 months, (4) between the age range of 16-70, and (5) across genders.

Ethical Issues pertaining to Human Subjects

This inquiry study declared full conformity to the research's ethical guidelines, particularly authors corroborated into the National Ethical Guidelines for Research Involving Human Participants 2022, with strong emphasis on Ethical Research for Social Research and Ethical Guidelines for Research in Traditional and Alternative Health Care. (25)

Data Collection and Analysis

Upon consent administration, 6 patient informants agreed to partake as the subjects of the inquiry, while another two (2) additional non-participants, who satisfied the eligibility criteria profile, were determined to pilot the designed interview instrument, allowing investigators to identify any ambiguities and make

modifications to the questions or ordering to ensure that the questions accurately captured the intended information.

In terms of sample size, there is no strict rule in narrative inquiry. (26, 27) However, sample sizes in educational research typically range from 1 to 24 participants, while in health sciences, the average ranges from 1 to 52. Generally, a sample size of 6 to 10 participants is considered reasonable for this research design. (28) Therefore, the sample size used in this study is deemed justifiable.

The validated interview instrument ran expert validation. The instrument is structured in two (2) parts, where the first part captured participants' information, including age, gender, musculoskeletal complaint for treatment, and number of treatment sessions per condition, while the final part detailed three (3) questions for the narrative inquiry, anchored in the research objectives.

A semi-structured individual online interviews were performed during the first and second week of March 2025. This approach was deemed appropriate as it allowed patients to openly share their thoughts and perceptions regarding traditional bone setting with integrative chiropractic techniques treatment whilst controlling the general structure of the interviews. Informed consent was obtained from all participants prior to their participation. Interviews were audio recorded, verbatimly transcribed, and anonymized. A reflexive thematic analysis text of data based on Braun and Clarke's (2006) model was preferred for data analysis, which includes six (6) phases: (1) familiarizing with the data; (2) generating initial codes; (3) generating themes; (4) reviewing potential themes; (5) defining and naming themes; and (6) producing the report. (29) Coding and generating themes for analysis was carried out using an NVIVO 15 software.

RESULTS

There were six (6) informants who responded to the inquiry, comprising 3 men and 3 women interviewees. The interview with TBS-CP-P06 was performed in written form and triangulated with a one-on-one discussion, whilst the others were conducted through audio messages or voice recordings. The descriptive patient's profile is presented in table 1.

Table 1. **Descriptive Patients Profiles**

Informant (n=6)	Age	Sex	Municipality	Musculoskeletal complaint	Case Classification	No. of treatment session/s attended per condition
TBS-CP- P01	36	F	San Jose	Lower Back Pain	Diagnosed	2
TBS-CP- P02	35	M	Loreto	Chest Pain	Diagnosed	1
TBS-CP- P03	26	M	San Jose	Jaw Pain	Undiagnosed	1
TBS-CP- P04	32	F	Dinagat	Wrist & Back Pains	Undiagnosed	2
TBS-CP- P05	22	M	Basilisa	Back Pains	Undiagnosed	1
TBS-CP- P06	27	F	San Jose	Knee Pain due to Injury	Diagnosed	4

The patients ranged in age from 22 to 36 years and commonly presented with musculoskeletal complaints, primarily back pain. Additional conditions included pain in the chest, jaw, wrist, and knee (injury-related). Among the cases, 50% had received a formal clinical diagnosis, while the remaining 50% were undiagnosed at the time of traditional bone-setting intervention. The frequency of visits to the traditional bone setter (TBS) where chiropractic-like care was administered, ranged from a minimum of one session to a maximum of four sessions per patient.

Six (6) transcripts were analyzed until data saturation was reached, extracting three (3) main themes. Interview transcripts were preserved in the original vernacular language during thematic analysis for contextual integrity. For reporting purposes, the transcribed responses were subsequently translated into English to enhance clarity and accessibility.

Theme 1: Influences on Patients' Utilization to TCAM Care

This main theme explores key factors that influence patients' decisions to utilize TBS with chiropractic-like care, stemming from their personal beliefs, social context, and online exposure to the therapy.

When participants were asked to describe about their motivating factors that led them to care utilization, sub-themes, including peer-endorsed care, social media exposure to therapy, and common spiritual affiliation emerged.

Peer-Endorsed Care

The majority (5/6) of the references highlighted peer influence as a significant factor in patients' decision-making, wherein shared experiences, recommendations, and testimonies from peers fostered reassurance and trust on the part of the patients. For example:

I tried it, because based on people's experience, the feeling is really good. But before I undergo to the treatment, I asked my friends about their experiences with it. There were a lot of positive feedbacks. (TBS-CP-P01)

But since my friends who are also teachers tried it first and gave good feedback based on their experiences, I decided to try it too—even though I was aware that the person providing the service wasn't really a medical professional. (TBS-CP-P03)

Patients' decisions to undergo treatment are influenced by affirming narratives from their peers, which create a sense of pressure. This influence has shaped their perceptions of the therapy's efficacy and necessity, despite concerns regarding the credibility of the service provider. As a result, they tend to prioritize peer validation over personal reservations and the advice of medical professionals.

Social Media Exposure to Therapy

Another attribute identified by the patient-informants (4/6) was their social media exposure to therapy, with chiropractic medicine online contents became interestingly receptive. In this regard, TBS-CP-P01 stated: *"I saw in a post that Mr. A is offering chiropractic services, and the feedback seems good, so I thought of trying it, maybe I'll get okay..."* while the same contexts were extracted from TBS-CP-P02, stating that *"And on his social media...there are also many testimonials from people saying that his services are really effective"* and TBS-CP-P03, *"Based on the videos I've seen online, the patients seem to be okay, and since this chiropractor also has a vlog or social media account, I checked it out as well. From his videos, the patients also seem to be okay"*.

This suggests that the service provider has utilized social media outlets to proliferate patients' testimonies who sought treatment from him, creating a receptive effect within the community, thereby leading to an increased uptake of such conventional treatment modalities. In contrast, others reported that exposure to therapy online is prevalent, as chiropractic content has been circulating widely. TBS-CP-P06 supports this statement, saying, *"Most of what I've heard on social media are positive feedbacks, so that's why I 100% trust him."*

Patient-Provider Spiritual Affiliation Alignment

Across all patients, one (1/6) revealed that faith-based connection between the patient and healthcare provider fostered trust, which significantly influenced their healthcare decisions. In this context, patient-provider belief alignment plays a crucial role in shaping attitudes, serving as a key factor in the decision-making process. This sentiment was expressed by TBS-CP-P03 who stated, *"Another factor is that he is devoted to ... (an organization). As members of (the organization), we know that ... guided him, which is why I have full trust in him. I really rely on him"*.

Theme 2: Patients' Self-Reported Health Outcomes to TCAM Care

After receiving treatment with combined TBS and chiropractic-like care, patients reported varying health outcomes, including their care satisfaction and post-care concerns.

Satisfaction to Care: During and Immediately After the Treatment

Most (5/6) of them reported that they were satisfied to the acquired therapy, further noting pain relief experiences and satisfaction to a *"popping sound"* during chiropractic adjustment. For example, *"I was amazed after the chiropractic treatment because, after the session, my hands and body were able to put on pants with ease. And when I got home, I was able to stand up straight"* (TBS-CP-P02). This underlined that the therapy generates good health experiences to patients, leading to care efficacy.

Other patients also expressed their sentiments towards the care, like *"Chiropractic is one of the best solutions because my jaw feels better"* (TBS-CP-P03), *"But the treatment itself is really good; it relieves the tension in my body and eases my pain"*

(TBS-CP-P01), and *"I felt relief when he massaged my hand, stretched it, and applied pressure. My back also felt very satisfying, especially when he worked on the knots. After the treatment, the pain really lessened. I wonder what would have happened if I had continued with the procedure since it only happened once"* (TBS-CP-P04).

These further reports that the audible release during repositioning contributed to a soothing effect or sense of satisfaction to the patients, which could relate to the adjustment outcome.

Post-Care Concerns

Despite the sense of satisfaction with the therapy, few (4/6) of the patients reported pain recurrence as part of their post-care experiences and outcomes. Patients highlighted the temporary effects of the care, noting that while they felt relief during and immediately after treatment, the relief did not last long-term. TBS-CP-P01 recalled her experience that *"Chiropractic treatment is not long-lasting ... After the session, I really feel better, but the discomfort always comes back. It feels like a session where the pain keeps returning, so I need to get chiropractic care again"* while TBS-CP-P04 stated, *"A few months passed, I had to go for a second session because the pain returned. That's why I can say it's really just temporary, because the pain came back after a few months. It didn't fully heal, but it still helped a little because it did lessen the pain"*.

This recurrence of pain has led many to express the need for ongoing or repeated care to maintain the benefits they experienced during the therapy. However, one patient (TBS-CP-P05) also revealed that the therapy might have caused the severity of his condition, stating *"After the treatment, I felt fine because it seemed like there was relief. However, the next day, my back started to hurt again, and the pain lasted for about 2-3 days"*.

Theme 3: Patients' Experiential Evaluation to TCAM Care

This main theme covers patients' evaluative insights based on their experiences to the treatment, these include service provider care quality, skepticism to care, expense of service provision, and perceived treatment risks.

Service Provider Care Quality

Patients (5/6) lamented feedback on the quality of service provided by the traditional healer, which included both positive and negative comments. Among the positive reviews, TBS-CP-P01 noted, *"When I arrived at the treatment venue, they didn't immediately start the procedure. The provider first explained the process and pressed on the areas where I felt pain. I was also told not to tense up to ensure the procedure went smoothly."* Additionally, TBS-CP-P03 mentioned, *"He advised me not to eat hard foods and to avoid chewing bubble gum."* These statements reflect that the service provider offers health recommendations aimed at supporting the patient's recovery process.

On the other hand, some patients expressed concerns about their experiences during the therapy. One notable response was from TBS-CP-P04, who shared, *"Before I was even ready, the provider immediately adjusted me."* These experiences contributed to the patient's anxiety about undergoing subsequent sessions following the service they have received.

Skepticism to Receiving Future TCAM Care

When patients were asked about their experiences on the treatment, others (4/6) testified anxious feelings on receiving the same procedure in the future. One of which was revealed by TBS-CP-P04 that, *"But after the chiropractic session, I had a fever. I suspected that I might have been strained, but before the procedure, my body was already feeling unwell."* Similarly, TBS-CP-P06 reported, *"It was just that last adjustment... where it seemed like my bones and muscles were forced, which is why it reacted the way it did."* These have caused patients feel undecided about getting their next session.

Other patients also expressed skepticism about the procedure. After undergoing TCAM treatment, they sought diagnosis from medical practitioners, such as physical therapists, to assess their conditions. Following the receipt of appropriate rehabilitative therapies, they became uncertain about returning to TCAM use. In this regard, TBS-CP-P01 stated: *"Since I started to consult from physical therapy, I've been doubting chiropractic-like care which was administered by my previous provider"* and TBS-CP-P06 similarly reported that, *"I consulted with a doctor ... and based on the results of the X-ray, the doctor advised me to get an MRI scan because there*

were no fractures in my bones and everything looked healthy. The doctor mentioned that it might be due to the muscles or a ligament tear."

Expense of Service Provision

Although TCAM care is widely available in the community, access to the combined treatment of TBS and chiropractic-like care has become a challenge for patients due to its cost. Since the treatment service comes with monetary value, patients feel doubtful about undergoing the therapy; in fact, one has resorted to the raffle draw initiated by the service provider, aiming to get access to care.

Patients (2/6) TBS-CP-P01 and TBS-CP-P02 shared the same sentiments, "But when I inquired, it was quite expensive. The provider was running a promotion, and suddenly, I won the raffle, so I underwent chiropractic care just once" and "Though it was a bit expensive, since he helped me, I felt like I was also helping him by contributing to his income", however, despite the cost, they remained resourceful in finding ways to access the treatment.

Perceived Treatment Risks

While some patients were satisfied with the treatment, others (3/6) also perceived potential risk about the therapy, particularly when they observed the quality of the procedure is performed and the changes in the affected areas of their bodies. This reflects how patients raised doubts about the procedure's effectiveness and safety, as they observed signs that are inconsistent with their expectations.

Taken into this account, patients revealed statements like, "That's when I realized that the therapy could bring risks to patients because it can startle the body. Especially when you're not ready... my back was startled, and I heard a crack or pop" (TBS-CP-P04), "Although it feels like there's some relief after the treatment, the procedure, in my opinion is risky, especially when the service provider is not a medical professional. It feels risky on my end because I'm petite, I worry that if something goes wrong after the adjustment, the damage could be more severe compared to those who are obese" (TBS-CP-P05), and "During the procedure, I could feel my knee "crack" and more painful. I doubt it's normal because the other knee doesn't seem like that... I compared them" (TBS-CP-P06).

Finally, when patients were asked about the availability

of physical therapy services provided by the Human Resources for Health under the National Health Workforce Support System (NHWSS) of the Department of Health (DOH), they reported limited awareness of such services in their communities, which contributed to the preference for TCAM treatments as their primary healthcare option for managing musculoskeletal conditions.

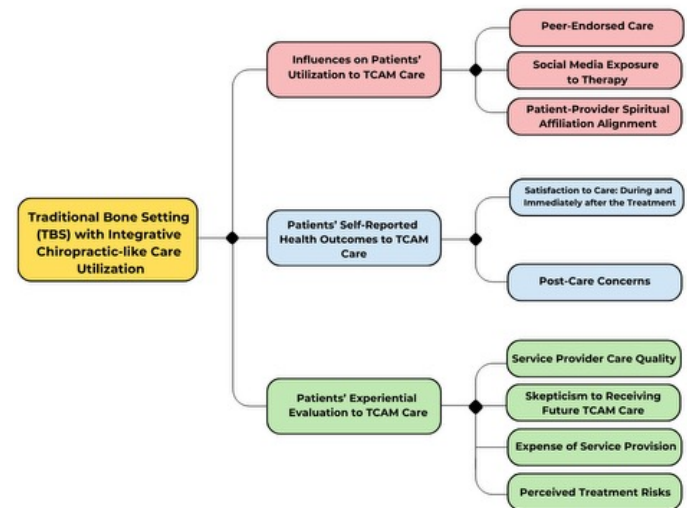


Figure 1. Patients' Utilization of Traditional Bone Setting (TBS) with integrative Chiropractic-like Care

DISCUSSION

Generally, this study shed light on understanding why patients in rural communities are pulled towards traditional medicine use as their primary care in addressing their musculoskeletal conditions and sought to uncover their self-reported health outcomes and their range of experiences towards receiving the care.

In the findings, patients revealed that peer influence, social media exposure to the therapy, and spiritual affiliation between patient and provider are key antecedents for motivating TCAM consumption, particularly traditional bone setting (TBS) combined with chiropractic-like care. Positive testimonies from peers significantly shaped care-seeking behavior among patients. It was found that the utilization of chiropractic treatment is largely influenced by the advice given by a family physician and the positive experiences shared by a friend or relative. (30) This contradicts to the idea that most patients sought the treatment driven by their personal philosophies, not majorly influenced by their family tradition. (31) However, in terms of referral, a friend or a family member played a salient role in their decision-making process.

Other influences include the patient's social media exposure to therapy, underscoring its significant role in shaping public perceptions and utilization of TCAM care. Although social media has been recognized as a significant source of health-related information (32), exposure to TCAM procedures through these platforms may increase the likelihood of individuals utilizing such therapies, even in the absence of rigorous scientific validation. In fact, it was found that some patients test TCAM therapies despite the fact that these have not been shown to be safe or effective or whose manufacturing quality has not been verified due to the popularity and quantity of posts on social media. (33, 34, 35, 36) This justifies that the online platform can be a channel for the spread of misinformation about TCAM. (37, 38, 39, 40, 41)

Most notably, with social media being widely accessible, it has also become a potential platform for service providers to leverage and promote their TCAM services. In fact, social media has become a useful tool for both user and practitioner as they get to testify to their beliefs, experiences, and attitudes towards TCAM. (42) They further confirmed that social media is an effective and viable option for disseminating TCAM therapies and information. This creates a receptive effect within the community, in the same way how traditional bone setting paired with chiropractic-like care becomes acceptable in the studied community as a primary care option despite being done by folk practitioners. This resonates with the fact that social media is a channel for both factual and inaccurate information, and despite this reality, it has still been equally trusted by social media users. (43)

While the therapy carries uncertainty, especially its legitimacy as an effective primary healthcare service, the spiritual alignment between patient and provider also revealed to play a critical role in facilitating the acceptance and uptake of care. This meant further that similarity of spiritual belief between two people reinforces trust. In fact, this complements with the findings, positing that spirituality and religion attract people to traditional medicine (TRM) use, further noting that consumers become attracted to unconventional treatment because their spiritual beliefs are congruent with TRM practice. (44)

With these emerging determinants, patients' tendency to utilize healthcare services becomes evident. In fact, patients expressed a mix of dependency, satisfaction, and even skepticism regarding post-care experiences with the therapy. These insights stemmed from their

perceived health outcomes and experiences with the procedure, highlighting both a sense of relief and the recurrence of pain issues after receiving treatment, poised to recommend or not recommend care for other consumers. Given the practice is done by the folk practitioner, its close similarity to formal chiropractic care satisfaction surveys could be supplemented. For example, chiropractic treatment outcomes and satisfaction levels exhibit a relationship where high satisfaction is linked with positive outcomes and low satisfaction with less positive outcomes, (45) while chiropractic treatment effects and changes in pain are common determinants of satisfaction, indicating that negative treatment outcomes conversely influenced satisfaction. (46) For example, patients' satisfaction level is adversely affected by their perceived symptomatic reactions. (47)

Finally, evaluation of care among patients reported an array of themes, describing individuals' wide range of experiences receiving the care, including being skeptical of future availment of therapy due to post-care concerns and seeking further medical insight or advice, treatment cost-efficacy, quality care by the service provider, and the perceived treatment risks and dangers. For service cost, the study revealed that treatment costs are high; however, for some, if it benefits them, the cost is less likely to be a concern. These have supported other studies that patients with lower incomes and no insurance coverage tend to be least satisfied with the financial aspects of treatment, (48) while chiropractic manipulation is perceived to be less costly and more effective compared with physiotherapy or GP care. (49) While cost influences care-seeking decisions, some patients are still willing to pay higher prices if the treatment effectively manages their chronic low back and neck pain. (50) Additionally, chiropractic care has been shown to be more cost-effective than self-management, suggesting that patients value treatments that deliver greater improvements in health outcomes, even if they come at a higher cost. (51)

On the other hand, patients noted that the quality of care provided by the practitioner shaped both positive and negative perceptions of the treatment. For example, when chiropractors addressed patients' individual needs and offered personalized care, patients were more likely to appreciate the tailored approach, especially when it included healthcare advice and information about their conditions. (52) Conversely, if these aspects were not provided, patients might perceive the treatment negatively. In aspects such as treatment risks, patients also perceived potential dangers associated with the

procedure, especially concerns about pain. However, despite 20% of patients reporting unexpected or unpleasant reactions to their treatment, most commonly tiredness or fatigue (32%) and additional pain (36%), they were still less concerned about these reactions and expressed that their care expectations were largely met. (53) This is in contrast to the report by the General Chiropractic Council that while others felt satisfied about the treatment, some participants have expressed apprehension towards chiropractic treatment or had concerns that the treatment might have associated negative risks. (52)

Ultimately, this synthesizes the complex decision-making process patients undergo when considering future traditional and alternative healthcare options; hence, understanding the patterns of patient's use of TCAM could assist healthcare policymakers in planning and intervention management, creating stricter regulation of the blended practice.

CONCLUSIONS

Despite the therapeutic benefits received among patients about TBS with combined chiropractic-like care performed by a folk practitioner, such as pain relief, there remains an underlying skepticism about the therapy. In fact, while patients expressed satisfaction with the treatment, equal emphasis was placed on their skepticism toward future use, brought about by factors like treatment risks. This also stemmed from the fact that the service provider is not a certified professional who has not met the necessary educational and ethical standards outlined by PITAHC.

While we have acknowledged the potentiality of traditional medicine, being paired with this conventional approach is a question that carries danger and threats. Thus, Filipino consumers must remain cautious and vigilant about the potential risks of traditional manual adjustment therapies performed by untrained or unlicensed professionals. When musculoskeletal adjustments and pain management are needed, it is important to consult licensed chiropractors or other qualified medical professionals to ensure that appropriate and evidence-based treatments are supplemented. As such, promoting information and health literacy is also essential and should be further intensified to empower Filipinos in making informed decisions about appropriate healthcare treatment, as health and well-being remain an individual's highest concern. Most importantly, PITACH and other health regulatory bodies must enhance oversight towards

TCAM practices in the community for health safety among consumers.

Limitations and Recommendations

This study acknowledged several limitations, including a small sample size, the use of a single survey medium, and the limited participation of key informants, which restricted the scope of the investigation. These limitations were primarily due to the low response rate to survey invitations, the unavailability of some informants at the study site, and the refusal of others to participate in face-to-face interviews. As a result, the researchers recommend that future studies expand to include neighboring provinces to increase the number of informants and enhance the relevance and depth of the findings. Additionally, it is suggested that future research incorporate focus group discussions with licensed chiropractors, physical therapists, and other relevant healthcare providers to foster dialogue about the state of adjustment therapy in the province and to explore common issues surrounding the use of unconventional treatments within the community.

Acknowledgments

This narrative inquiry would not have been as well-defined and conceptually grounded without the valuable insights provided by **Mr. Roy Roland J. Kho**, a physical therapist whose expertise in public health service greatly enriched this study. Sincere gratitude is also extended to the patient-informants who generously shared their lived experiences and participated openly in the research process. The lead author likewise expresses heartfelt appreciation to family, friends, and loved ones, whose unwavering support and encouragement served as a constant source of motivation throughout the completion of this scholarly endeavor.

Funding and Conflicts of Interest

The authors declared no funding sources and conflict of interest of the study.

REFERENCES

1. World Health Organization. Health is a fundamental human right [Internet]. 2017 Dec 10 [cited 2025 Jun 19]. Available from: <https://www.who.int/news-room/commentaries/detail/health-is-a-fundamental-human-right>
2. Villaverde MC, Ronquillo KG, Espiritu II NS, Adora JMV. Universal health care in the Philippines: from

policy to practice. Department of Health; 2022.

3. Dayrit MM, Lagrada LP, Picazo OF, Pons MC, Villaverde MC. The Philippines health system review. *Health Syst Transit*. 2018;8(2):1–316.
4. World Bank. The transition to universal health coverage in BARMM: delivering and financing health services in the Bangsamoro Autonomous Region in Muslim Mindanao. 2020. Available from: <https://www.worldbank.org>
5. Pouliot M. Relying on nature's pharmacy in rural Burkina Faso: empirical evidence of the determinants of traditional medicine consumption. *Soc Sci Med*. 2011;73(10):1498–1507. doi:10.1016/j.socscimed.2011.08.037
6. Farnsworth NR. Ethnopharmacology and drug development. In: *Ciba Found Symp*. Vol 185. Wiley; 1994. p. 42–59. doi:10.1002/9780470514634.ch4.
7. Pingoy D. CAM Use at the Cancer Institute. *Philippine J Intern Med*. 2004;42:159–171.
8. Mendoza RL. Is it really medicine? The Traditional and Alternative Medicine Act and informal health economy in the Philippines. *Asia Pac J Public Health*. 2009;21(3):333–45. doi:10.1177/1010539509336570
9. Dahilig VR, Salenga RL. Prevalence, perceptions and predictors of complementary and alternative medicine use in selected communities in the Philippines. *J Asian Assoc Sch Pharm*. 2012;1(1):16–24. Available from: http://www.aaspjournal.org/pdf_fullpaper/vol01no01_24-32.pdf
10. Berdon ZJS, Ragosta EL, Inocian RB, Manalag CA, Lozano EB. Unveiling Cebuano traditional healing practices. *Asia Pac J Multidiscip Res*. 2016;4(1):51–59.
11. Naturopathy School of the Philippines. About us. 2018 Feb 14. Available from: <https://www.naturopathy.ph/2018/02/14/about-us/>
12. Ladia MAJ, Sison OT, Castillo-Carandang NT, et al. Prevalence of and associations for complementary and alternative medicine use among apparently healthy individuals in the Philippine LIFECARE cohort. *Acta Med Philipp*. 2018;52(5):404–10.
13. National Center for Complementary and Integrative Health. Complementary, alternative, or integrative health: what's in a name? 2018. <https://nccih.nih.gov/health/integrative-health>. Accessed 5 Jan 2020.
14. Aries MJH, Joosten H, Wegdam HHJ, van der Geest S. Fracture treatment by bonesetters in central Ghana: patients explain their choices and experiences. *Trop Med Int Health*. 2007;12(4):564–74.
15. Onuminya JE. The role of the traditional bonesetter in primary fracture care in Nigeria. *S Afr Med J*. 2004;94(8):652–8.
16. Nwadiaro HC, Ozoilo KN, Nwadiaro PO, Kidmas AT, Oboiren M. Determinants of patronage of traditional bone setters in the middle belt of Nigeria. *Niger J Med*. 2008;17(3):356–9.
17. Nwankwo OE, Katchy AU. Limb gangrene following treatment of limb injury by traditional bone setter (TBS): a report of 15 consecutive cases. *Niger Postgrad Med J*. 2005;12(1):57–60.
18. Zhang PY. Advantages, disadvantages, and trend of integrative medicine in the treatment of heart failure. *Cell Biochem Biophys*. 2015 Jun;72(2):363–6. doi:10.1007/s12013-014-0466-7.
19. GMA Integrated News. Content creator injured in chiropractic session dies [Internet]. 2025 Jan 28 [cited 2025 Jun 19]. Available from: <https://www.gmanetwork.com/news/topstories/regions/934371/content-creator-injured-in-chiropractic-session-dies/story/>
20. Council on Licensure, Enforcement and Regulation (CLEAR). Philippines: calls for regulation of massage and chiropractic professionals [Internet]. 2025 Jan 2 [cited 2025 Jun 19]. Available from: <https://www.clearhq.org/news/philippines-calls-for-regulation-of-massage-and-chiropractic-professionals>
21. The Manila Times. Filipino-Chinese doctor uplifts chiropractic medicine [Internet]. 2015 Dec 19 [cited 2025 Jun 19]; Available from: <https://www.manilatimes.net/2015/12/19/weekly/the-sunday-times/filipino-chinese-doctor-uplifts-chiropractic-medicine/235243>
22. Arevalo MVPN, Robredo JPG, Valenzuela S, Ho FDV, Alberto NRI, Alberto IRI, Bernardo MNG, Manlongat KD, Garcia AMU, Galvez Tan JZ, Dee EC, Eala MAB. The role of traditional, complementary, and alternative medicine in cancer care in the Philippines. *Chin Clin Oncol*. 2022;11(6):49. doi:10.21037/cco-22-91

23. O'Brien BC, Harris IB, Beckman TJ, Reed DA, Cook DA. Standards for reporting qualitative research: a synthesis of recommendations. *Acad Med.* 2014;89(9):1245–51. doi:10.1097/ACM.0000000000000388.
24. Philippine News Agency. Ecleo says Dinagatnons need 2nd-level hospital [Internet]. 2022 [cited 2025 Jun 19]. Available from: <https://www.pna.gov.ph/articles/1188248>
25. Philippine Health Research Ethics Board. National ethical guidelines for research involving human participants [Internet]. 2022 [cited 2025 Jun 19]. Available from: <https://ethics.healthresearch.ph/index.php/phoca-downloads/category/4-neg?download=154:national-ethical-guidelines-for-research-involving-human-participants-2022>
26. Francis JJ, Johnston M, Robertson C, et al. What is an adequate sample size? operationalising data saturation for theory-based interview studies. *Psychol Health.* 2010;25(10):1229–45.
27. Vasileiou K, Barnett J, Thorpe S, Young T. Characterizing and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. *BMC Med Res Methodol.* 2018;18(1). doi:10.1186/S12874-018-0594-7.
28. National University. Qualitative narrative inquiry research. 2025. Available from: <https://resources.nu.edu/c.php?g=1013605&p=8398152>
29. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
30. Carlton S, Johnson C, Cliffe T. Factors influencing parents' decisions to choose chiropractic care for their children in the UK. *Complement Ther Clin Pract.* 2009. doi:10.1016/j.ctcp.2009.04.003.
31. Brown BT, Bonello R, Fernandez-Caamano R, et al. Consumer characteristics and perceptions of chiropractic and chiropractic services in Australia: results from a cross-sectional survey. *J Manipulative Physiol Ther.* 2014;37(3):219–29. doi:10.1016/j.jmpt.2014.01.001.
32. Saridede D, et al. The effect of social media on treatment awareness in health: chiropractic. *Bezmialem Sci.* 2024. doi:10.14744/bauh.2024.30502.
33. Ernst E. The role of complementary and alternative medicine. *BMJ.* 2000;321:1133–5
34. Bishop FL, Yardley L, Lewith GT. A systematic review of beliefs involved in the use of complementary and alternative medicine. *J Health Psychol.* 2007;12:851–67. <https://doi.org/10.1177/1359105307082447>.
35. Reid R, Steel A, Wardle J, Trubody A, Adams J. Complementary medicine use by the Australian population: a critical mixed studies systematic review of utilisation, perceptions and factors associated with use. *BMC Complement Altern Med.* 2016;16:176. <https://doi.org/10.1186/s12906-016-1143-8>.
36. Tangkiatkumjai M, Boardman H, Walker D-M. Potential factors that influence usage of complementary and alternative medicine worldwide: a systematic review. *BMC Complement Med Ther.* 2020;20:363. <https://doi.org/10.1186/s12906-020-03157-2>
37. Kawchuk G, Hartvigsen J, Harsted S, Nim CG, Nyirö L. Misinformation about spinal manipulation and boosting immunity: an analysis of Twitter activity during the COVID-19 crisis. *Chiropr Man Therap.* 2020;28:34. doi:10.1186/s12998-020-00319-4.
38. Merten JW, Gordon BT, King JL, Pappas C. Cannabidiol (CBD): perspectives from Pinterest. *Subst Use Misuse.* 2020;55:2213–20. doi:10.1080/10826084.2020.1797808.
39. Yin J, Basch CH, Adnan MM, Dottington Fullwood M, Menafro A, Fung ICH. Attributes of videos on YouTube related to cupping therapy. *Altern Ther Health Med.* 2018;24:32–7.
40. Dai H, Hao J. Mining social media data on marijuana use for post traumatic stress disorder. *Comput Hum Behav.* 2017;70:282–90. doi:10.1016/j.chb.2016.12.064.
41. Marcon AR, Klostermann P, Caulfield T. Chiropractic and spinal manipulation therapy on Twitter: case study examining the presence of critiques and debates. *JMIR Public Health Surveill.* 2016;2:e5739. doi:10.2196/publichealth.5739.
42. Ng JY, Verhoeff N, Steen J. What are the ways in which social media is used in the context of complementary and alternative medicine in the health and medical scholarly literature? a scoping

- review. *BMC Complement Med Ther*. 2023;23:32. doi:10.1186/s12906-023-01999-2.
43. Gierth L, Bromme R. Attacking science on social media: how user comments affect perceived trustworthiness and credibility. *Public Underst Sci*. 2020;29:230–47. doi:10.1177/0963662519889275.
44. Gyasi RM, Osei E, Addo I. Do health beliefs explain traditional medical therapies utilization? evidence from Ghana. *Cogent Soc Sci*. 2016;2(1):1209995. doi:10.1080/23311886.2016.1209995.
45. Newell D, Holmes MM. Patient experience and satisfaction with chiropractic care: a systematic review. *J Patient Exp*. 2024;11:1–21. doi:10.1177/23743735241302992.
46. Maiers M, Bronfort G, Evans R, et al. Spinal manipulative therapy and exercise for seniors with chronic neck pain. *Spine J*. 2014;14(9):1879–89.
47. Eriksen K, Rochester RP, Hurwitz EL. Symptomatic reactions, clinical outcomes and patient satisfaction associated with upper cervical chiropractic care: a prospective, multicenter, cohort study. *BMC Musculoskelet Disord*. 2011;12:219.
48. Sawyer CE, Kassak K. Patient satisfaction with chiropractic care. *J Manipulative Physiol Ther*. 1993;16(1):25–32.
49. Tsertsvadze A, Clar C, Court R, et al. Cost-effectiveness of manual therapy for the management of musculoskeletal conditions: a systematic review and narrative synthesis of evidence from randomized controlled trials. *J Manipulative Physiol Ther*. 2014;37(6):343–62. doi:10.1016/j.jmpt.2014.05.001.
50. Herman PM, Kommareddi M, Sorbero ME, Rutter CM, Hays RD, Hilton LG, Ryan GW, Coulter ID. Characteristics of chiropractic patients being treated for chronic low back and neck pain. *J Manipulative Physiol Ther*. 2018;41(6):445–455. doi:10.1016/j.jmpt.2018.02.001.
51. Stochkendahl MJ, Sørensen J, Vach W, et al. Cost-effectiveness of chiropractic care versus self-management in patients with musculoskeletal chest pain. *Open Heart*. 2016;3(1):e000334. doi:10.1136/openhrt-2015-000334.
52. General Chiropractic Council. Chiropractic patient satisfaction and experience. 2025. Available from: https://www.gcc-uk.org/assets/publications/GCC_Patient_Satisfaction_Report.pdf
53. MacPherson H, Newbronner E, Chamberlain R, Hopton A. Patients' experiences and expectations of chiropractic care: a national cross-sectional survey. *Chiropr Man Therap*. 2015;23(1):3. doi:10.1186/s12998-014-0049-0.