



A Qualitative Study on the Real Perceptions of Foreign Orthopedic Patients Receiving Auricular Acupressure with Traditional Chinese Medicine Beans

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Abstract: *Objective:* To explore how foreign orthopedic patients perceive and experience auricular acupressure and to identify cultural, communication, and care-related factors that may influence acceptance of the therapy. *Methods:* From April 2024 to March 2026, seven foreign orthopedic patients who received auricular acupressure in the orthopedic ward of a tertiary hospital in Ningbo, Zhejiang Province, were recruited by purposive sampling. Semi-structured interviews were conducted, and the transcripts were analyzed using thematic analysis. *Results:* Four themes and eight sub-themes were identified: (1) cultural and cognitive conflicts, including difficulty understanding TCM theory and doubts about the treatment rationale; (2) differences in treatment experience, including varied physical sensations and mixed psychological responses; (3) communication and interaction barriers, including language barriers and culturally related misunderstandings; and (4) nursing expectations and care needs, including insufficient information and a need for individualized care. *Conclusion:* Foreign orthopedic patients may experience uncertainty when auricular acupressure is unfamiliar to them, particularly when language and cultural differences limit understanding. Clear explanations, appropriate language support, and individualized nursing assessment may improve treatment experience and acceptance.

Keywords: Foreign patients; Orthopedics; Auricular acupressure; Cross-cultural nursing; Qualitative research

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1. Introduction

Auricular acupressure is used in Chinese clinical practice as a non-pharmacological adjunct for symptom management. Recent studies have reported potential benefits for postoperative pain, sleep, and recovery in selected patient groups^[1-4]. Most of this literature, however, focuses on clinical outcomes rather than on how patients understand or experience the therapy. For patients from different linguistic and cultural backgrounds, unfamiliar explanations of illness and treatment, together with language discordance, may affect understanding, trust, and participation in care^[5-8]. Evidence describing these issues in foreign orthopedic

patients receiving auricular acupressure in Chinese hospitals remains limited. This study therefore explored their treatment experiences and care needs, with the aim of informing more appropriate cross-cultural nursing support.

2. Subjects and methods

2.1. Research subjects

Purposive sampling was used to recruit foreign orthopedic patients who received auricular acupressure in the orthopedic ward of a tertiary hospital in Ningbo, Zhejiang Province, from April 2024 to March 2026. Sampling sought variation in age, sex, nationality, fracture type, and exposure to auricular acupressure so that a range of experiences could be captured. Inclusion criteria were: (1) age ≥ 18 years; (2) an orthopedic diagnosis confirmed by appropriate clinical and imaging assessment; (3) willingness to receive auricular acupressure and provide written informed consent; and (4) residence in China for at least 1 month. Exclusion criteria were: (1) severe systemic illness that could interfere with participation; (2) mental or cognitive impairment that prevented clear communication; and (3) known allergy to materials used for auricular acupressure. Seven participants completed the formal interviews and were coded N1-N7. Participant characteristics are shown in **Table 1**.

Table 1. Basic Information of Interviewees (n = 7)

ID	Gender	Age (years)	Nationality	Fracture type	Treatment duration (days)	Number of auricular acupressure sessions
N1	Male	36	USA	Left ankle fracture	4	1
N2	Female	50	UK	Right wrist fracture	6	2
N3	Male	25	Germany	Right metacarpal fracture	3	1
N4	Male	23	USA	Right tibia and fibula fracture	9	3
N5	Male	26	Ethiopia	Open right patella fracture	3	1
N6	Male	27	Tanzania	Left distal radius fracture	3	1
N7	Male	24	Tanzania	Right ankle fracture	3	1

2.2. Research methods

2.2.1. Formulation of the interview outline

A phenomenological qualitative approach was adopted, using semi-structured in-depth interviews. The interview guide was developed after reviewing literature on TCM nursing, cross-cultural healthcare, and auricular acupressure. It was then pilot-tested with two eligible foreign orthopedic patients and refined before formal data collection. The final interview guide focused on first impressions of auricular acupressure, physical and emotional responses during treatment, communication difficulties, the influence of cultural differences, and suggestions for improving care.

- (1) When you were first introduced to auricular acupressure treatment, what were your initial impressions and perceptions of it?
- (2) During the course of auricular acupressure treatment, what specific physical sensations did you experience—for example, any pain, discomfort, or relief?
- (3) From a psychological perspective, what kind of experience did the auricular acupressure treatment bring to you? Did you have feelings of curiosity, worry, or other complex emotions?

- (4) What difficulties did you encounter in communicating with healthcare providers during the treatment, and how did these difficulties affect your treatment experience?
- (5) In what aspects do you think cultural differences manifested during the auricular acupressure treatment, and what obstacles did they create in your understanding and acceptance of this therapy?
- (6) What improvements would you hope healthcare providers could make regarding auricular acupressure treatment to better meet your needs and enhance treatment outcomes?

2.2.2. Data collection methods

Before each interview, the researcher explained the purpose and procedures of the study and obtained written informed consent and permission for audio recording. Interviews were conducted in a quiet, private room. Open-ended questions were followed by clarification and probing when needed, and non-verbal cues such as tone and body language were noted during the conversation. The interviewer avoided leading or evaluative prompts. Interviews lasted approximately 20-40 minutes. Recruitment and data collection ended when subsequent interviews no longer yielded substantively new information relevant to the developing themes.

2.2.3. Data analysis methods

Audio recordings were transcribed within 24 hours of each interview. The data were analyzed using Braun and Clarke's six-phase thematic analysis framework ^[9]. Two researchers first familiarized themselves with the transcripts and developed initial codes, then compared their interpretations and refined candidate themes through discussion. The analysis proceeded through familiarization, coding, generation of candidate themes, review of themes, definition and naming of themes, and report writing. Where interpretations differed, the researchers returned to the original transcripts and discussed the relevant excerpts; a senior researcher with qualitative research experience was consulted when clarification was needed. The final thematic structure was agreed by the research team.

3. Results

3.1. Theme 1: Cultural and cognitive conflicts

3.1.1. Difficulty in understanding TCM theory

Participants described several TCM concepts as difficult to relate to their previous understanding of health and illness. N5: "TCM theory is too complicated. Concepts like meridians and Qi and blood simply don't exist in my original culture. I have no idea what they mean—they feel so abstract, like stepping into an entirely new and unfamiliar world." N7: "I tried to understand the Yin-Yang balance mentioned in TCM, but it's too difficult for me. In my culture, there isn't a complete theoretical framework like this to explain how the body works or how diseases develop. I felt like I was groping in the fog." These accounts suggest that unfamiliar terminology could make the treatment rationale difficult to grasp.

3.1.2. Doubts about the therapeutic principle of auricular acupressure

Some participants questioned how stimulation of the ear could influence fracture-related symptoms and wanted an explanation they could relate to their previous medical knowledge. N6: "I don't understand why putting these small seeds on the ear can treat my condition—there seems to be no direct connection with the ear. This makes me feel that this treatment is quite unreliable." N6: "I just looked up some information

about auricular acupressure online, but I still can't figure out how it works. There's no scientific explanation that convinces me, and I worry that it's just a waste of time and won't really solve my problem." N1: "I simply cannot believe in a treatment method that lacks a clear principle. I would rather choose a treatment I am familiar with and that has a scientific basis, even if the process might be more painful." For these participants, uncertainty about the rationale reduced their willingness to accept the therapy without further explanation.

3.2. Theme 2: Differences in treatment experience

3.2.1. Diversity of physical sensations

Physical responses to auricular acupressure varied. Some participants noticed local discomfort or tenderness around the ear, while others later described some relief in their overall symptoms. N7: "Soon after the seeds were applied to my ear, I felt a strange sensation and a slight stinging pain in that area, which made me want to touch it." N2: "The skin on my ear felt especially sensitive. Even a slight head movement caused pain and discomfort." N4: "At first my ear felt uncomfortable, but after several sessions, I felt that the pain at the fracture site seemed to lessen somewhat." N2: "I felt that the pain had eased." The coexistence of discomfort and perceived relief made the experience difficult for some participants to evaluate in simple positive or negative terms.

3.2.2. Mixed psychological responses: Curiosity, concern, and expectation

Curiosity was common because the treatment differed from the medical approaches participants already knew, but it often occurred alongside concern about safety and effectiveness. N2: "When I first learned that a bone condition could be treated through the ear, I couldn't believe it—it's totally different from any treatment I've ever seen before." N7: "Auricular acupressure is so unique; I've never seen anything like it. How does it actually work?" N5: "I have concerns about this therapy—I worry about whether it carries any risks or could harm other parts of my body, since it's not a treatment I'm familiar with." N3: "I'm not sure whether auricular acupressure really works for my fracture, or whether it might delay my normal treatment course and make me miss the best opportunity for recovery." N4: "Although I have some worries, I still hope it can bring me a pleasant surprise, help my fracture heal faster, and allow me to return to my normal life and work as soon as possible." N5: "I expect it to ease my pain; I'm hopeful and willing to give this new therapy a try." These responses show that willingness to try the therapy could coexist with substantial uncertainty.

3.3. Theme 3: Communication and interaction barriers

3.3.1. Language barriers affecting treatment participation

Language differences sometimes limited participants' understanding of treatment instructions and made it difficult for them to describe discomfort or ask follow-up questions. N1: "The nurse spoke too fast, and I couldn't understand some parts. I got the general idea, but I wasn't sure about the actual procedures." N4: "The nurse explained the benefits of auricular acupressure to me, but I had never heard of it before." N7: "My ear felt uncomfortable, but I didn't know how to tell the doctor in English. I just hoped the feeling would go away." N6: "I had some questions about auricular acupressure—for example, why the ear and how long to keep the seeds on—but I couldn't ask clearly. Still, I was willing to try it because it seemed interesting." These communication gaps affected how confidently participants could take part in the treatment process.

3.3.2. Cultural differences leading to communication misunderstandings

Different expectations about illness and treatment also contributed to misunderstandings. Some participants compared auricular acupressure with the forms of orthopedic care that were familiar to them and found the underlying logic difficult to reconcile. N2: “In my country, this kind of TCM treatment like auricular acupressure is seen as mysterious, and I have many doubts about it.” N5: “I don’t really understand how auricular acupressure can affect the healing of my fracture through acupoints on the ear. When the doctor explained it to me, I felt his explanation didn’t align with my cultural understanding, so I doubted the effectiveness of the treatment.” N7: “In my country, when we get sick, we usually first see a specialized orthopedic doctor and use familiar methods like surgery. Now that I’m in China, I can try your methods.” N7: “I hope to recover quickly, but I can’t fully understand your methods in communication.” The issue was therefore not language alone; cultural expectations also influenced how explanations were received.

3.4. Theme 4: Nursing expectations and care needs

3.4.1. Lack of information causing anxiety and worry

When participants felt that information about the purpose, expected effects, or possible discomfort of auricular acupressure was insufficient, uncertainty increased. N3: “I didn’t know what it was, and I wasn’t sure if it would actually work or have adverse effects on my fracture recovery. I felt a bit anxious, but I also thought it might help me get better.” N7: “I really wanted to understand, but I didn’t quite get it, and I was somewhat worried.” They wanted clearer information before and during treatment so that they could judge what to expect.

3.4.2. Expectation of individualized nursing care

Participants also wanted nursing care to take account of individual comfort and practical needs rather than applying the procedure in exactly the same way for everyone. N5: “My habits are different from yours. For example, I found the adhesive tape for the seeds uncomfortable, and I hoped for a material more suitable for my skin type. But it seemed that such considerations were not taken into account, and I was still treated in the routine way, which made me uncomfortable.” N3: “I hope the nurses could be more attentive when applying auricular acupressure, so that I can feel more comfortable during the treatment.” Skin sensitivity, comfort with the adhesive material, and the manner in which the procedure was performed were among the concerns raised.

4. Discussion

4.1. Support understanding through culturally adapted explanations

The participants’ accounts show that unfamiliarity with TCM concepts was not simply a knowledge gap; it shaped how they judged the plausibility of auricular acupressure and whether they felt comfortable accepting it. This is consistent with nursing literature showing that cultural differences and unfamiliar explanatory models can complicate communication and care when clinicians and patients do not share the same assumptions about illness and treatment^[5,6]. For foreign patients, explanations should therefore begin with the purpose, expected sensations, limitations, and safety of the treatment in plain language rather than relying primarily on abstract TCM terminology. Bilingual written or visual materials may help, but they should support - not replace - direct discussion and opportunities for patients to ask questions.

4.2. Respond to differences in physical and emotional treatment experience

Participants described both local discomfort and perceived symptom relief, and their emotional responses often combined curiosity, concern, and hope. These mixed experiences are clinically relevant because auricular acupressure is an unfamiliar intervention for many foreign patients. Previous orthopedic and pain-related studies have reported possible benefits of auricular acupressure or related combined interventions^[1,2], but the present qualitative data should not be interpreted as evidence of treatment efficacy. Nursing care should instead focus on what can be assessed directly: skin condition, comfort, tolerance of pressure and adhesive materials, understanding of expected sensations, and the patient's willingness to continue. Any discomfort should be reassessed promptly, and patients should be told that they may ask for the procedure to be stopped or adjusted.

4.3. Strengthen language support and cross-cultural communication

Language barriers affected both directions of communication: nurses sometimes had difficulty explaining procedures and precautions, while patients had difficulty describing discomfort or asking questions. Similar problems have been reported across hospital settings, where language discordance may affect information exchange, patient experience, and continuity of care^[5,8]. The practical priority is not simply to ask staff to improve their foreign-language skills. For patients who cannot communicate comfortably in the available language, care teams should use trained interpreters or appropriate translation support when available, provide concise bilingual instructions, and confirm understanding after key explanations. Cross-cultural communication training can also help clinicians recognize differences in expectations and avoid treating hesitation as non-cooperation^[6,7].

4.4. Provide information early and individualize nursing care

Participants wanted more information before treatment and more attention to individual comfort during the procedure. These needs support a simple sequence for nursing practice: explain first, assess individual preferences and concerns, perform the intervention, and then ask about the patient's experience. Cultural competence training can improve clinicians' knowledge and communication behaviors, although evidence for direct effects on patient outcomes remains limited^[7]. For auricular acupressure, individualized care may include adapting the pace and amount of information, checking skin sensitivity and comfort with adhesive materials, and considering mobility or positioning limitations related to the orthopedic condition.

5. Conclusion

This study identified four themes in the experiences of seven foreign orthopedic patients receiving auricular acupressure: cultural and cognitive conflicts, differences in treatment experience, communication and interaction barriers, and nursing expectations and care needs. The findings suggest that unfamiliarity with TCM concepts, language discordance, and insufficient information can shape how patients understand and accept the therapy. Clear explanations, language support, and individualized assessment are practical ways to make the care process easier to understand and more responsive to patient needs. The study was conducted in a single institution with a small and culturally heterogeneous sample, so transferability should be judged in relation to local populations and service settings. Further qualitative research across multiple sites and a wider range of national and cultural backgrounds could examine whether these themes recur in other

orthopedic settings.

Disclosure statement

The authors declare no conflict of interest.

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