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Research Paper

A Qualitative Inquiry Exploring Recovery From Lower Extremity Fractures

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ABSTRACT

Background and Objectives: Lower extremity fractures (LEFs) impose a significant functional and psychosocial burden on patients. Understanding the lived experiences and identifying critical aspects during recovery is vital to support patient-centered rehabilitation models and establish meaningful assessment criteria for post-discharge recovery. This study explored patients' recovery experiences from LEF following inpatient rehabilitation and examined what patients consider important when evaluating their recovery progress.

Methods: A qualitative explorative study design was employed to capture the lived experiences of Nigerian patients with LEF during their recovery journey. Audio-recorded, open-ended, semi-structured in-depth interviews were conducted face-to-face or by telephone to explore patients' experiences comprehensively. A purposive sample of LEF patients was interviewed until data saturation was reached. The ATLAS.ti, software, version 24 package was utilized to organize, store, and retrieve data, which was subsequently analyzed using inductive thematic data analysis.

Results: Ten patients shared their profound, often emotionally challenging experiences of recovery from LEF. Five comprehensive themes emerged related to personal experiences during recovery: physical impact, social impact, occupational impact, financial and psychological impact, and evaluating recovery. This study illuminates the multifaceted recovery journey from LEFs, revealing the complex interplay between physical pain, emotional distress, social disruption, and the persistent pursuit of normalcy. Through their shared narratives, participants provided invaluable insights into the challenges and aspirations of navigating life after a significant lower-extremity injury.

Conclusion: The lived experience of patients following LEFs is characterized by significant mobility limitations, impaired functional capacity affecting daily activities and return to work, participation restrictions, and substantial psychological consequences.

Keywords: Lower extremity fracture, Patient experience, Patient values, Recovery experiences, lived experiences, Nigeria, Rehabilitation

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What is "already known" in this topic:

Bones of the lower extremity have been reported to be primarily affected in road traffic injuries. Bone fracture constitutes a major global public health issue, accounting for 178 million (78 million with LEFs). LEFs impose a significant burden.

→ *What this article adds:*

The lived experience of patients following lower extremity fractures (LEFs) is marked with mobility limitation, impaired functional activity, including daily activities, return to work, and participation restriction with psychological consequences. Individuals with LEFs value quick restoration of mobility, desire prompt spiritual reconnection and worship while recovering. One of the post-surgical outcomes the participants valued is functional independence.

Introduction

In Nigeria and many other developing countries, road users face increased risk of traumatic injuries due to inadequate road infrastructure, high traffic volumes, insufficient driver training, poor law enforcement, and lack of physical separation between vehicles and vulnerable road users [1]. Lower extremity bones have been consistently reported as primarily affected in road traffic injuries (RTIs), [2] with tibia/fibula fractures ranking highest, followed by femur fractures in Nigeria [3-5]. The shift toward motorcycle transportation in many rural communities has substantially contributed to these RTIs [2]. The consequences of lower extremity trauma among RTI victims include profound physical suffering and ongoing social and economic costs [6, 7].

The impact of sustaining a lower extremity fracture (LEF) can be life-altering, with prolonged recovery periods that fundamentally affect patients' quality of life [8]. These impacts encompass delayed return to work, [9] job loss and economic burden [7, 9, 10], disruption of everyday social life and social isolation, [11] family life disruption, [12] sleep deprivation, compromised sense of independence, and diminished psychological well-being [13]. Furthermore, injuries affecting mobility have broad quality of life and economic consequences for both patients and their family members [6, 14-16].

Bone fractures constitute a major global public health concern, accounting for 178 million new cases (78 million involving LEF) in 2019, representing a 33.4% increase since 1990 [17]. The age-standardized incidence and prevalence rates of bone fractures in Nigeria are particularly concerning, with 1100.5 per 100000 and 3190.0 per 100000 population in 2019, demonstrating increases of 5.6% and 4.1% respectively from 1990 [17]. This translates to approximately 193 years lived with disabilities per 100,000 Nigerians in 2019, potentially attributed to increased disability-adjusted life years due to rising RTIs forecasted to double by 2030 in sub-Saharan Africa [1].

Evidence from medical literature suggests that LEF healing typically occurs 3 months post-injury, with patients expected to recover to pre-injury health status within 6 months [14, 18]. However, clinical recovery often does not translate to meaningful functional recovery based on patients' perceptions and lived experiences. Recent data indicate that Nigerians with LEFs do not return to their pre-injury health status 6 months after LEF [19].

Patient-centered rehabilitation, which prioritizes patients' perspectives and values, represents one approach to mitigate the burden of LEF. Previous studies exploring the lived experiences of patients with LEF have revealed critical recovery priorities [6, 8, 13, 20-22]. Key areas identified as important include walking, gait and mobility, being able to return to life roles, pain or discomfort, and quality of life [23].

However, extrapolating patients' lived experiences during recovery may be limited by variations in healthcare systems across countries, particularly when comparing developed nations with lower-middle-income countries like Nigeria. The absence of structured care transitions for Nigerians with LEFs often limits care pathways. In contrast to healthcare systems in developed countries, where patients transition from surgical hospitals to specialized post-acute care facilities [24], Nigerian secondary and tertiary health facilities provide both postoperative care and rehabilitation during prolonged hospital stays. Healthcare financing remains approximately 70% out-of-pocket for most Nigerian patients, with less than 5% of the population having enrolled in health insurance [25].

There is limited information on how Nigerians with LEFs experience the transition from inpatient rehabilitation to home, their recovery experiences, and what matters most to them during their community-based recovery journey. Including the perspectives of Nigerian patients with LEF may improve the quality of care and recovery outcomes [26] while helping to formulate culturally appropriate patient-centered rehabilitation approaches [13]. Therefore, this study aimed to explore the lived experiences of Nigerian patients with LEF, identify what patients consider essential during recovery, and examine how these priorities can inform the evaluation of LEF service quality and patient-centered care approaches.

Patients and Methods

This qualitative study followed the consolidated criteria for reporting qualitative (COREQ) research guidelines [27].

Study Design

Theoretical framework

A qualitative, exploratory study was adopted to capture and comprehensively describe the lived experiences of Nigerian patients with LEF during their recovery. The focus was on understanding and describing experiences as they are authentically lived and felt by individuals [28].

Participant Selection

Purposive sampling was used to recruit participants representing various types of LEFs, ages, and genders. Ten participants were recruited until data redundancy was achieved, ensuring comprehensive capture of diverse experiences. The inclusion criteria comprised participants who had been discharged from inpatient care, achieved clinical union of their LEF, were ≥12 weeks post-injury, and were able to provide informed consent for interviews. Exclusion criteria included patients with non-clinical union, <12 weeks post-injury, and those unable to consent to the interview. The sampling process spanned 11 months.

Study setting

In-depth interviews were conducted by the principal investigator in a noise-free, private cubicle (face-to-face) or via telephone to ensure participant comfort and confidentiality. All participants were outpatients at the Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria.

Data collection

Before interviews, a structured pro forma was used to collect comprehensive sociodemographic and clinical information. Clinical details, including the date of fracture onset, fracture type, length of hospitalization, and treatment modality, were extracted from patients' hospital records. Sociodemographic characteristics, including age, gender, education level, and occupation, were systematically documented.

A semi-structured interview guide facilitated consistent yet flexible exploration of experiences across all interviews. Strategic probes were employed to capture detailed information during interviews as appropriate. The interview guide contained carefully constructed questions that elicited participants' lived experiences during recovery and the factors they considered most important. Participants were asked to describe their typical day and explain how LEF affected their daily lives, including impacts on their mood, walking ability, work capacity, leisure activities, and family relationships. To better understand recovery priorities, participants were asked to identify the most significant factors in their recovery and to compare their daily lives before and after LEF. When necessary, targeted probes were utilized to elicit temporal, procedural, or detailed information.

Interviews were audio-recorded, with reflective annotations to support accurate interpretation of the interview data. Interviews were conducted in either English or Yoruba, depending on participants' language preferences, and lasted 30 to 45 minutes. The interview guide was professionally translated into Yoruba and back-translated by language experts to ensure data credibility and cultural appropriateness. Trustworthiness in the study was maintained through strategies that included member checking, triangulation during data analysis, an audit trail maintained from conception through to analysis, the research team's reflexivity, and attempts at thick description in the reporting of the data.

Data analysis

Interviews were recorded using encrypted digital audio recorders and securely downloaded to password-protected laptops accessible only to the lead researcher. All interviews were transcribed verbatim with identifiable information removed to ensure participant confidentiality. Interview transcripts were stored on secure, password-protected devices and pseudonymized using unique study identification numbers. The lead author thoroughly reviewed all transcripts to achieve deep familiarity with the data. Data organization and analysis were completed using ATLAS.ti software, version 24 package. Transcripts were independently coded by two authors, with regular discussion sessions among researchers to ensure agreement, dependability, and consistency throughout the analysis. Data analysis was performed using inductive thematic analysis to provide an authentic representation of how individuals experience and interpret their realities of LEF recovery, grounded in their personal perspectives [28, 29].

Research team and reflexivity

Personal characteristics

The research team comprised experienced healthcare professionals and researchers with diverse expertise. Olufemi Oyewole (OO) is a clinical physiotherapist and researcher with PhD credentials. Lateef Thanni (LT) is an orthopedics consultant, academician, and professor. Adekunle Adebanjo (AA) is a hospital consultant specializing in traumatology. Michael Ogunlana (MO) is a clinical physiotherapist and researcher with PhD qualifications. Abiola Fafolahan (AF) is a clinical physiotherapist with public health interests and biostatistics knowledge. Adesola Odole (AO) is a professor of musculoskeletal physiotherapy with extensive qualitative research experience, and Pragashnie Govender (PG) is a professor of occupational therapy with significant qualitative research expertise. Through this rigorous process, researchers suspended their judgments and prior understanding of recovery post-LEF to ensure that the participant voices emerged [30].

Relationship with participants

OO, LT, and AA were employed in the care setting and directly involved in patient care management, including the care of study participants. This insider perspective provided valuable context while requiring careful attention to potential bias through the bracketing process.

Results

Participant characteristics

Ten participants contributed their experiences to this study (Table 1). The majority were females (80%) with tertiary education (60%), married (50%), and a mean age of 40.9±17.9 years. Closed femoral and malleolar fractures were most common (80%), with 60% receiving non-surgical intervention.

Emergent themes

In the contemplative environment of a rehabilitation clinic, participants in this descriptive phenomenological study generously shared their profound, often emotionally charged experiences of recovering from LEF. Their compelling narratives revealed a complex tapestry of physical discomfort, social disruption, and deeply held hopes for complete recovery. Five major themes emerged from the analysis, representing the multifaceted nature of LEF recovery experiences (Table 2).

Discussion

This explorative study provides valuable insights into the lived experiences of Nigerian patients recovering from LEFs, revealing the multifaceted nature of recovery that extends far beyond clinical indicators of bone healing. The findings illuminate critical aspects of patient-centered recovery that have important implications for rehabilitation practice and healthcare service delivery in resource-limited settings.

Pain and functional limitations

Pain emerged as a dominant theme affecting all aspects of participants' lives, corroborating previous research findings [6, 13, 16, 21]. The persistent nature of pain and its impact on functional activities aligns with established literature indicating that pain can be debilitating, significantly impacting activities of daily living and potentially leading to home-bound or bedridden status if inadequately managed [6, 22]. The participants' consistent desire for pain-free function underscores the critical need for comprehensive pain management strategies throughout the recovery continuum.

Most participants experienced significant functional limitations, particularly affecting walking capacity. This finding is expected, given the lower extremity's fundamental role in mobility, and is consistent with previous studies demonstrating that individuals with LEFs expe-

Table 1. Characteristics of the Participants (n=10)

Variables		No. (%)/Mean±SD/Median (IQR)
Sex	Male	2(20)
	Female	8(80)
Education	Primary	1(10)
	Secondary	3(30)
	Post-secondary/tertiary	6(60)
Marital status	Single	4(40)
	Married	5(50)
	Widow/widower	1(10)
Occupation	Unemployed/retired	3(30)
	Artisan	1(10)
	Professional	6(60)
Religion	Christiam	9(90)
	Muslem	1(10)
Diagnosis	Femoral fracture	4(40)
	Tibial/Fibula fracture	2(20)
	Malleolar fracture	4(40)
Fracture type	Closed	9(90)
	Open	1(10)
Treatment type	Surgical	4(40)
	Non-surgical	6(60)
Age (y)		40.9±17.9
Duration since fracture (wk)		35.2±14.9
Length of hospitalization (d)		8.5 (0.0–55.5)

rience substantial difficulty performing mobility-related activities [6, 13, 20, 31-33]. The emphasis on walking, gait, and mobility aligns with expert consensus identifying these as core outcome domains for LEF patients [23].

The relationship between mobility restoration and quality of life emerged clearly in participants' narratives. Mobility limitations led to social isolation, restricted community participation, and broad economic and quality-of-life consequences affecting both patients and family members [6, 11], consistent with previous research identifying walking ability as fundamental to recovery and quality of life among people with LEFs [16]. The concept of mobility as a "bridge to the sense of coherence in everyday life" among individuals with fractures [34] was evident in participants' descriptions of their recovery priorities.

Social and psychological consequences

The social and psychological impacts of LEFs revealed in this study highlight the complex interplay between physical limitations and psychosocial well-being. Participants experienced significant psychological disturbances, including depression, anxiety, and feelings of being a burden, consistent with previous research [11, 13, 35].

Table 2. Emergent themes

Theme/Sub-theme	Quote
Theme 1: Physical impact	The physical consequences of LEF were pervasive in participants' accounts. The manifestations ranged from activity limitations to persistent pain that fundamentally altered daily functioning. Participant No. 6 (P. 6) said: "It impacted almost everything in my life, especially during the first two weeks. The first two weeks, I was dependent and couldn't do anything on my own; people had to come to me because I was in bed, except when I had to go to the toilet, and someone helped me. I was dependent, and life was difficult— to feed and brush. I had to depend on someone. "
Participants consistently described frustrating limitations in basic mobility tasks.	As P. 1 explained: "The only thing I can't do for now is to climb the staircase because if I do, I would start feeling the pain again." This sentiment was echoed by P. 3, who lamented: "Most of the time I walk, I feel pain because of the limping and because of the surgery they did for me; there was a little error, so I find it difficult to walk because of the limping."
The persistence of pain varied significantly among participants, but its impact on function was universally reported.	P. 2 noted: "The difference is that I could stand for a longer period before, but now I'll be feeling pains when I stand for 30 minutes and resting on the second leg, which also aches." Meanwhile, P. 6 described more specific neurological symptoms: "When I wake up in the morning before setting out, I have this nerve pain and it goes down as the day goes by, and at night, I feel pains, so I use ointment on it, but I've been working and coping with it."
Physical limitations extended beyond pain to include swelling and fatigue.	P. 7 observed: "And after walking, I would need to rest the leg, if not it will swell, and I have to be careful and limit my walking in order not to stress my leg."
Walking capacity was universally compromised, particularly for longer distances or challenging terrain.	P. 10 candidly shared: "I could walk like 20 km before, but now I can still walk the same distance, but I have to rest on my way because I get tired before completing the distance."
The reliance on assistive devices became a powerful symbol of altered independence.	As P. 5 explained: "It is actually better, but I can't move without the crutches, and the last X-ray I did, my ankle and knee are ok, but the tibia is overlapping, which has prevented the bone from being strong."
Theme 2: Social impact	LEFs profoundly disrupted participants' social relationships and community engagement patterns. The impact extended far beyond physical limitations, affecting fundamental social roles and relationships.
Family dynamics were particularly affected, with participants describing altered relationships and increased dependence on family members.	P. 5 poignantly described: "My daughter wants me to play with her like I used to, but I can't. It has really affected me." The theme of dependency emerged strongly across narratives, with P. 10 sharing: "My fracture has hindered a lot of things because I am a nursing mother and I live alone with my husband but ever since I got back home from the hospital, my sister-in-law has started living with us and sometimes when I want to do something, it's not convenient even to cook."
The emotional burden of increased dependence was palpable in participants' accounts.	As P. 9 reflected: "If I want to take anything, I had to call someone, I couldn't even walk, which was a very big issue for me because I don't know how to sit down in a place, and at some point. It made me feel like I had to always depend on other people before I could do anything, and it really affected me."
Religious and community participation, highly valued in the Nigerian context, was significantly disrupted.	P. 5, a pastor, described the profound impact: "I couldn't go to church and elsewhere, the difference is much because I am a pastor who attended programmes but couldn't again." This disruption to spiritual life emerged as a particularly distressing aspect of the recovery experience for many participants.
Theme 3: Occupational impact	The fracture experience fundamentally altered participants' capacity to engage in meaningful work and daily occupational activities. These impacts extended across both paid employment and essential daily living tasks.
Influence on Work and Employment: Several participants described significant disruptions to their work capacity and income generation.	P. 5 explained the difficult decision to resign: "It has really affected me a lot because I was working in a school, and because of the fracture, I had to resign because I couldn't go to work with POP and crutches, and I've been staying at home since then." Similarly, P. 3 described the broader economic implications: "I said earlier that while in School I combined trading with my schooling, but since I had the fracture and I am done with School and NYSC, I have been at home and unable to work." Some participants found creative adaptations, as P. 9 noted: "I've not started working physically, like going out to look for a job, but I can bake and I do that at home."
Influence on daily living activities: The fracture experience resulted in reduced participation in previously enjoyed recreational and essential daily activities. Participants shared experiences of abandoning valued leisure activities.	P. 3 explained: "Let's say, like I loved swimming before the fracture, but ever since the fracture, I have not been able to swim. I went to the pool once, but because of the cold water, it was really unbearable for me."
Basic daily activities became challenging endeavours requiring assistance.	As P. 6 described: "I was dependent and life was difficult, even to feed and brush, I had to depend on someone."
The inability to perform routine tasks, such as grocery shopping, emerged as a common challenge.	Many participants noted: "I have not been able to go to the market."

Theme/Sub-theme	Quote
Theme 4: Financial and psychological influence	The economic and emotional consequences of LEF added further layers of complexity to the recovery journey, often compounding physical challenges and creating cycles of distress.
Financial Burden: Participants consistently reported significant financial strain due to both medical costs and the loss of income-generating capacity. The economic implications also extended to family members.	P. 3 noted: “Ok, like before the fracture, I did trading with my schooling, so I was unable to make money because I am always indoors.” P. 6 explained: “It affected my family because they had to show a sense of care, and my parents had to travel at some point to visit me, which was a burden for them... There was a financial implication on my part and my parents as well.”
Psychological Impact: The emotional toll of the fracture experience was profound and multifaceted. Participants described feelings of sadness, frustration, and helplessness that accompanied their physical limitations.	P. 7 expressed: “It was when the fracture occurred that it affected my mood and I felt like the world was coming to an end.”
The visibility of disability and social stigma concerns emerged as significant psychological stressors.	P. 1 shared: “I don’t want people to push me and be looking at my leg when walking.” Similarly, P. 10 explained her reluctance to engage socially: “I am shy because not everyone knew that I had an accident, and I wouldn’t want people to start asking questions when they notice how I am walking, so I won’t let my leg heal completely before I start going out.”
Depression and feelings of being a burden were common experiences.	P. 6 candidly shared: “It affected my mood, especially when I was bedridden, and I see my colleagues going to work, I feel very sad knowing fully well I wasn’t like this before.” The sense of being diminished was captured by P. 9: “The first thing is that initially, when I had the fracture, I was down and felt like my colleagues were working, but I was in the hospital and could not move around. It affected me mentally because I felt I was a liability to those around me.”
Theme 5: Expectations of recovery-what counts as important during recovery	Participants identified multiple dimensions of recovery that were particularly significant in their healing journey. These priorities provided crucial insights into patient-centered recovery goals and values.
Pain Relief and Symptom Management: The desire for pain-free function emerged as a fundamental recovery goal across participants.	As P. 3 expressed: “I just want to walk better and without pain and walk like other people.” P. 6 elaborated on this goal: “Then, I will not want to have any recurring pains in my ankle or joint... I also do not want the leg to swell, as it is still swollen right now.”
Restoring Mobility and Functional Independence: Walking ability was the most frequently cited and deeply valued recovery outcome. The desire to eliminate dependence on assistive devices was particularly meaningful. Participants emphasized the importance of regaining full physical function and independence.	P. 9 explained the social implications of mobility restoration: “Number one was the ability to walk normally without limping because to me I felt that when I start limping, people will be asking me what happened to your leg, you were not like this before, how come this happened, and all that, so that was the most important.” P. 3 shared: “Then, I couldn’t walk without using crutches, but now, I can walk without the crutches. Then I was always indoors, but now I can go out a little bit farther away from home.” As P. 6 articulated: “I want the leg to get back to the way it was before without any pains and discomfort... I want to move about like I always did before. I wanted to move my car and interact with people like I normally did before.”
Occupational Reengagement and Return to Meaningful Activity: Returning to meaningful work and productive activities represented a crucial recovery milestone. The ability to resume leisure and recreational activities was particularly significant for participants.	P. 6 described: “It was getting back to work and my normal life, I just wanted to leave my room and get back to work to do what I enjoy doing.” P. 5 expressed: “I am a singer and I dance, but I can’t dance again, and it’s painful to me. I can’t stand to teach for a long time again, and also stand to preach in a very painful church.”
Spiritual Reconnection and Worship: Given the significant spiritual orientation of Nigerian culture, participants emphasized the critical importance of returning to religious practices and community worship. The role of spiritual resilience in recovery was profound.	P. 6 noted: “Those were the most important things to me and also to serve God because I couldn’t go to church during those times.” The restoration of spiritual roles was particularly meaningful, as P. 5 expressed her desire to return to “back to the pulpit.” P. 1 shared: “When I had the fracture, I lost all hope, but with God, he did not allow that. I’ll tell them they should have the Same hope because God is at my Side and He’s the one who made me alive today.”
Post-Surgery Outcomes and Future Concerns: Participants expressed both satisfaction with surgical outcomes and ongoing concerns about long-term implications. However, concerns about medical hardware remained significant.	P. 9 shared positive reflections: “The most important thing is that I went for the surgery and God made it successful and I’m not limping because before I went for the surgery, it was very obvious that the legs were different and at some point, the leg was bow but now the leg is straight and when I stand you can’t know that anything has happened.” “The first question on my mind is the fact that the plate that was fixed in my leg, at some point has to be removed, So the question is, when I want to remove it, what is the next line of action or can I just leave It there forever without having to undergo any process again of removing the plates and the screws in the leg.” The ultimate recovery goal for many participants was captured by P. 10: “The most important thing to me when I had the accident was that I told God not to make me a handicap and heal me to my former self, and thank God, I am getting better now.”

The dependency on family members, while providing necessary support, also created emotional distress and concerns about being a burden to loved ones. This finding suggests that professional social support services, which are often lacking in Nigerian healthcare facilities, could significantly alleviate patient anxiety, fear, and worry while promoting psychological well-being and optimal outcomes [36]. The integration of social welfare services into LEF care pathways represents an essential opportunity for healthcare system improvement.

Cultural and spiritual dimensions

A unique finding of this study relates to participants' emphasis on spiritual reconnection and worship during recovery. The disruption to religious participation emerged as a significant source of distress, reflecting the profound spiritual nature of Nigerian culture. This finding suggests that healthcare providers should consider spiritual and religious needs as integral components of holistic recovery planning. The role of spiritual resilience as a coping mechanism was evident in participants' narratives, indicating that spiritual support could be leveraged as a therapeutic resource in the recovery process.

Occupational impact and independence

The disruption to work capacity and income generation represents a critical dimension of LEF impact that extends beyond immediate medical concerns. Participants' experiences of job loss, reduced work capacity, and economic hardship highlight the need for vocational rehabilitation services and financial support programs. The creative adaptations some participants employed, such as home-based work alternatives, suggest potential intervention strategies that could be integrated into rehabilitation programs.

The desire for functional independence emerged as a paramount recovery goal, reflecting participants' pre-injury autonomy and self-determination. The over-dependence on others during recovery, while necessary, created additional psychological burden and highlighted the importance of rehabilitation approaches that systematically promote independence while providing essential support.

Healthcare system implications

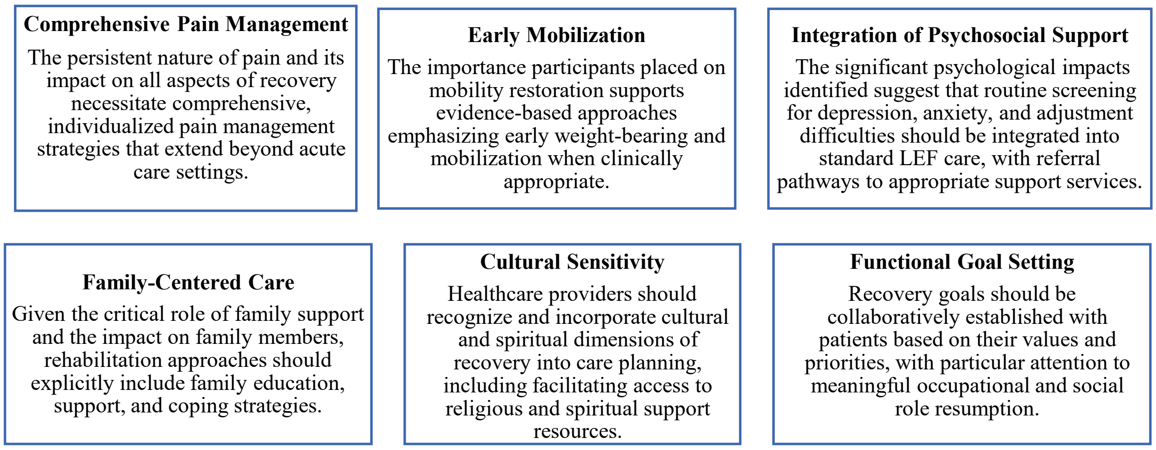
The findings reveal important gaps in the Nigerian healthcare system's approach to LEF care. The absence of structured transitions between acute care and community-based rehabilitation, limited access to comprehensive rehabilitation services, and a lack of psychosocial support represent significant opportunities for system improvement. The predominantly out-of-pocket healthcare financing model may exacerbate recovery challenges by limiting access to essential services and increasing financial stress for patients and families.

Clinical practice implications

Several important implications for clinical practice emerge from this study (Figure 1).

Conclusion

This study reveals that the lived experience of Nigerian patients following LEFs is characterized by profound, multifaceted impacts extending far beyond clinical indicators of bone healing. Participants' experiences were marked by persistent mobility limitations, impaired functional capacity affecting daily activities and work participation, social and community participation restrictions, and significant psychological consequences, including depression, anxiety, and concerns about being a burden



Comprehensive Pain Management

The persistent nature of pain and its impact on all aspects of recovery necessitate comprehensive, individualized pain management strategies that extend beyond acute care settings.

Early Mobilization

The importance participants placed on mobility restoration supports evidence-based approaches emphasizing early weight-bearing and mobilization when clinically appropriate.

Integration of Psychosocial Support

The significant psychological impacts identified suggest that routine screening for depression, anxiety, and adjustment difficulties should be integrated into standard LEF care, with referral pathways to appropriate support services.

Family-Centered Care

Given the critical role of family support and the impact on family members, rehabilitation approaches should explicitly include family education, support, and coping strategies.

Cultural Sensitivity

Healthcare providers should recognize and incorporate cultural and spiritual dimensions of recovery into care planning, including facilitating access to religious and spiritual support resources.

Functional Goal Setting

Recovery goals should be collaboratively established with patients based on their values and priorities, with particular attention to meaningful occupational and social role resumption.

Figure 1. Clinical practice implications

to others. The recovery priorities identified by participants emphasize the critical importance of pain relief, mobility restoration, functional independence, occupational reengagement, and spiritual reconnection. These findings highlight the need for comprehensive, culturally sensitive rehabilitation approaches that address not only physical healing but also psychosocial, occupational, and spiritual dimensions of recovery. The study highlights the importance of patient-centered care that incorporates patients' values, priorities, and cultural context into rehabilitation planning and service delivery. Adequate rehabilitation programs that promote functional independence — highly valued by patients — while addressing psychosocial and spiritual needs may lead to optimal outcomes and enhanced patient satisfaction. Healthcare systems, particularly in resource-limited settings, should consider developing comprehensive care pathways that integrate physical rehabilitation with psychosocial support, vocational services, and spiritual care resources. The findings provide valuable insights for healthcare providers, policymakers, and researchers seeking to improve patient outcomes and experiences after LEFs. Future research should explore intervention strategies based on these patient-identified priorities and examine the effectiveness of comprehensive, culturally sensitive rehabilitation approaches in improving both clinical outcomes and patient-reported recovery measures.

Study limitations

Several limitations should be considered when interpreting these findings. The single-center design may limit generalizability, although the findings may be transferable to similar healthcare contexts and cultural settings.12 The single-interview approach, conducted 4-16 months post-injury, may have introduced recall bias, although the depth and consistency of participants' accounts suggest robust data quality. The involvement of some research team members in participants' clinical care, while providing a valuable insider perspective, required careful attention to potential bias through rigorous bracketing processes. Additionally, the findings reflect experiences within the specific context of the Nigerian healthcare system and cultural setting, which should be considered when applying insights to other contexts.

Ethical Considerations

Compliance with ethical guidelines

This study was approved by the Ethics Committee of Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria (Code: OOUTH/HREC/368/2020AP).

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The paper was extracted from a research project of the Olufemi Oyeleye Oyewole, approved by Department of Physiotherapy, Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria.

Authors' contributions

Conceptualization and study design: Olufemi Oyeleye Oyewole, Lateef Olatunji Thanni, Adesola Odole, Michael Ogunlana, and Adekunle Adebanjo; Data collection: Olufemi Oyeleye Oyewole; Data analysis and interpretation: Olufemi Oyeleye Oyewole, Pragashnie Govender, and Abiola Fafolahan; Drafting of the manuscript: Olufemi Oyeleye Oyewole and Pragashnie Govender; Manuscript revision and final approval: All authors.

Conflict of interest

The authors declared no conflict of interest.

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