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Navigating the Care Landscape for Spinal Cord Injury: A Sociological Insight

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A R T I C L E I N F O

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A B S T R A C T

Background: Spinal Cord Injury (SCI) is a major global public health concern, with a disproportionate burden in low- and middle-income countries (LMICs), particularly in Africa. In Nigeria, most research has emphasized clinical and rehabilitative outcomes, with limited attention to sociocultural aspects of SCI care. This study examined how people living with SCI and their caregivers navigate the healthcare landscape, and the sociocultural factors shaping their choices and experiences.

Methods: This hospital-based, cross-sectional study was conducted between February 2018 and February 2019 at the University College Hospital, Ibadan, using a mixed-methods design. Data were collected through surveys with 108 informal caregivers, in-depth interviews with 30 SCI patients and caregivers, and 6 key informant interviews with traditional healers. Quantitative data were analyzed using univariate and bivariate statistics, while qualitative data was analyzed thematically.

Results: Biomedical care was the most common initial response to SCI, driven by its acute presentation and availability of specialized services. Many participants later concurrently or sequentially utilized alternative care, including traditional bone setting (25.9%) and spiritual healing (71.3%). Medical tourism was reported in a few cases, and decision-making was heavily influenced by family, friends, and spiritual advisors. Despite skepticism, some caregivers reported psychological and cultural value in alternative therapies. No significant associations were found between caregivers' socio-demographic characteristics and alternative care use.

Conclusion: Healthcare-seeking for SCI in Nigeria reflects a complex blend of biomedical, traditional, and spiritual practices. Integrating culturally sensitive, community-based rehabilitation strategies with evidence-based care is critical for improving outcomes and ensuring continuity of care in LMICs.

Keywords: Spinal Cord Injury; Healthcare Seeking Behaviour; Traditional Medicine; Patient Experience; Developing Countries; Nigeria

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Introduction

Spinal cord injury (SCI) is a significant public health problem globally, with major burden recorded in low-and middle-income countries (LMIC) where it usually affects young, economically productive individuals (Jazayeri et al., 2023; Jesuyajolu et al., 2023). Severe SCI is particularly debilitating and associated with negative consequences for affected individuals. Major consequences of SCI include long-term disability and loss of independence which have significant implications for the physical, psychological, economic, and social wellbeing (Budd et al., 2022; World Health Organization, 2024). In essence, SCI severely disrupts the lives of affected persons and the family pushing them into socio-economic hardships due to income loss, associated comorbidities, its chronicity, and increased healthcare needs (Oña et al., 2021; Oyediran et al., 2022).

Over the years, the global occurrence of SCI has increased drastically, with over 15 million living with the condition (World Health Organization, 2024). According to the 2019 Global Burden of Disease Study, an estimated 9 million cases of SCI occurred worldwide in 2019 alone, representing a 52.7% increase from 1990 records (Liu et al., 2023). This exponential increase in SCI cases is a public health concern, considering the extensive implications for individuals, healthcare systems, and societies globally (World Health Organization, 2024).

However, the incidence of SCI and its surveillance are unequal across countries and socio-demographic strata. Specifically, Africa is disproportionately burdened by SCI, evidence, however, suggests that the region is acutely understudied (Jesuyajolu et al., 2023; Lu et al., 2024; Oña et al., 2021). Most available studies report facility-level statistics rather than data derived from comprehensive, country-level investigation that can accurately reflect the actual epidemiology of SCI in the region (Jesuyajolu et al., 2023; Lu et al., 2024; Obalum et al., 2009; Oña et al., 2021). Similarly, the incidence of traumatic SCI (TSCI) is comparatively higher in developing than developed countries as global epidemiological studies have consistently shown (Lu et al., 2024). A recent systematic review reported TSCI incidence rates of 30.17 per million in developing versus 16.40 per million in developed regions (Lu et al., 2024).

These differences are closely associated with structural challenges that characterise most LMICs, such as ineffective injury prevention, poor safety regulations, inadequate trauma care, and weak public health infrastructure (Lu et al., 2024). Alongside influencing SCI incidence, these structural disparities also determine healthcare-seeking behaviour among people affected by SCI. Previous research have identified various determinants of healthcare-seeking behavior, such as socioeconomic status, accessibility of healthcare services, cultural beliefs and personal experience (Fasasi et al., 2020; Ikhioya & Akerele, 2021; Latunji & Akinyemi, 2018; Olasehinde, 2018).

Care-seeking for SCI can also be understood through established sociological frameworks. The Health Belief Model (HBM) highlights how perceptions of severity, benefits, and barriers influence decisions to seek biomedical or alternative care (Rosenstock, 1974). Andersen's Behavioral Model emphasizes predisposing factors, enabling resources, and perceived need, reflecting how family and financial conditions shape utilization (Andersen, 1995). Kleinman's Explanatory Model situates these choices within professional (biomedical), folk (traditional), and popular (family) care systems (Kleinman, 1980). Similarly, the theory of Social Networks underscores the influence of kin, friends, and spiritual advisors (Valente, 2010), while Medical Pluralism explains the coexistence and simultaneous use of biomedical, traditional, and spiritual systems (Baer, 2022). These frameworks provide a useful lens for examining the sociocultural dynamics of SCI care in Nigeria.

Current literature on SCI in Nigeria have extensively documented and prioritized the clinical

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and functional aspects of SCI management, focusing primarily on rehabilitation, medical treatments and clinical outcomes (Ihegihu et al., 2014; Obalum et al., 2009; Oyediran et al., 2022; Yongu et al., 2016). Some behavioural studies investigated life satisfaction (Malomo et al., 2020), and health-related quality of life (Ekechukwu et al., 2017; Obalum et al., 2009). These studies have consistently reported poor quality of life, low life satisfaction, and high morbidity and mortality (Ekechukwu et al., 2017; Malomo et al., 2020; Nasidi et al., 2019, 2019; Obalum et al., 2009).

Despite the significant burden of SCI in Nigeria, there are gaps in research regarding healthcare-seeking behaviour for SCI. Published works that investigated healthcare-seeking behaviour in Nigeria focused on issues like sexual and reproductive (Envuladu et al., 2022), maternal and child illnesses (Adamu & Ango, 2024; Fasasi et al., 2020), and mental disorders (Kukoyi et al., 2022; Nonye & Oseloka, 2009); this is because many sampled healthy populations (Envuladu et al., 2022; Fasasi et al., 2020; Latunji & Akinyemi, 2018; Mohammed et al., 2023; Olasehinde, 2018). Moreover, literature search on major electronic databases such as Google Scholar and PubMed did not produce relevant studies.

Therefore, available evidence on the topic is insufficient to provide adequate understanding of the healthcare-seeking experiences among SCI patients managed at Ibadan. This study intends to address this gap by exploring the sociological dimensions of SCI care seeking to provide a more holistic understanding of patient care needs. Bridging this knowledge gap will provide valuable insights into the unique challenges faced by SCI patients and identify strategies to resolve them. To achieve this, the following question was raised: how do SCI patients navigate the care landscape and what socio-cultural factors influence their experiences? This study is significant because understanding healthcare-seeking behavior in SCI population is crucial for developing effective interventions, improving their quality of life and ensuring comprehensive support systems for improving patient outcomes.

Study objective

The primary objective of this study is to investigate the sociological aspects of care navigation among SCI patients and to identify key factors that impact their care experiences.

Methods

Study aim, design and setting

This study adopted a cross-sectional, hospital-based retrospective design. Both quantitative and qualitative data collection techniques were combined using convergent parallel approach (Creswell & Clark, 2017) to comprehensively explore the care experiences and challenges with healthcare seeking among persons affected by SCI patients and their caregivers. The research was conducted at the University College Hospital (UCH), Ibadan, a major referral centre for SCI care in Nigeria (Malomo et al., 2020). Its selection was purposive, ensuring access to a diverse population of SCI patients and family caregivers.

Study participants

The study population comprised three key groups: persons living with SCI, informal caregivers of PLWSCI, and traditional healers involved in SCI care. These groups were selected to capture the diverse perspectives and experiences relevant to SCI management and care within the Nigerian context.

Sampling and data collection methods

Quantitative sampling: Available information on the epidemiology of SCI in Nigeria is hospital-specific which is why the total sampling method, a variant of purposive sampling technique was used in the study to select all the eligible respondents (informal caregivers) at the study site. The investigator relied on the hospital record made available by the Neurological Surgery Division. However, only one hundred and eight (108) informal caregivers of SCI patients who had been discharged into the community and who went to UCH, Ibadan, for care between February 2018 and February 2019 were purposively sampled.

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Selection of interview participants: For the qualitative aspect, SCI patients and their significant others were purposively recruited through the Neurosurgery Division of UCH, Ibadan. Their selection of occurred in two stages.

a. First, the hospital record was obtained from the Neurosurgery Division of UCH. This involved extracting the contact details of caregivers and patients with traumatic SCI who were admitted and had been discharged. The patients and caregivers selected were those actively utilizing the services of the hospital.

b. Second, every other patient and caregiver on the list who fits the inclusion criteria were contacted via their mobile phone. They were appropriately informed about the study and their consent obtained. However, in a situation whereby a patient or caregiver declined to participate in the study, the next eligible person on the list was contacted. After giving their consent, the preferred time and venue for the interview were scheduled.

Thirty (30) participants (15 SCI patients; 15 informal caregivers) were enlisted for the in-depth interviews. Caregivers who had been administered the survey instrument were not eligible for participation in the qualitative phase of the study.

In addition, six traditional healthcare practitioners who had experience in the treatment of persons with SCI and who were recommended to the researcher by their clients or community members were approached and invited for participation in the study.

Quantitative method: Quantitative data was collected through semi-structured questionnaire to capture demographic information, experiences with SCI, and the care-seeking pathways of the caregivers.

Qualitative method: 30 in-depth interviews (IDIs) were conducted with SCI patients (15) and their caregivers (15) to explore their subjective experiences, especially care navigation. Additionally, 6 key informant interviews (KIIs) were held with alternative healers to gather insights into the broader care landscape for SCI. All participants for the qualitative study were selected purposively to ensure inclusion of individuals with rich and relevant experiences in SCI care and management. All interviews were conducted by the researcher at the convenience of participants (at home or clinic). Interviews concluded at the point of data saturation, when no new insights were provided by the participants.

Inclusion and exclusion criteria

Participants were enrolled if they met specific inclusion criteria tailored to their roles. Patients were required to have a clinical diagnosis of traumatic SCI with impairment graded as Frankel/ASIA A, B, or C. They must have been admitted for acute SCI care regardless of the duration of hospitalization, should be adults aged 18 or older, and have transitioned to community-based outpatient status at the time of the interview. Patients with concurrent head injuries or those unable to communicate verbally were excluded.

Informal caregivers eligible for participation were blood relatives living with SCI patient and aged 18 or older. Traditional healers qualified if they had experience with SCI care, were recommended to the researcher and practiced in predominantly Yoruba communities, including Ibadan. Importantly, all participants, regardless of category, were required to provide informed consent before involvement in the research. These criteria helped to ensure scientific rigor.

Data collection tools

Quantitative instrument: The quantitative data were collected using a researcher-developed semi-structured questionnaire informed by literature and study focus. Face validity was ascertained by sociologists and neurosurgeons for clarity and relevance. Content validity was also tested through translation from English to Yoruba Language. Section one (16 items) covered socio-demographics and SCI-related variables such as age, gender, education, and time since injury. The second section (16 items) examined issues related to the patterns of healthcare-seeking for SCI. This section combined both structured (4 items) and unstructured questions (12 items) developed based

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on findings from previous studies on healthcare-seeking behavior. A pre-test was conducted with 25 caregivers of patients with less severe SCI (Frankel D and E). The instrument's reliability was then assessed using Cronbach's Alpha in Statistical Package for the Social Sciences (SPSS v20.0). Finally, the analysis produced a coefficient of 0.882, indicating strong internal consistency and confirming instrument's reliability.

Qualitative instrument: Semi-structured interview guides tailored to each participant group were employed, allowing flexibility to probe emergent themes during interviews. Research instruments were validated by medical sociology experts and pretested on a subset of the target population. Feedback informed adjustments to improve clarity and appropriateness, strengthening data quality

Data management and analysis

The quantitative data were analysed using descriptive and inferential statistics. Before analysis, the pre-coded instruments were checked for missing data and labelled serially to facilitate accurate data entry. After that, the dataset was entered into the SPSS (v20.0), cleaned, and checked for errors or inconsistencies. Univariate analysis was conducted to provide descriptive statistics. Bivariate analysis examined relationships between relevant variables, adopting a 5% significance level and a 95% confidence interval. Due to the small sample size, multivariate analysis was not feasible.

Qualitative data analysis was conducted using NVIVO (v8.0) software to convert interview transcripts into meaningful research findings. This involved verbatim transcription of recorded interviews. Interview notes were used to fill gaps in the transcripts, followed by translation and back-translation where necessary. Participants were also contacted for clarification to resolve any ambiguities. Transcripts were then organized by interview questions, participant attributes, and interview dates. Thematic content analysis involved repeated reading to develop familiarity and contextual understanding of participants' experiences within their cultural setting (Braun & Clarke, 2014, 2019). Following that, open coding was applied by assigning descriptive abbreviations to segments of data, facilitating the grouping of similar codes into themes. These themes were then content-analyzed and contextually interpreted. The qualitative findings are presented through direct verbatim quotations to enrich understanding.

Ethical considerations

Ethical approval was granted by the University of Ibadan and UCH Ethics Committee and the approval number: UI/EC/17/0406 was issued. In addition, permission was sought from the office of the Chairman, Medical Advisory Committee (CMAC) and the Department of Clinical Nursing at UCH, Ibadan. All ethical guidelines applicable to research involving human subjects were complied with.

Results

Descriptive statistics

Socio-demographic characteristics are presented in Table 1. Majority of the informal caregivers were female (65.7%), with a mean age of 39.5. A significant proportion of them was married (63.9%) and had attained secondary education (38.9%). The predominant ethnic group was Yoruba (75.9%), and the majority identified as Christians (75.9%). (Table 1).

Figure 1 shows the relationship between caregivers and SCI patients. Results revealed diversity, with spouses (25.9%) and siblings (25%) being the most common, followed by parents (19.4%) and children (13.9%). (Figure 1).

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Table 1. Socio-demographic characteristics of informal caregivers

Variables	Frequency (N-108)	%
Gender		
Male	28	25.9
Female	80	74.1
Age		
18 - 19yrs	1	0.9
20 - 29yrs	11	10.2
30 - 39yrs	14	13.0
40 - 49yrs	39	36.1
50 - 59yrs	29	26.9
60 - 69 yrs	12	11.1
70+ yrs	2	1.8
	Mean-46.1 ± 11.7 Mode-45	
Ethnicity		
Hausa/Fulani	5	4.6
Igbo	9	8.3
Yoruba	87	80.6
Others	7	6.5
Level of education		
Primary school completed	24	22.2
Secondary school completed	47	43.5
Tertiary (Polytechnic/university completed	32	29.6
Postgraduate degree completed	3	2.8
Others	2	1.9
Marital status		
Never married (Single)	15	13.9
Married, not living with a spouse	2	1.9
Married, living with a spouse	77	71.3
Widowed	12	11.1
Divorced	1	0.9
Separated	1	0.9
Religion		
Christianity	67	62.0
Islam	41	38.0
Main occupation		
Artisan	16	14.8
Civil service employee	16	14.8
Farming	5	4.6
Trading	41	38.0
Teaching	6	5.6
Schooling	6	5.6
Clergyman	2	1.9
Unemployed	7	6.5
Retired	3	2.8
Others	6	5.6
Monthly income		
Below ₦15,000	5	4.6
₦15,000 – ₦34,999	30	27.8
₦35,000 – ₦54,999	17	15.7
₦55,000 – ₦74,999	11	10.2
₦75,000 – ₦94,999	6	5.6
₦95,000 – ₦114,999	2	1.9
₦115,000 and above	1	0.9
Varies	25	23.1
None	11	10.1

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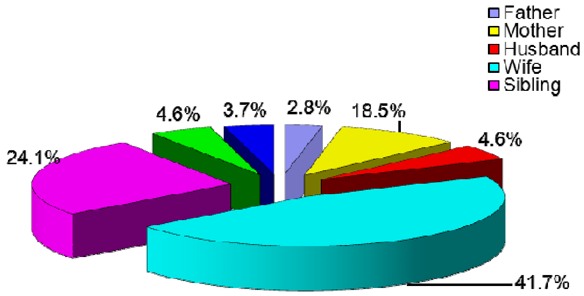

Figure 1. Pie chart showing the relationship of the respondents with the patients

Biomedical care: The main port of call

Table 2 shows the first facility visited and the time of presentation at UCH, Ibadan. About 9 in every 10 caregivers (89.8%) revealed that the patient was first taken to a biomedical facility following the trauma. The majority received medical care in other healthcare facilities before going to UCH, Ibadan, for further care. Other facilities mentioned include primary healthcare facilities, general hospitals, private hospitals and Federal medical centers. Other caregivers (10.2%) did not mention the first place visited. (Table 2).

Table 2. First facility visited and time of presentation at UCH, Ibadan (N=108)

First facility visited	
UCH, Ibadan	17 (15.7%)
Other health facilities	80 (74.1%)
Not indicated	11 (10.2%)
Time of presentation at UCH, Ibadan	
Same day	25 (23.1%)
1-6 days	44 (40.7%)
7- 13 days	22 (20.4%)
1-3 months	7 (6.4%)
4-6 months	3 (2.8%)
7 months and above	3 (2.8%)
No idea	4 (3.7%)

The choice of biomedical options for SCI care was attributed to different factors such as injury's severity. Traumatic SCI being sudden, with physical signs of disability, influenced the perceived severity of the condition and choice of treatment. As shown in Figure 2, majority of family caregivers (n=89; 82%) indicated that road traffic related causes, including motor vehicle and motorbike accidents, were responsible for the SCI. Also reported are the fall from height (n=9; 8.3%) and fall of heavy object on head (n=4; 3.7%). Cases that resulted from fall with a heavy object on the head, lifting heavy object, and assault were the least common (n=2; 1.9%). (Figure 2).

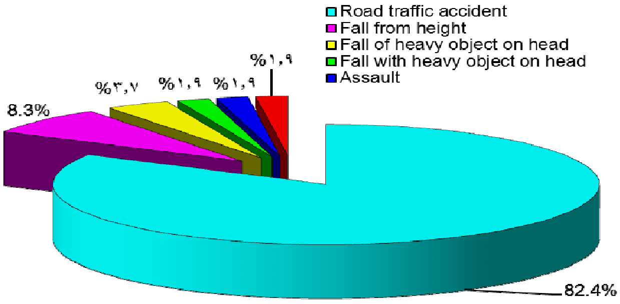

Figure 2. Causes of spinal cord injury

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Considering that the events leading to SCI were traumatic, the opportunity to deliberate on the preferred place of care may not arise. Patients, their family, and friends may not express their preference regarding the preferred place of care.

During their therapeutic adventures, multiple concurrent care-seeking was reported as other alternative care options were combined with biomedical interventions. Table 3 reveals that the proportion of participants who engaged in multiple care-seeking gradually increased over the course of the injury. However, only 1/4 of the caregivers (25.9%) revealed that they had utilized the services of the bone setters at any point during the care of their relation. Five of the participants revealed that the patient had visited other countries for further medical care. Two countries were reported as their destinations, the United States of America (USA) and India. Furthermore, three caregivers indicated that the patient travelled to India while 2 mentioned the USA was visited for further care. The chi-square analysis shows a very strong statistically significant association (P-value: <0.001) between patronage of traditional bonesetters (TBS) during hospitalization and subsequent patronage (Table 3).

Table 3. Different care services utilized for SCI

Services and time of utilization	Responses	N=108 Total expected value (108)
Traditional bonesetters		
Before hospitalization	Yes No	1 (0.9) 107 (99.1)
During hospitalization	Yes No	7 (6.5) 101 (93.5)
Post- hospitalization	Yes No	28 (25.9) 80 (74.1)
Spiritual help		
Before hospitalization	Yes No	25 (23.1) 83 (76.9)
During hospitalization	Yes No	71 (66.0) 37 (34.0)
Post- hospitalization	Yes No	77 (71.3) 31 (28.7)
Hospitals abroad	Yes No	5 (4.6) 103 (95.4)
Herbal remedies	Yes No	40 (37.0) 60 (63.0)

Table 4 further shows that the rate at which spiritual assistance was utilized to supplement biomedical care (before, during, and after hospitalization) for SCI was higher than the TBS. Prior to hospital admission, some informal caregivers (23.1%) had sought spiritual help. Many (66%) declared this was combined with orthodox medical care while the majority (n=77; 71.3%) sought it after patient's discharge into the community. Compared to TBS, the rate of spiritual healing utilization as a therapeutic choice was higher at different stages of healthcare-seeking (Table 4).

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Table 4. Chi-square analysis showing relationship between patronage of traditional bonesetters (TBS) during hospitalization and after discharge

			Visit to bonesetter after discharge		Total	X^2	P-value
			Yes	**No**			
Visit to bonesetter during admission	Yes	Count	7	0	7	21.133	<0.001
		Expected Count	1.8	5.2	7.0		
	No	Count	21	80	101		
		Expected Count	26.2	74.8	101.0		
Total		Count	28	80	108		
		Expected Count	28.0	80.0	108.0		
		% of Total	25.9%	74.1%	100.0%		

Table 5 indicates reasons for seeking alternative care for SCI. One of the reasons given for healthcare-seeking abroad was the desire to help patients get better care. Another reason was to facilitate full recovery as mentioned by 3 respondents ,and lastly, because the patient was a resident in the USA. The respondent further explained that the patient returned to USA where she was further cared for. (Table 5).

Table 5. Reasons for seeking alternative care for SCI

Reasons for utilizing spiritual care	**N= 65**
Belief in God's healing power and physical restoration	28 (43.1%)
Reliance on religious practices	24 (37.3%)
Exploring all available therapeutic options	2 (3.1%)
Belief that the injury was caused by a spiritual attack	1 (1.5%)
Reasons for utilizing TBS	
To hasten patient’s recovery	13 (56.5%)
Reassurance from significant others	3 (13.0%)
Belief in efficacy of therapy	3 (13.0%)
Financial constraints	2 (8.7%)
Last resort after orthodox care failed	1 (4.3%)
Exploring all available options	1 (4.3%)

Role of kith and kin in navigating care

Figure 3 highlights major sources of information regarding the therapeutic options and referral to alternative care. Notable are the social groups (friends and neighbours) and family (extended and nuclear). The most named source of information was the immediate family (48.1%), followed by friends (33.3%), the extended family network (11.1%) and lastly the neighbors (7.4%) (Figure 3).

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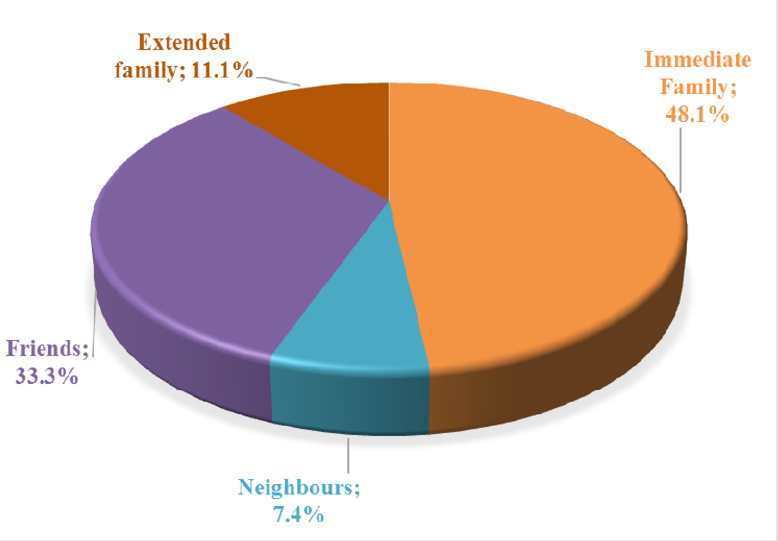

Figure 3. Main sources of referral to alternative healthcare sources

Determinants of alternative choice of care for SCI

Chi-square analysis shows no significant statistical association (p> 0.05) between caregivers' socio-demographic characteristics and utilization of TBS for the management of SCI after hospital discharge. Likewise, the chi-square analysis reveals that the relationship between caregivers and the patient causes of injury, and the time since patient sustained SCI did not have any statistically significant association with the utilization of TBS post-discharge. Similarly, no aspect of the sociodemographic variables was significantly related to the utilization of spiritual healing during and post-hospitalization (p> 0.05) following the chi-square analysis.

Findings from interviews

The authors identified four major themes from the interviews:

- Pathway to care,
- Multiple concurrent care-seeking,
- Influence of social networks on decision-making,
- Perception of alternative care for SCI.

These themes show that healthcare-seeking for SCI is multidimensional (as it combines biomedical, traditional, and spiritual pathways), and shaped by structural gaps in the health system, social and religious networks.

Pathway to care

Similar to survey responses, interviewees confirmed that informal caregivers played negligible roles in determining first place of care. In most cases, trauma victims were assisted to the hospital by first responders who are usually other road users or Emergency Rescue Workers.

The incident occurred at Alapako and we were rescued by the Federal Road Safety Corp. They took us to a hospital in Shagamu, Ogun State. (IDI 03/ 27 years /Single Male/Paraplegic)

Proximity of health facilities and availability of experienced personnel were other factors cited. Moreover, effective SCI management requires the expertise of neurosurgeons who are not usually in the pool of staff in many Nigerian hospitals, hence the referral from other facilities to UCH, Ibadan.

As soon as it happened, they first took me to one private hospital and when we got there, he (the doctor) said he could not do anything that they should take me to UCH, then the doctor gave us a letter to take to UCH. (IDI 30/Patient/26 years/ Yoruba/ Single Male/Quadriplegic)

Multiple concurrent care seeking

Findings from both survey and interviews confirmed multiple concurrent care seeking. The TBS interviewed confirmed that they usually treat SCI cases and could manage patients while on

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admission in the hospital if necessary. A TBS described his diagnosis procedure and how the prognosis and fate of each case are determined.

Yes, at times, when they (patients) are on admission they may consult me, and I will go to the hospital to examine the patient. What I also do is ask them to demand the patent's discharge if the prospect is good. But before discharge, I do not have to touch the patient before knowing what the chances of recovery are. I will just look at the patient and look for certain signs, I know what to look out for. If I can handle it I will start the treatment either in the patient's house or in my place. (KII 18/Male/Hausa/Bone Setter)

One of the patients indicated that following his discharge from the hospital, different options offered were deliberated before the family finally settled for alternative care:

After getting home people gave me different advice based on their knowledge of traditional medicine. (IDI 13/Patient/40 years/Widowed Male/ Paraplegic)

Influence of social networks in decision-making

Unlike survey respondents, interviewees who sought the faith-based options relied mostly on their spiritual advisers while some visited any popular religious center they knew. Only a few followed the advice of their friends before making the decision.

Perception of alternative care for SCI

Interviewing participants had mixed perceptions of traditional and spiritual healing approaches for managing SCI. Overall, the limited efficacy of traditional care was reported and most participants found it ineffective, describing it as a waste of time and resources. A patient shared how traditional healers exploited him financially without delivering results. He experienced adverse effects, such as stomach swelling, from herbal concoctions and discontinued their use:

Since I returned home, different people have been coming to deceive me, they would collect my money. They gave me all sorts of things and since there has been no improvement I just decided to stop patronizing all of the fake traditional healers. I now put my trust in God my creator. (IDI 08/Patient/45 years/Yoruba/Married Male/ Paraplegic)

Only two patients and one informal caregiver reported finding traditional medicine effective for managing SCI. An informal caregiver reported significant improvements in her husband's condition through traditional bone setting (e.g., increased mobility and sensation). However, the patient remained paraplegic, and the family sought further medical care despite perceived improvements.

before, he was always on neck collar… he would not sleep through the night... But… we sourced for fund…and took him to Niger State and that was where the neck became stable…We did not spend up to a month there…They massaged his body with hot water, they made scarification on his body... they said it would make the muscles come alive gradually. Presently, he can lift his hands; it is only the fingers that are yet to become sensitive. If you pinch him on the stomach now, he can sense/feel it. Before now he could not feel anything. Then at times he would be sitting down, and the leg will start moving, it will fold and stretch as if someone is moving it…now from the neck down to the waist he can lift it up by himself... (IDI 45/Relation/Yoruba/Wife to Patient)

One traditional healer admitted that no known traditional therapy could fully heal a complete SCI, whereas the bonesetters claimed expertise but did not guarantee full recovery.

Similarly, those who utilized spiritual care indicated that it provided them with significant emotional and psychological support. This option served as a coping mechanism. Many noted that spiritual healing, particularly prayer, helped patients cope well with SCI. However, participants hoped for miraculous recovery but did not experience this as imagined. A young female patient expressed frustration over slow progress made in her recovery, yet she maintained faith in God for eventual healing.

It is just that at this stage the improvement is dragging I do not know unlike the first 2 years after the accident. I still trust God that he is still God, and

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he will always be God. I am still trusting God that he can still take it away. (IDI 04/Patient/27 years/Yoruba/Single Female/Paraplegic)

Others shared similar beliefs, emphasizing hope and reliance on spiritual practices to manage their condition.

Discussion

This study identified the complex sociocultural factors shaping the care landscape for SCI in Nigeria, providing critical sociological insights into the healthcare-seeking behaviors of affected individuals and their families. Contrary to the prevailing notion that traditional or alternative medicine is the primary recourse in many African settings (Aminu & Jegede, 2015), the findings reveal that most participants initially accessed orthodox healthcare facilities, ranging from private clinics and primary health centres to general hospitals and tertiary institutions. This challenges previous studies that reported traditional bonesetters and spiritual healers as the first point of care for SCI patients in Nigeria (Ihegihu et al., 2014; Yongu et al., 2016).

In this study, preference for biomedical was observed among participants. This pattern is consistent with findings from a Ghanaian study where a high proportion (94.6%) of trauma patients preferred orthodox medical care (Baffour-Awuah et al., 2018). The preference for biomedical care observed in the current study may be inspired by factors such as the proximity, referral, and reputation of tertiary facilities like the UCH, Ibadan, as well as the urgency associated with spinal trauma. Participants reported being referred from various regions across the country to UCH, Ibadan, suggesting critical systemic gaps in neurosurgical expertise and care at lower-tier facilities in developing countries (Anand et al., 2024; Ukachukwu et al., 2022; Weiss et al., 2019).

Although orthodox care predominates the initial phase of SCI care, traditional and spiritual healing practices were equally entrenched in the therapeutic trajectories of many participants. For instance, many informal caregivers reported engaging traditional bonesetters after hospital discharge as well as concurrently during hospitalisation. This confirms their consistent belief in the efficacy of this traditional care. For many, combining traditional and biomedical treatments was not contradictory, but rather a pragmatic attempt to maximize healing. Similar healthcare-seeking behaviour have been documented among different population groups across Africa (Fasasi et al., 2020; Olasehinde, 2018).

This experience is common among Africans because people hold a firm belief in traditional and alternative care medicine. They believe in its efficacy and in the supernatural healing power of the healers (Aminu & Jegede, 2015, 2017; James et al., 2018). In traditional medicine, there is no illness believed to exist without a cure (Aminu & Jegede, 2015). Consequently, due to limited biomedical understanding of SCI and its prognosis, accepting a diagnosis of permanent impairment is often emotionally and culturally difficult. The belief that traditional bone setting might restore musculoskeletal function, especially following traumatic accidents, motivates families to seek care from traditional providers. This has been reported in previous studies (Mbada et al., 2020). In the current study, responses from some participants suggested a deliberate attempt to obscure prior use of alternative healing homes, perhaps due to social desirability bias or perceived judgment from health professionals.

Social networks and community affiliations significantly shaped these healthcare choices. Lay referral involving friends, neighbours, or extended family recommending therapies or healers played a critical role in determining therapeutic pathways. Participants frequently cited their social group as the main source of information about both traditional healers and spiritual centres. This shows the importance of socio-cultural contexts and informal knowledge systems in shaping healthcare-seeking behavior. Other scholars have identified social networks as crucial in decision-making and healthcare choices (Bernhörster & and Reifegerste, 2025; Budu et al., 2020).

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Medical pluralism also extended to spiritual healing. A substantial proportion of participants utilized prayer and spiritual rituals alongside biomedical care. This supports findings of other studies regarding medical pluralism (Chowdhuri et al., 2022; Okyere Asante et al., 2023). While few reported dramatic improvements, many viewed spiritual practices as a source of emotional strength and divine hope. The use of spiritual healing was particularly prominent during periods of crisis, such as acute hospitalisation, and continued into long-term recovery. This highlights the coping role of spirituality for both patients and caregivers in chronic health conditions like SCI.

Medical tourism emerged as another dimension of healthcare-seeking, especially among middle- and upper-class families. Some participants reported seeking care in countries such as India and the United States. The growing trend of international travel for health services reflects both dissatisfaction with local healthcare infrastructure and the perception that better care is available abroad at relatively lower costs. This is particularly common in countries like India that have positioned themselves as choice destinations for affordable specialty care (Chowdhuri et al., 2022).

Conclusions

This study reveals a complex and layered pattern of healthcare-seeking behavior among families affected by spinal cord injury in Nigeria. While orthodox medical care remains the dominant and preferred initial response, traditional and spiritual healing systems continue to play significant roles throughout the recovery process. These findings underscore the urgent need for health system reforms that go beyond addressing infrastructural and professional capacity gaps to include the socio-cultural dimensions that influence therapeutic decisions. A culturally sensitive approach that embraces medical pluralism and promotes evidence-based care remains essential. This should involve targeted health education to improve literacy on SCI, the integration of community-based rehabilitation services, and constructive engagement with informal healthcare providers to safeguard patient safety and ensure continuity of care. Such an inclusive model holds promise for enhancing recovery outcomes and supporting the long-term well-being of individuals living with SCI in Nigeria.

Notwithstanding the strength of the study, some limitations are worth mentioning. A major limitation of the study is the small sample size which was selected from a single tertiary facility (University College Hospital, Ibadan), thus limiting the generalizability of findings to other regions or healthcare settings in Nigeria. The small sample size made multivariate analysis impossible, further limiting exploration of complex variable interactions. There is the possibility of recall bias by the participants which could affect the accuracy of reported care pathway utilized especially the alternative care used. Therefore, future studies should consider the highlighted limitations in their research design.

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Conflict of interest

The author declared no conflict of interest.

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Ethical considerations

The University of Ibadan and UCH Ethics Committee granted approval for the study (UI/EC/17/0406). All participants gave informed consent before the interviews and all ethical principles were followed in the study.

Code of ethics

(UI/EC/17/0406)

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Authors' contributions

AK conceptualized the study, collected, analyzed and interpreted data. AK drafted and reviewed the manuscript.

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