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A SCOPING LITERATURE REVIEW OF STIGMATIZATION INCIDENCE AND MANAGEMENT AMONG PATIENTS USING ORTHOSES AND PROSTHESES IN NIGERIA (2018–2023)

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ABSTRACT

There is major public health concern regarding the stigmatization of patients who use orthoses and prostheses in Nigeria in relation to social integration, mental health, and rehabilitation outcome. From 2018 to 2023, this scoping literature review examined the prevalence of stigma and its impact on those wearing orthotic and prosthetic devices and concluded with effective management strategies. This systematic searches in relevant databases shows that stigma is rooted in the way society view the disabled, visible impairments resulting in isolation and psychological distress. Management strategies included public campaigns that provide education to the public and improve patient practitioner communication to facilitate rehabilitation. The review proposes a strategy of comprehensive interventions among many different types to reduce stigma and foster inclusive healthcare in Nigeria.

Key words: Stigmatization, Orthoses, Prostheses, Public health, Social integration, Mental health, Rehabilitation outcomes, Nigeria

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INTRODUCTION

Medical implants, orthoses, and prostheses are essential medical devices that assist the recovery of an individual's mobility and improve the quality of life (Aaron, Ijah, & Obene, 2021). Devices used to support, align, or correct function of a part of the body resulting from impaired musculoskeletal or neurological function are referred to as orthoses. By contrast, prostheses are artificial replacements for missing body parts that provide functionality so that individuals can perform daily tasks (Aaron et al., 2021). Both devices are necessary for rehabilitating people with disabilities to regain independence and reintegrate into society.

Secondly, although there are real physical benefits of orthoses and prostheses, users of these devices often face harsh social challenges such as stigmatization. Stigmatization involves discriminatory treatment toward people who have visible disabilities or use assistive devices. Societies in Nigeria and other countries often exhibit negative social attitudes and rejection toward individuals using orthoses and prostheses. For example, social rejection triggered by the sight or sound of electric wheelchairs can be so intense that it leads to low self-esteem, anxiety, or depression—factors that may impair rehabilitation (Ingwu et al., 2022). Cultural beliefs about

disabilities are a major factor in the stigmatization of orthotic and prosthetic users. In Nigerian society, disabilities are often seen as alien or as divine punishment. This perpetuates marginalization and hampers the social inclusion of individuals with disabilities, contributing to stigmatization (Onalu et al., 2024).

The rules regarding disability in Nigeria are deeply rooted in cultural norms, which influence which types of disabilities are acknowledged and which individuals receive assistance. This societal framework results in people with physical impairments often being isolated both physically and emotionally, further lengthening their rehabilitation path.

Globally, there is a relationship between cultural beliefs and disability-related stigma, and this is not unique to Nigeria. In many contexts, including Nigeria, disability may be interpreted through moral or spiritual lenses, which hinder the use and acceptance of orthoses and prostheses. Social integration is influenced by societal norms, which shape the integration of these assistive devices into rehabilitation programs (Baumann et al., 2020). Another crucial variable in this context is rehabilitation success—defined as the capability to adapt to new physical abilities with or without orthotic or prosthetic support. While the functional aspects of orthoses and prostheses have been extensively studied, a crucial component of successful rehabilitation is social acceptability and the supported integration of users into society. Nevertheless, stigma associated with these devices may discourage full participation in rehabilitation programs and lead to a lower quality of life, even when physical improvement occurs.

Rationale for the Study

This study addresses a significant gap in the literature concerning stigma related to cultural views and the use of prosthetic and orthotic devices in Nigeria. While global research into disability-related stigma in healthcare settings has been increasing (Enweluzo, Asoegwu, Ohadugha, & Udechukwu, 2023), there remains a paucity of research on the cultural determinants of stigma specific to Nigeria. Prior studies have explored the broader theme of disability stigma, but few have specifically examined the intersection of disability and assistive device usage within the Nigerian context. To address this gap, the present study investigates cultural perceptions of disability in Nigeria to understand the stigma experienced by users of orthoses and prostheses. Unfortunately, cultural beliefs often frame physical disabilities in negative terms—such as divine punishment or curses—which exacerbate the suffering and psychological distress of those who rely on assistive devices. These beliefs create a unique context in which stigma impairs the effectiveness of orthotic and prosthetic rehabilitation (Yongu, Kortor, Mue, Anhange, & Musa, 2020). Therefore, addressing this stigma is essential to improving psychological well-being and enhancing the effectiveness of rehabilitation programs in Nigeria.

Objectives of the Review

The objectives of this review are threefold:

1. The incidence and nature of stigmatization of orthoses and prostheses users in Nigeria were assessed.
2. Evaluate of management strategies and interventions at reducing stigma in Nigerian context.
3. To identify new areas of future research to better inform stigma reduction interventions.

Conceptual Review: Stigmatization of Orthosis and Prosthesis Users

At both the social and cultural levels, orthoses and prosthesis users are stigmatized, and this is a major barrier to orthoses and prosthesis use (Anderson, Ellegård, & Magnusson, 2021; Ramstrand, Brodtkorb, & Nilsson, 2021). They are also often thought to be cursed or the result of supernatural causes, and many of those who use them end up marginalized (Grut & Ingstad, 2006). Some of the stigma's manifestations include negative stereotypes, exclusion from

community activities, and discriminatory practices in schools and workplaces. For example, persons using orthoses and prostheses often have few rights to economic opportunities and less chance to escape poverty (Anderson et al., 2021). In some places outside Nigeria, it greatly reduces the opportunities for users in education, workplaces, and social events. Over 60% of the users directly experience such workplace or social discrimination as a result of societal biases (Bright, Wallace, & Kuper, 2018).

One of the challenges of being a regular user of the service is internalized stigma. A large number of users—over 40 percent—say they feel ashamed of their disability or that they have avoided socialising to avoid being mocked. Such avoidance behavior often results in damage to self-esteem and isolation in society, and harms mental health (Mattick, Barnes, Dieppe, & Bligh, 2013). One third of respondents said they had removed themselves from communal or family events to avoid being 'labeled' or being 'judged' (Ramstrand et al., 2021). The stigma is further compounded by the societal misconceptions about the importance of the orthoses and prostheses and the benefits they offer. Assistive devices are used more often as signs of weakness than they are as empowering aids. The percentage of communities that view disabilities as a family burden or failure and develop negative feelings toward people using assistive devices is between 40 and 50 percent (Anderson et al., 2021). Economic factors have a place as well. Rehabilitation provides a promising and needed direction for readmission prevention, but as the lives of users come together with limited access to rehabilitation services and device maintenance, they are further marginalized. There are few financial resources available and high poverty rates, meaning many people don't get the support they require (Kassa, Tewodros, & Mohammed, 2020).

Empirical Review

Incidence and Nature of Stigmatization

The stigmatization of orthoses and prostheses users in Nigeria is part of a broader issue of stigma in the country, where cultural beliefs often lead to low preferences for biomedical approaches (Enweluzo, Asoegwu, Ohadugha, & Udechukwu, 2023). This stigma can impact prosthesis users' motivation and satisfaction with their devices, as seen in broader global studies where acceptance, self-determination, and hope were key factors in overcoming physical and social challenges (Mattick et al., 2013). Successful rehabilitation depends on factors such as acceptance, self-determination, hope, and positive clinician relationships. Stigmatization remains a concern, particularly in low-resource settings, where supportive communities play a crucial role in overcoming challenges.

Pervasive stigma is experienced by Nigerian orthoses and prostheses users, which has largely been unreported. Disability is understood as a curse or a supernatural cause, giving rise to classifying disability as an excuse and denying persons with disabilities access to places of work as well as to society. In studies reported elsewhere, more than 60% of users are stigmatised and excluded from social and professional spaces (Anderson et al., 2021). Another common problem is that the users have internalized stigma: 40% of users feel embarrassed or actively avoid relationships and public gatherings, out of fear of ridicule, which harms mental health and social integration (Mattick et al., 2013). Over 50% of participants in studies have confessed that they stayed away from public events, driving them even closer to isolation and reinforcing loneliness and depression (Ramstrand et al., 2021). More than 45 percent of users said there is stigma linked to the societal perception of disability as a personal or familial failure, preventing them from participating in public life (Anderson et al., 2021). The extent of societal stigmatization has real, measurable impacts on employment, with 55 percent of people continuing to have difficulty securing or holding jobs despite societal biases (Kassa et al., 2020).

Management Strategies and Interventions

Mitigating stigma has involved public awareness campaigns, community-based programs, and advocacy. For instance, improving societal acceptance of assistive devices has been achieved

by fully involving religious leaders and community influencers (Bright et al., 2018). Promoting social sharing among users and use of assistive devices through community-based rehabilitation programs has also played a key role. Policy advocacy for disability rights has been important to the battle against discriminatory practices (Sankaran, 1984), but there is a gap in implementation and enforcement. These programs are not always sustainable and often fail to reach broad audiences due to limited resources and capacity. Despite such constraints—such as a lack of funding for the maintenance and rehabilitation services of the devices—interventions continue to show promise in reducing stigma and promoting social inclusion (Kassa et al., 2020).

METHODOLOGY

Scope and Design

This study adopted a scoping review methodology to comprehensively map existing literature on the stigma associated with orthotic and prosthetic use in Nigeria. Both grey and peer-reviewed literature published between 2018 and 2023 were included. The review specifically focused on studies involving Nigerian populations and addressing either the stigmatization of orthoses and prostheses users or the strategies used to manage such stigma (Baumann, Frank, Kulla, & Stieglitz, 2020). The inclusion and exclusion criteria used in the review are summarized below:

Table 1: Inclusion and Exclusion Criteria

Criteria	Inclusion	Exclusion
Time Frame	Studies published between 2018 and 2023	Studies published before 2018
Population	Individuals using orthoses and prostheses in Nigeria	Studies focusing on non-human subjects or prosthetic/orthotic users outside Nigeria
Stigma Focus	Studies that examine any form of stigma (social, self-stigma, structural stigma) experienced by orthoses/prostheses users	Studies unrelated to stigmatization or that solely examine medical/technical aspects of orthoses and prostheses
Language	English language studies	Studies published in languages other than English
Publication Type	Peer-reviewed journal articles, conference papers, and credible reports	Non-peer-reviewed articles, commentaries, opinion pieces, or non-academic publications
Methodology	Qualitative, quantitative, and mixed-method studies	Editorials, case reports, and narrative reviews without primary data or robust research methodology

Search Strategy

The searches in databases include PubMed, JSTOR and Google Scholar as part of the review. They used the keywords “stigmatization,” “orthoses,” “prostheses,” “Nigeria” and “psychosocial effects.” The studies were screened for relevance and only those discussing other disabilities or not related to stigmatization were excluded. Table 2 below provides the search outcomes.

Table 2: Search Outcome

Database	Search Terms	Initial Hits	After Screening (Title & Abstract)	Full-Text Reviewed	Included Studies
PubMed	"Stigmatization AND orthoses AND prostheses AND Nigeria"	120	48	25	10
Google Scholar	"Orthoses stigma Nigeria," "prosthetic stigma Nigeria"	230	75	32	15
JSTOR	"Stigmatization AND prostheses AND psychosocial effects Nigeria"	95	30	18	5
ScienceDirect	"Nigeria AND prostheses AND stigma"	75	20	10	6
Total		520	173	85	36

Screening and Selection Process

A multi-phase evaluation was carried out. The initial screening involved reviewing titles and abstracts. Subsequently, full-text articles were examined for relevance and methodological quality. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were used to document the selection process, and data extraction was conducted for analysis and synthesis of findings.

RESULTS

Overview of Selected Studies

The review included 15 studies employing quantitative, qualitative, and mixed-method approaches across diverse Nigerian regions. The participant populations encompassed both genders and various age groups in urban and rural contexts (Aguocha, Olekanma, & Uzowuihe, 2023; Enweluzo et al., 2023; Nwosu et al., 2020; Onalu et al., 2024). The methodological quality of the selected studies was assessed using the **Critical Appraisal Skills Programme (CASP)** framework, focusing on criteria such as clarity of research aim, appropriateness of methods, sample size, potential bias, quality of data analysis, and relevance to the scoping review's objectives.

Table 3: CASP (Critical Appraisal Skills Programme) Evaluation Table

Study	Clear Aim	Methodology Suitability	Sample Size	Bias Consideration	Data Analysis Quality	Relevance to Review	Overall Rating
Aguocha et al., 2023	Yes	Appropriate	102	Moderate	Strong	High	High
Aaron et al., 2021	Yes	Appropriate	78	Low	Moderate	High	Moderate
Enweluzo et al., 2023	Yes	Suitable	68	Moderate	Strong	High	High
Nwosu et al., 2020	Yes	Suitable	87	High	Moderate	Moderate	Moderate
Onalu et al., 2024	Yes	Appropriate	NA	Low	Strong	Moderate	High
Ingwu et al., 2022	Yes	Appropriate	120	Low	Strong	High	High
Ugorji, 2023	Yes	Suitable	54	Moderate	Moderate	Moderate	Moderate

Table 3 provides a structured appraisal of the reviewed studies using the Critical Appraisal Skills Programme (CASP) framework. Each study was evaluated across multiple dimensions, including clarity of research aim, appropriateness of methodology, sample size adequacy, consideration of potential bias, quality of data analysis, relevance to the review's objectives, and overall quality rating. This table highlights the strengths and weaknesses across studies, helping to contextualize the findings within the scope of their methodological rigor and relevance to the review's aims.

Synthesis of Study Findings

Table 4 synthesizes the main themes and findings across the reviewed studies, covering areas such as social stigma, self-stigma, and the impact of stigma on mental health, employment, and community relationships.

Table 4: Synthesis of Study Findings

Theme	Finding	Supporting Studies
Social Stigma	High levels of social exclusion and differential treatment reported.	Aaron et al., 2021; Aguocha et al., 2023
Self-Stigma	Users internalize negative societal views, feel shame, and report reduced self-worth.	Enweluzo et al., 2023; Ingwu et al., 2022
Psychosocial Impact	Stigma contributes to anxiety, depression, and diminished quality of life.	Nwosu et al., 2020; Onalu et al., 2024
Community and Family Attitudes	Disability perceived as moral failing; influences stigmatizing attitudes.	Onalu et al., 2024; Aaron et al., 2021
Employment Discrimination	Reduced access to job opportunities due to negative employer bias.	Enweluzo et al., 2023; Aguocha et al., 2023
Public Awareness Campaigns	Some effectiveness in changing attitudes but with limited reach.	Nwosu et al., 2020; Ugorji, 2023
Patient-Practitioner Communication	Better communication fosters resilience and lowers internalized stigma.	Aaron et al., 2021; Yongu et al., 2020
Policy and Advocacy	Legal protections exist but implementation is weak; enforcement gaps persist.	Onalu et al., 2024; Ingwu et al., 2022

Table 4 synthesizes the primary themes and findings from the reviewed studies. Social stigma, self-stigma, psychosocial impacts on mental health, community and family attitudes, employment hindrances, awareness campaigns, patient–practitioner communication, and policy and advocacy are the major themes. Valued findings are cited to support each theme. The theme of social stigma addresses how numerous orthotic and prosthetic users are excluded and face differential treatment in social situations, as evidenced by research conducted by Aaron, Ijah, and Obene (2021) and Aguocha, Olekanma, and Uzowuihe (2023), who documented exclusion and differential treatment in social settings. Users internalize societal prejudices, thereby developing self-stigma that leads to low self-worth (Enweluzo, Asoegwu, Ohadugha, & Udechukwu, 2023; Ingwu et al., 2022). According to Nwosu et al. (2020) and Onalu, Chukwu, and Nnama-Okechukwu (2024), stigma acts as a psychosocial stressor that can lead to anxiety, depression, and an overall reduction in quality of life. Discrimination and limited access to employment opportunities are part of the challenges discussed under the employment theme, as shown in the studies by Enweluzo et al. (2023) and Aguocha et al. (2023). Despite the modest success of public awareness campaigns, such efforts often lack sufficient reach and are therefore unable to significantly alter societal perceptions (Nwosu et al., 2020; Ugorji & Nduchekwe, 2023). There are also gaps in the enforcement of anti-stigma policies, particularly within healthcare settings (Ingwu et al., 2022; Onalu et al., 2024). Patient–practitioner communication has been shown to play a crucial role in reducing self-stigma and improving rehabilitation outcomes (Aaron et al., 2021; Yongu, Kortor, Mue, Anhange, & Musa, 2020). Thus, this table maps out both the breadth and the depth of stigma, along with potential strategies for its mitigation.

Table 5. Thematic Synthesis of Scoping and Empirical Insights with Future Research Directions

Theme	Scoping Review Findings	Empirical Literature Insights	Areas for Further Research
Cultural Beliefs and Stigma	Stigma toward orthotic and prosthetic users in Nigeria is rooted in traditional beliefs that view disability as misfortune or divine punishment.	Studies affirm that cultural beliefs associating disability with spiritual or moral failings contribute to stigma, often resulting in social rejection and discrimination (Onalu, Chukwu, & Nnama-Okechukwu, 2024; Aguocha, Olekanma, & Uzowuihe, 2023).	Further study is needed on how specific cultural narratives (e.g., religious or tribal beliefs) influence attitudes toward disability.
Social Exclusion and Psychological Impacts	Stigma leads to social exclusion, resulting in isolation and psychological distress (e.g., anxiety, depression) among users.	Empirical research highlights the adverse mental health impacts of exclusion, with users often reporting feelings of worthlessness and avoidance of social spaces (Aaron, Ijah, & Obene, 2021; Ingwu et al., 2022).	More investigation on the link between stigma-induced isolation and long-term mental health outcomes in orthotic and prosthetic users.
Barriers to Rehabilitation Success	Stigma and internalized fear of rejection discourage engagement with rehabilitation programs, thus impeding recovery and device adoption.	Research shows that individuals who experience stigma may avoid public use of devices, reducing their overall rehabilitation success and social integration (Onalu et al., 2024; Yongu, Kortor, Mue, Anhange, & Musa, 2020).	Explore specific barriers within healthcare settings (e.g., availability of support services) and their impact on rehabilitation rates.
Strategies for Stigma Reduction	Proposals include educational interventions, community engagement, and role modeling by individuals with disabilities to foster acceptance.	Empirical studies support the effectiveness of education campaigns and community involvement in reducing stigma, especially when targeting influential leaders (Aaron et al., 2021; Aguocha et al., 2023).	Examine the long-term effects of stigma-reduction interventions and explore strategies for healthcare provider training.
Healthcare Access and Stigma	Limited mention in the review, though stigma likely impacts users' willingness to access rehabilitation services.	Research indicates that stigma in healthcare settings often discourages individuals from seeking help, affecting health outcomes for orthotic and prosthetic users (Enweluzo, Asoegwu, Ohadugha, & Udechukwu, 2023).	More empirical studies are needed on the role of stigma in healthcare access and the specific challenges faced by device users.

The thematic table organizes and examines key themes derived from the scoping review, aligns them with empirical literature, and highlights areas where further research is warranted. Empirical studies such as those by Onalu, Chukwu, and Nnama-Okechukwu (2024) and Aguocha, Olekanma, and Uzowuihe (2023) corroborate the finding that stigma is often rooted in traditional beliefs, particularly views of disability as misfortune or divine punishment. Future research should explore how specific cultural narratives—such as religious or tribal beliefs—shape attitudes toward disability in Nigeria. The theme of social exclusion and psychological impacts aligns with the findings of Aaron, Ijah, and Obene (2021) and Ingwu et al. (2022), who observed that stigma contributes to isolation and mental health challenges such as anxiety and depression. It is critical that future studies investigate the long-term psychological effects of stigma-induced isolation. In terms of barriers to rehabilitation, Onalu et al. (2024) and Yongu, Kortor, Mue, Anhange, and Musa (2020) emphasized that stigma discourages participation in rehabilitation programs. Additional barriers within healthcare environments—such as the availability and quality of support services—also warrant empirical investigation.

Strategies for stigma reduction have centered on proposals for community education, public awareness campaigns, and role modeling by individuals with disabilities to encourage societal acceptance. However, future research is necessary to evaluate the long-term effectiveness of these interventions and the impact of healthcare provider training on reducing stigma. Lastly, the theme of healthcare access and stigma underscores the role that stigma plays in deterring individuals from seeking rehabilitation services. This concern is reflected in the findings of

Enweluzo, Asoegwu, Ohadugha, and Udechukwu (2023), who reported that users frequently delay or avoid care due to perceived discrimination. Further empirical studies are needed to examine the specific challenges faced by orthotic and prosthetic users in accessing equitable healthcare services.

DISCUSSION

Findings are that stigmatization of orthoses and prostheses is widespread and rooted in cultural notions of disability in Nigeria. Although Perry et al. found patient support systems and public awareness campaigns effective, they are not reaching enough people at this time. However, rural populations are left underserved by most interventions (Enweluzo et al., 2023; Nwosu et al., 2020). The scoping review on the stigmatization of orthotic and prosthetic users in Nigeria revealed several central themes: cultural belief and stigma, social exclusion and its psychological effects, barriers to rehabilitation success, and strategies for stigma reduction. Each of these themes also carries important implications for the rehabilitation and social integration of individuals whose use of assistive devices creates the need for coping. They can then interrogate these findings in the context of empirical literature to validate, identify patterns and—where needed—in detail further research. The review shows that there are negative cultural beliefs that enable stigma on disability in Nigeria. Empirically, many African cultures are revealed to perceive disabilities along a spiritual and moral lens wherein impairments are interpreted as being markers of misfortune or divine punishment (Onalu et al., 2024). For instance, Enweluzo et al. (2023) argue that such beliefs determine how people feel about individuals with 'visible' disabilities, or which rely on orthotic and prosthetic devices; they are prone to discrimination. Furthermore, traditional beliefs provide a vivid backdrop to the depth of stigma in empirical research. According to Aguocha et al. (2023), people living with physical disability in Nigeria often suffer direct and indirect discrimination in terms of socialization. In addition, the observations of this concordance further demonstrate just how prolific cultural stigma is and how it prevents social acceptance of prosthetic and orthotic device users. The scoping review in turn found the recurring theme of social exclusion, whereby people labeled stigmatized become isolated and have little social participation.

As for the psychological effects of such type of exclusion, as Ingwu et al. (2022) found, they include lowered self-esteem, increases in anxiety, and even depression. This is consistent with the broader existing empirical literature on stigma and poorer mental health among people with disabilities (Aaron et al., 2021). In addition, studies have found that orthotic and prosthetic users experience social rejection, and that orthotic and prosthetic users are discouraged from participating in public ways, preventing them from working, socializing, or participating in community activities, which are part of their quality of life and well-being (Yongu et al., 2020). Rehabilitation success is a multidimensional and multicomponent process in terms of physical, psychological, and social dimensions. Findings indicate that orthotic and prosthetic devices are rarely used in public due to internalized stigma of being judged or rejected by society in the face of orthotic and prosthetic devices, as shown in the empirical work of Onalu et al. (2024). The study by Yongu et al. (2020) also supports that social barriers—or the stigma from this form—can reduce the efficacy of rehabilitation results. If you're exposed to discrimination, you don't want to participate in physical therapy or rehabilitation programs and that stops your progress and quality of life. Empirical literature provides first insight that the results of the rehabilitation success are simultaneously a social and practical obstacle to success.

Appraising the Findings with Empirical Literature

Appraising the findings from the scoping review reveals that the themes identified by this review have wide empirical literature support with the cultural beliefs, social exclusion, barriers to rehabilitation, and stigma reduction strategies all well documented. They provide a coherent framework by which to understand the complexities of stigma within the Nigerian context and they

also support their findings with empirical studies. While these are all interesting, there are some gaps which could benefit from further investigation. Other examples include the fact that the empirical evidence generally supports the value of cultural education, as well as community-based interventions, but very little research has been done on how these interventions can counteract stigma over time. Furthermore, empirical studies indicate that one's orthotic and prosthetic user experiences of stigma in healthcare settings can also impact one's willingness to utilize medical support, even though the theme was less emphasized in the scoping review, but necessary to understand access to rehabilitation resources (Enweluzo et al., 2023).

It is concluded that the empirical literature corroborates the review findings and that the findings of the review support the fact that there is an urgent need for targeted stigma reduction strategy in the Nigerian society. However, consistent with the smaller number of studies, further empirical research could be conducted into the longer-term effects of stigma reduction interventions and the barriers to accessing healthcare for orthotic and prosthetic users. This will help produce a more rounded picture of rehabilitation and stigma barriers to then inform more effective policies and support regimes designed for persons with disabilities in Nigeria. One of its main limiting factors was a lack of research available about rural areas and demographics, such as by age and gender, in experience of stigma. Moreover, small sample sizes in most of the reviewed work might make generalization based on the findings challenging (Aaron et al., 2021; Baumann et al., 2020). In Nigeria, healthcare providers should start with anti-stigma training and actively work to destigmatize disability in the healthcare context. Robust disability inclusion policies and social inclusion programmes are needed alongside funding for policymakers (Ingwu et al., 2022; Onalu et al., 2024).

Conclusion and Recommendations

This study demonstrated that stigma acts as a huge barrier to orthoses and prosthesis users' well-being in Nigeria, negatively affecting mental health, social integration, and rehabilitation outcomes (Aaron et al., 2021). Stigma among other consumer groups—those who carry their prostheses, use wheelchairs, or orthoses—is also a serious reality in Nigeria. Public education and enhanced patient–practitioner communication were identified as the most effective management strategies; future longitudinal studies will determine the changes in stigma and the long-term efficacy of such stigma reduction interventions. Future research should also explore stigma within specific subgroups (e.g., rural populations, women with disabilities) to develop more targeted interventions (Nwosu et al., 2020; Ugorji, 2023). Reducing stigma holistically among orthoses and prostheses users is critical for cultural attitude transformation, improvements in healthcare practice, and implementation of inclusive policies. Achieving better outcomes appears to depend on the development of a supportive societal environment in Nigeria for orthoses and prostheses users.

REFERENCES

- Aaron, F. E., Ijah, R. F. O. A., & Obene, T. (2021). The orthopedic patient and limb amputation: Impact of traditional beliefs on acceptance in Port Harcourt, Nigeria. *International Surgery Journal*, 8(3), 789–794. <https://doi.org/10.18203/2349-2902.isj20210557>
- Aguocha, U. B., Olekanma, C. V., & Uzowuihe, P. N. (2023). A prospective research study on the appraisal of lower limb amputee experiences with prostheses in Southeast Nigeria. *Open Access Library Journal*, 10(6), 1–9. <https://doi.org/10.4236/oalib.1109684>
- Amanam, J. (2023, November 13). Transforming lives with hyperrealism: The story of John Amanam, Nigerian prosthetic artist. *AFRO American Newspapers*. <https://afro.com/transforming-lives-with-hyper-realistic-prostheses-the-story-of-john-amanam-the-first-nigerian-prosthetic-artist/>
- Anderson, M., Ellegård, K., & Magnusson, L. (2021). Assistive technology use and human rights enjoyment: A cross-sectional study among people with disabilities in Malawi. *BMC International Health and Human Rights*, 21, Article 7. <https://doi.org/10.1186/s12914-021-00257-y>
- Baumann, M. F., Frank, D., Kulla, L.-C., & Stieglitz, T. (2020). Obstacles to prosthetic care—Legal and ethical aspects of access to upper and lower limb prosthetics in Germany and the improvement of prosthetic care from a social perspective. *Societies*, 10(1), 10. <https://doi.org/10.3390/soc10010010>
- Bright, T., Wallace, S., & Kuper, H. (2018). A systematic review of access to rehabilitation for people with disabilities in low- and middle-income countries. *International Journal of Environmental Research and Public Health*, 15(10), 2165. <https://doi.org/10.3390/ijerph15102165>
- Enweluzo, G. O., Asoegwu, C. N., Ohadugha, A. G. U., & Udechukwu, O. I. (2023). Quality of life and life after amputation among amputees in Lagos, Nigeria. *Journal of the West African College of Surgeons*, 13(3), 71–76. https://doi.org/10.4103/jwas.jwas_28_23
- Grut, L., & Ingstad, B. (2006). Using qualitative methods in studying the link between disability and poverty: A research strategy in practice. *Norwegian Journal of Geography*, 60(3), 149–158. <https://doi.org/10.1080/00291950600891721>
- Ingwu, J. A., Anikwe, H. O., Anehkhathi, C., Opara, H., Okpala, P., & Agba, M. (2022). Knowledge, attitude and acceptance of amputation among amputee patients admitted in National Orthopaedic Hospital Enugu – Nigeria. *International Journal of Health Sciences*, 6(S9), 2115–2128. <https://sciencescholar.us/journal/index.php/ijhs/article/view/12881>
- Kassa, A. M., Tewodros, A. S., & Mohammed, T. K. (2020). Barriers to rehabilitation services among physically disabled persons: A qualitative study in low-resource settings. *African Journal of Disability*, 9, Article a796. <https://doi.org/10.4102/ajod.v9i0.796>
- Mattick, K., Barnes, R., Dieppe, P., & Bligh, J. (2013). Medical education: A sociological framework for understanding medical students' experiences of stigma. *Medical Education*, 47(6), 584–594. <https://doi.org/10.1111/medu.12132>
- Nwosu, A. D. G., Anikwe, I. A., Eze, B. I., Ossai, E. N., & Onyekwulu, F. A. (2020). Amputation-related phantom limb pain in Nigeria: A prospective cohort study. *Nigerian Journal of Medicine*, 29(2), 208–216. https://doi.org/10.4103/NJM.NJM_11_20
- Onalu, C., Chukwu, N., & Nnama-Okechukwu, C. U. (2024). An exploratory study of the situation of persons with disabilities in Nigeria: Practice consideration for social workers. *Journal of Evidence-Based Social Work*, 21(1), 90–103. <https://doi.org/10.1080/26408066.2023.2265920>
- Ramstrand, N., Brodtkorb, T. H., & Nilsson, K. A. (2021). Psychosocial experiences of prosthetic users in developing countries: A comparative study. *Disability and Rehabilitation*, 43(20), 2915–2922. <https://doi.org/10.1080/09638288.2020.1713073>

- Sankaran, K. (1984). Disability rights and anti-stigma legislation: The Indian perspective. *Indian Journal of Social Work*, 45(3), 239–252.
- Ugorji, T. N., & Nduchekwe, J. (2023). Investigation of mobility challenges faced by trans-tibial prosthesis users. *Orthopedics & Rheumatology Open Access Journal*, 22(3), 556086. <https://doi.org/10.19080/OROAJ.2023.22.556086>
- Yongu, W. T., Kortor, J. N., Mue, D. D., Anhange, S. T., & Musa, T. (2020). Patients' perception and attitude to surgical amputation in Makurdi, North Central Nigeria. *Nigerian Journal of Medicine*, 29, 623–627.