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"I Will Advocate for Rehabilitation Specialists…": A Secondary Analysis of In-Service Adolescents With Disabilities and Families' Recommendations to Enhance Rehabilitation Access in Ghana

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ABSTRACT

Background: Despite supportive national policies in respect of healthcare access, in-service adolescents with disabilities and their families in Ghana still face key barriers in accessing rehabilitation services. The aim of this study is to identify and understand recommended solutions from in-service adolescents with disabilities and their families to improve access to rehabilitation services in Ghana.

Methods: The study is a secondary analysis of data set from a previous qualitative study with 45 participants (consisting of 25 adolescents with disabilities and 20 families of adolescents with disabilities). We collectively analyzed the data thematically in combination with elements of a grounded theory approach.

Results: We identified four key recommended solutions from the analysis. These are (i) affordable rehabilitation services, (ii) availability of services, (iii) protection of human rights, and (iv) greater awareness of rehabilitation services. Overall, participants' recommended solutions related to policies and practices that can potentially improve access to rehabilitation services for adolescents with disabilities in Ghana and similar contexts.

Conclusion: Participants' recommended solutions have important implications for rehabilitation service provision and policy decision-making. As such, there is an urgent need to involve in-service adolescents with disabilities and their families in the development and implementation of rehabilitation interventions to meet the specific and unique needs of adolescents with disabilities. This may advance Ghana's efforts towards the achievement of the 2030 Agenda for Rehabilitation and, ultimately, the Sustainable Development Goal 3.

Summary

- As part of efforts by the WHO to improve access to rehabilitation services for children with disabilities, including adolescents with disabilities, particularly those in low- and middle-income countries (LMICs), there is an integration of rehabilitation interventions into existing healthcare systems.
- Improving the infrastructure of rehabilitation facilities and addressing the indirect costs associated with accessing rehabilitation services, such as transportation, are critical areas of investment towards the achievement of the 2030 Agenda for Rehabilitation and universal health coverage.
- Increasing advocacy and raising awareness about available rehabilitation services through self-help groups and other support networks should be prioritized to ensure that families raising adolescents with disabilities can access these services.

1 | Background

Equitable healthcare access for persons with disabilities has gained global attention. The United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) affirms the rights of persons with disabilities to quality health services [1]. Aligned with the (Sustainable Development Goals) SDGs' goal of "leaving no one behind," the 2030 Agenda also promotes inclusive health and well-being of marginalized groups such as persons with disabilities, particularly, through universal health coverage [2]. Persons with disabilities (including adolescents with disabilities) are categorized as marginalized, facing poorer healthcare access and outcomes [1, 3]. This study defines adolescents with disabilities (ages 12–18) as children with limitations in daily activities such as walking or grasping, increasing their dependence on adults [4].

Understanding the health and rehabilitation needs of adolescents with disabilities is vital to optimizing their functioning and participation and to achieving the SDGs [5]. The World Health Organization has prioritized rehabilitation through key initiatives. The 2015 Global Disability Action Plan aimed to expand access to rehabilitation [6], reinforced by the 2017 "Rehabilitation 2030" call for coordinated global action [7]. Similarly, the 2018 Declaration of Astana recognizes rehabilitation as essential to health care [8]. Yet, many low- and middle-income countries (LMICs) lack adequate rehabilitation services, limiting access for persons with disabilities, including adolescents [9].

Despite supportive national policies, in-service adolescents with disabilities and their families in Ghana still face key barriers to accessing rehabilitation services. These include financial constraints, lack of information, long distances to service centers, and limited rehabilitation professionals [10–12]. Such barriers increase risks of secondary complications, hospitalizations, and higher costs for families [13]. Given this, researchers highlight the importance of understanding the experiences of in-service adolescents with disabilities and their families to improve access to rehabilitation [14].

Evidence on disability services in Ghana is extensive [15, 16]. However, the deeper research gap lies in the absence of user-centered, qualitative accounts of how in-service adolescents with disabilities and their families experience barriers to rehabilitation. Existing studies in LMICs adopt top-down approaches and are largely provider-focused [17–20]. Evidence from these existing studies [e.g., 20] emphasize policy and implementation challenges rather than ground-level realities and lived experiences of adolescents with disabilities and their families who rely on rehabilitation services. Although grounded in the Ghanaian context, this study offers relevant insights to many marginalized and low-resource settings, globally. Common barriers are encountered in accessing rehabilitation services across health systems serving marginalized populations. By centering the voices of in-service adolescents with disabilities and their families, this study provides a practical blueprint for designing patient-centered, rights-based rehabilitation systems that strengthen equity, dignity, and access in similar contexts worldwide.

Consequently, this study explores in-service adolescents with disabilities and their families' suggested solutions to improve access, a crucial step toward inclusive rehabilitation policies in Ghana and similar LMICs.

2 | Ghana Context

In 2021, Ghana's population was ~30.8 million (0.4% of the global population) [21], with a GDP of $77.59 billion and a growth rate of 5.1% [22]. Significant progress in poverty reduction has been made, with the proportion of Ghanaians living below the international poverty line ($1.90 a day) decreasing from 47.4% in 2011 to 11.3% in 2021 [22]. Despite these advances, about 3.4 million people, predominantly in rural areas, still face extreme poverty, affecting marginalized groups including persons with disabilities and their families [21]. Ghana is administratively divided into 16 regions, further subdivided into 261 Metropolitan, Municipal, and District Assemblies, which include 58 urban councils, 108 zonal councils, and 626 area councils. Additionally, there are over 16,000-unit committees, the smallest administrative units. The country is linguistically diverse, with about 50 indigenous languages. The Akan language is the most widely spoken, with the native speakers constituting 45.6% of the national population [21].

With Ghana's context established, it is important to examine the policy landscape and the commitments that shape access to rehabilitation for in-service adolescents with disabilities and their families who are in contact with services.

2.1 | Policy Commitment to In-Service Adolescents With Disabilities and Their Families and Provision of Rehabilitation Services in Ghana

Ghana ratified the UNCRPD, mandating high-standard healthcare, including rehabilitation services, for persons with disabilities [1]. Subsequent harmonization of the human rights principles in the UNCRPD into Ghana's Person with Disability Act of 2006 (Act 715) aimed at enhancing healthcare access for persons with disabilities (including adolescents with disabilities) [23]. There are several provisions in Ghana's Act 715 aimed at removing healthcare disparities, such as providing complimentary medical and rehabilitation services and ensuring healthcare facilities are accessible to all persons with disabilities, including adolescents with disabilities [24].

Ghana's Disability Policy outlines a pathway for assessing children's abilities, difficulties, and needs, mandating local (District) assessment and resource centers for early disability detection [23]. Following diagnosis, children with disabilities, including in-service adolescents with disabilities and their families, could be referred to either public and/or private rehabilitation facilities such as disability resource centers, special schools, and healthcare facilities for appropriate therapy services (i.e., occupational therapy, physiotherapy, speech and language therapy, and assistive technology). Ghana's Disability Policy further makes provisions for expansion of these services and training of relevant professionals for tailored rehabilitation delivery. Despite these policy commitments, evidence shows that in-service adolescents with disabilities and their families still face significant barriers to accessing rehabilitation services in Ghana.

3 | Method

We used a qualitative secondary analysis to address the objective of the study. This approach involves an in-depth exploration of a new issue or topic that emerged from an original qualitative study [25–27]. We opted for this approach for three main reasons. First, the primary authors of the original study (EMG—a male social worker and disability researcher with a qualitative research background; ED—a male global health and disability researcher with relevant skills, knowledge, and interest in qualitative studies and the topic under study; and MPO—a male disability researcher and academic with qualitative research background) are involved in this current study. The inclusion of these researchers' is key as they are immersed with the data and have substantial understanding of the study context. Second, the coauthors of this study (RPN—a female physiotherapist with qualitative research background and; FCO—a female qualitative researcher with interest in children and youth with disabilities and their families) were not involved in the original study and, thus, are well positioned to explore and interpret the data with new lenses and perspectives. Finally, this approach is an effective means of maximizing data, also utilizing service users' voices and experiences in health policy decision-making [26].

In this study, we conducted secondary analysis using data from a primary qualitative study that explored the experiences of in-service adolescents with disabilities and their families in accessing support (i.e., healthcare and including rehabilitation services) described in Ghana's Persons with Disability Act of 2006 (Act 715). Briefly, the primary qualitative study was conducted between March and April 2023 with in-service adolescents with disabilities and their families who sought rehabilitation services at both public and private rehabilitation centers and healthcare facilities in Ghana. The findings of this study have been peer-reviewed and published [28].

Ethical clearance for the original study was obtained from the Kwame Nkrumah University of Science and Technology's Committee for Human Research, Publication and Ethics (CHRPE/AP/155/23). Permissions were also sought with the offices of the Ghana Federation of Disability Organizations and the Department of Social Welfare at the study site. Written and verbal (where applicable) informed consent and/or assent were obtained for all participants prior to their participation in the original study.

Participants were selected purposively to obtain a maximum-variation sample of demographic characteristics, including age, sex, education, living area, adolescents' disability types, family members relationship to adolescents with disabilities, and employment status. The participants in the original study were recruited through the Ghana Federation of Disability Organizations and the Department of Social Welfare. In terms of data collection, semistructured interviews were conducted by EMG at various locations (including homes, schools, health facilities, rehabilitation centers, and community centers/durbar grounds) convenient for both the participants and the interviewer. Prior to the interviews, participants were made aware that the interviewer worked as a social worker at the study setting. The interviews were facilitated by questions that included barriers in accessing rehabilitation services for in-service adolescents with disabilities and their families and strategies to improve access to such rehabilitation services. The interviewer recorded each interview using a digital voice recorder, with the consent of the participants. The interviewer also took detailed field notes for nonverbal cues (during interviews) and reflections (before and after each interview). The interviewer repeatedly used prompts to facilitate the elicitation of more and clearer information or clarification of certain concepts used by participants. The interviews lasted 45 min on average.

The analysis for this paper involved thematic analysis [29], combined with some elements of the grounded theory approach [30]. Thus, themes were allowed to emerge from participants' perspectives. Moreover, one author (EMG) conducted repeated, line-by-line readings of the transcripts to deepen familiarity with the data and enhance accuracy in the emerging interpretations. Using the constant comparison approach, the other authors (ED, RPN, FCO, and MPO) further undertook a comparative analysis of the themes between participants to understand areas of convergence and divergence. Although the primary data set underwent member checking [28], we further ensured rigor through keeping a detailed audit trail, reflexivity, multiple peer briefing meetings, the use of the NVivo software to organize and analyze all the data, and consensus on the final themes. Finally, we conducted the current study in accordance with the consolidated criteria for reporting qualitative research (COREQ) guidelines [31].

4 | Results

4.1 | Participants Characteristics

A total of 45 in-service adolescents with disabilities and their families participated in the study. Among the families of adolescents with disabilities who participated in the study, only six (6) were biological parents. Most of the participants ($N = 31$) were living in rural areas (further details can be found in Table 1).

4.2 | Participants' Suggested Solutions and Recommendations to Improving Access to Rehabilitation Services

Participants shared ways of improving access to rehabilitation services that have implications on policy modifications and improvement in clinical practice. Four themes were identified: affordable rehabilitation services, availability of services,

TABLE 1 | Demographic characteristics of participants.

Characteristics	In-service adolescents with disabilities *n* (%)	In-service families *n* (%)	In-service adolescents with disabilities and their families *N* (%)
Age of participant (years)			
Mean age (range)	14.9 (13–17)	55.3 (27–81)	32.8 (13–81)
Sex of respondent			
Female	12 (48.0)	15 (75.0)	27 (60.0)
Male	13 (52.0)	5 (25.0)	18 (40.0)
Education			
No formal education	3 (12.0)	1 (5.0)	4 (8.9)
Up to primary school	4 (16.00)	5 (25.0)	9 (20.0)
Junior high to senior high school	18 (72.0)	13 (65.0)	31 (68.9)
Bachelor's degree or higher	—	1 (5.0)	1 (2.2)
Residence			
Rural	16 (64.0)	15 (75.0)	31 (68.9)
Urban	9 (36.0)	5 (25.0)	14 (31.1)
Types of disabilities			
Mobility impairment	15 (60.0)	N/A	N/A
Visual impairment	10 (40.0)	—	—
Relationship to adolescent with disability			
Biological mother	N/A	4 (20.0)	N/A
Biological father	—	2 (10.0)	—
Step-parent	—	4 (20.0)	—
Grandparent	—	6 (30.0)	—
Uncle/aunty	—	4 (20.0)	—
Employment status			
Employed	N/A	5 (25.0)	N/A
Unemployed	—	15 (75.0)	—

protection of human rights, and greater awareness of rehabilitation services. These themes are described in greater detail below with supporting quotations from the participants.

4.3 | Theme 1: Affordable Rehabilitation Services

All participants emphasized the importance of affordable rehabilitation services, highlighting the National Health Insurance Scheme (NHIS) as essential for enhancing access. In-service adolescents with disabilities and their families acknowledged NHIS for enabling access to vital rehabilitation services without direct charges. However, participants suggested restructuring the NHIS to include indirect costs such as assistive devices (reading glasses, wheelchairs, and hearing aids) and personal expenses during residential rehabilitation (meals and utilities).

An adolescent participant explained:

"I suggest the NHIS should cover all costs involved in periodically changing reading glasses. My unemployed mother struggles whenever it's time to replace them. Sometimes I delay replacements due to financial constraints, risking worsening my eye condition. NHIS coverage would give me peace of mind and prevent my mother from borrowing money after each hospital visit (Adolescent with disability, Female 10)."

Families consistently supported restructuring the NHIS to ensure affordability and timely access. They expressed concerns over expenses like transportation to medical facilities, exacerbated by poor road infrastructure, physiotherapy fees, consumables such as massage gels, and opportunity costs related to caregiving time away from work. One family member specifically recommended expanding NHIS coverage:

"Not all rehabilitation costs like physiotherapy, certain surgeries, and massage gels are covered by NHIS, causing significant out-of-pocket expenses. Travel, food, and ambulance costs also burden families, preventing timely care. NHIS should cover all rehabilitation-related expenses to encourage timely care-seeking (Family Member, Female 03)."

4.4 | Theme 2: Availability of Services

Participants recommended expanding access to rehabilitation services by increasing their availability within local communities and schools. Adolescents with disabilities emphasized that establishing rehabilitation centers at schools and health facilities would significantly improve accessibility and reduce delays that worsen their conditions. One adolescent remarked,

"I visit the rehab centre at the government hospital every 2 weeks. I would attend daily if services were available at school. Authorities should establish a centre here for easy access (*Adolescent*, *Male*, *04*)*."*

Additionally, participants highlighted the importance of recruiting more rehabilitation professionals, including mobility trainers, speech therapists, occupational therapists, physiotherapists, optometrists, neurologists, pediatricians, and rehabilitation nurses. They emphasized these experts' critical role in addressing unique emotional and developmental needs. An adolescent stated,

"You can only have access to physiotherapists and mobility experts at the Municipal hospital, making it difficult and costly for villagers. Rehabilitation specialists should be posted to every zonal council health facility (*Adolescent*, *Female 02*)*."*

Families similarly stressed the necessity of providing rehabilitation services locally. One participant shared,

"My child sometimes skips school for therapy in Kumasi. Local availability would greatly help, eliminating travel needs (*Family Member*, *Female 01*)*."*

Participants recommended periodic refurbishment of existing rehabilitation centers, highlighting the significance of modern technology and specialized expertise to service quality and effectiveness. They urged stakeholders to prioritize upgrading public rehabilitation facilities due to current service dissatisfaction.

Improving facility accessibility through infrastructural enhancements, such as ramps and disability-friendly sidewalks, was also emphasized. Participants noted accessible public transportation could significantly reduce dependence on costly private transport, such as commercial taxis.

Moreover, participants proposed establishing mobile rehabilitation teams to conduct outreach services periodically in remote areas. One family member suggested:

"With their limited numbers, mobility instructors could offer outreach services every market day at zonal council capitals, making services accessible for rural families (*Family Member*, *Female 06*)*."*

Overall, enhancing the availability and accessibility of rehabilitation services through local centers, specialized professionals, modernized infrastructure, and outreach initiatives was strongly advocated to ensure timely, effective care for adolescents with disabilities.

4.5 | Theme 3: Protection of Human Rights

Participants emphasized respecting and protecting the human rights, particularly privacy and confidentiality, of adolescents with disabilities during rehabilitation services. They recommended dedicated spaces for different genders during therapy to improve accessibility. Participants preferred private interactions with rehabilitation professionals to freely discuss their experiences without fear of judgment or prejudice. They felt privacy prevents sensitive information about their impairments from reaching the public domain. One adolescent noted:

"Since sensitive information about our impairment is always in the public domain, I think it is wise to ensure that there are no third parties in consulting rooms during therapy sessions. A lot more of colleagues disabled people will access therapy when our privacy and confidentiality is prioritized (*Adolescent with disability*, *Male 08*)*."*

Families reinforced this, advocating for the use of ward screens to enhance privacy during therapy sessions and stressing that consultations occur in enclosed rooms. A family member shared:

"Can you imagine how my daughter felt when a male patient walked-in on her while she was undressing for hot water therapy? Authorities can use ward screens to enhance privacy (*Family Member*, *Female 13*)*."*

4.6 | Theme 4: Greater Awareness of Rehabilitation Services

Participants indicated that improving adolescents' access to rehabilitation services requires increased public awareness about disability and rehabilitation, particularly among families and communities. They highlighted that ignorance significantly delays appropriate interventions. As one participant noted:

"Most people don't even know some disabilities exist. They attribute them to witches and wizards. How can such families seek rehab services for children? Extensive education on disability and rehabilitation is needed in communities (*Adolescent with disability*, *Male 11*)*."*

Stakeholders were urged to initiate broad awareness campaigns. Participants recommended integrating disability and rehabilitation modules into healthcare training curricula and establishing continuous professional development programs for healthcare workers. They emphasized the importance of healthcare professionals being knowledgeable to effectively address adolescents' unique rehabilitation needs:

"You can't give what you don't have. Healthcare workers sometimes have no clue about disabled persons. Retraining healthcare workers on disability care is necessary if we expect good treatment (*Adolescent with disability*, *Female 13*)*."*

Families reinforced this perspective, advocating regular public education on disability and rehabilitation to enhance community understanding. Participants proposed ongoing training for all healthcare workers—including nonclinical staff—to maintain up-to-date knowledge on rehabilitation services. Continuous training was seen as essential for improving service quality and ensuring staff at all healthcare levels could competently engage with adolescents with disabilities:

"All healthcare workers, clinicians or non-clinicians, such as accountants, cleaners, and security, should understand disability and rehabilitation care. We encounter these people first before seeing therapists (*Family Member*, *Male 03*)*."*

Participants further emphasized that fostering positive societal attitudes toward disability is crucial. Addressing stigma and discrimination through positive engagement and discouraging

derogatory labeling were strongly recommended. Finally, participants called for mainstreaming disability and rehabilitation within broader healthcare policies, stressing that inclusive rehabilitation services, supported by positive attitudes, could substantially enhance access and effectiveness for in-service adolescents with disabilities and their families.

5 | Discussion

The purpose of this study was to understand in-service adolescents with disabilities, and their families' suggested recommendations for improving access to rehabilitation services in Ghana. Participants made four key recommendations: ensuring affordable rehabilitation services, improving availability of services, strengthening the protection of human rights, and increasing awareness of rehabilitation services. Together, these themes show that in-service adolescents with disabilities and their families are not passive users of rehabilitation services. Instead, they act as knowledgeable advocates who identify structural gaps and propose practical solutions to strengthen access. Their views are consistent with research indicating that meaningful engagement of persons with disabilities and their families through self-advocacy, advocacy, and shared decision-making enhances service improvement and policy responsiveness [32–34].

Although Ghana provides free primary healthcare in public facilities, participants noted that the NHIS does not adequately cover rehabilitation services. This limitation affects both direct and indirect costs associated with accessing rehabilitation services. Families reported that although NHIS enables initial contact with health facilities, it does not cover several essential rehabilitation-related needs, including assistive devices, transport, consumables, and accommodation. These findings reflect earlier evidence [such as 10, 12, 35, 36], which shows that poor rehabilitation quality and low awareness discourage families from using public services. As a result, families often turn to private rehabilitation providers, where services are relatively costly [37]. Most private rehabilitation facilities are located in urban areas; hence, rural–urban disparities in access widen [38]. Participants' call for a more comprehensive NHIS coverage therefore represents a significant advocacy action aimed at improving financial protection and fairness in access to rehabilitation. From an advocacy perspective, in-service adolescents with disabilities and their families clearly identified financial barriers and proposed reforms that reduce out-of-pocket spending. Andrews et al. [32] contend that advocacy in rehabilitation includes actions that enhance system responsiveness, resource allocation, and user protection. Participants' recommendations align with this view, as they call for insurance reforms that safeguard the financial well-being of in-service adolescents with disabilities and their families. However, Andrews et al. [32] also caution that expanded insurance coverage should be accompanied by adequate staffing, infrastructure, and service quality. Without these improvements, increased utilization could overwhelm facilities and compromise care.

Participants further recommended integrating rehabilitation into Ghana's primary healthcare system. They suggested that Community-based Health Planning and Services (CHPS) compounds and local health centers should provide routine rehabilitation services. With more than 6500 CHPS facilities across Ghana [39], the integration of rehabilitation could significantly reduce travel time, transportation costs, and school absenteeism while supporting continuous care. This recommendation aligns with global calls for integrating rehabilitation into primary healthcare under universal health coverage. It also demonstrates that in-service adolescents with disabilities and their families recognize how structural factors shape access to rehabilitation.

Participants emphasized that indirect costs associated with rehabilitation such as transportation, meals, and accommodation should also be covered by NHIS. These costs are substantial, especially for families who must travel long distances or accompany adolescents to appointments. Lost income and other opportunity costs further increase their financial burden. Participants' views are supported by studies showing that reducing indirect costs is essential for equitable access [40]. From a self-advocacy standpoint, in-service adolescents with disabilities and their families were able to clearly identify and communicate the support they need. This aligns with Koca et al. [33], who note that self-advocacy relies on the ability to understand needs and express them. The participants demonstrated their understanding of current access gaps as well as the need for stronger financial protection.

Participants also acknowledged the economic consequences of poor access to rehabilitation. They indicated that timely and affordable services can prevent worsening impairments, improve functioning, and enhance quality of life. These benefits also translate into reduced long-term healthcare costs [41, 42]. Families noted that affordable rehabilitation supports household financial stability by reducing excessive spending, particularly among low-income households. This suggests that in-service adolescents with disabilities and their families advocate not only for improved health outcomes but also for economic stability and social protection.

A major recommendation was the need to increase the availability of rehabilitation services and professionals. Participants mentioned that existing rehabilitation services in Ghana are insufficient. They identified shortages in several specialties, including physiotherapy, occupational therapy, speech therapy, neurology, rehabilitation nursing, mobility training, and optometry. They linked these shortages to poor working conditions, professional migration, and low incentives [35, 43, 44]. A limitation in the number of rehabilitation providers results in delays in early detection and intervention. Early rehabilitation is important for long-term outcomes, especially in periods of rapid neural development [45]. Participants therefore recommended posting rehabilitation specialists to district and subdistrict facilities, upgrading existing rehabilitation centers, and establishing school-based rehabilitation units. They also suggested infrastructural improvements such as ramps, disability-friendly walkways, and accessible public transport. To address the needs of remote communities, participants proposed the deployment of mobile rehabilitation teams. These solutions reflect a systems-level understanding of service delivery and align with findings from Sakız et al. [34], who note that families often advocate for equitable service distribution and improved quality. Both studies show that families recognize that shortages and poor distribution of rehabilitation providers limit access. Participants' views also support insights from Koca et al. [33], who argue that adolescents' capacity to express their needs depends on supportive environments. In this study, in-service adolescents with disabilities articulated their need for available and accessible rehabilitation options, demonstrating meaningful self-advocacy.

Participants also highlighted the need to protect human rights in rehabilitation settings. They reported breaches of privacy and confidentiality that caused embarrassment and reduced willingness to continue care. Participants recommended gender-appropriate spaces, the use of ward screens, and ensuring that sensitive discussions take place in private rooms. These recommendations align with evidence showing that provider attitudes and breaches of dignity can limit rehabilitation uptake [46, 47]. Ensuring privacy promotes comfort, reinforces autonomy, and builds trust. From an advocacy perspective, protecting human rights is essential for person-centered rehabilitation. Andrews et al. [32] emphasize that advocacy includes defending civil and human rights, while Koca et al. [33] highlight that awareness of rights is central to self-advocacy.

Participants further stressed the need for greater awareness of disability and rehabilitation. They explained that misconceptions, such as attributing disability to supernatural causes, delay care-seeking. They recommended public awareness campaigns targeting families, communities, and healthcare professionals. Participants also suggested incorporating disability and rehabilitation content into training curricula across Ghana's health-training institutions. Participants further proposed that continuous professional development be provided for all healthcare workers, including nonclinical staff. These suggestions align with research showing that poor provider knowledge and community misconceptions hinder access to rehabilitation [48]. Participants also recommended the use of support groups and self-help groups to disseminate information, which is consistent with evidence that support groups can positively influence health-seeking behavior [49]. These recommendations show that participants view awareness-building as an important advocacy action. Their emphasis aligns with Koca et al.'s [33] view that environments which strengthen communication, self-understanding, and rights knowledge promote self-advocacy.

Overall, the findings show that in-service adolescents with disabilities and their families understand the financial, structural, attitudinal, and rights-related barriers to rehabilitation access. These barriers are interconnected and reinforce each other. Financial constraints limit the ability to afford assistive devices, consumables, and transportation and also intensify the effects of service shortages, especially in rural communities [43, 50]. Banks et al. [51] report that long travel distances increase opportunity costs and indirect expenses, which further limits service use. The limited availability of rehabilitation professionals at district and subdistrict levels worsens this burden, creating a cycle where both cost and availability reinforce inequity [52]. The theme of human rights becomes increasingly important when considering the dignity-related concerns raised by participants, such as mixed-gender wards and lack of privacy, which discourage continued engagement with rehabilitation services. This supports evidence showing that breaches of confidentiality and poor provider attitudes undermine trust and autonomy [46, 47]. These interconnected barriers demonstrate that improving access to rehabilitation requires a holistic and rights-based approach that addresses financial, structural, and dignity-related challenges.

Participants' suggested solutions reflect both self-advocacy (i.e., identifying personal needs) and systemic advocacy (i.e., calling for policy-level reform). When synthesized with findings from Koca et al. [33], Sakız et al. [34], and Andrews et al. [32], these recommendations demonstrate that improving access to rehabilitation for in-service adolescents with disabilities and their families in Ghana requires collaborative efforts. These include expanding financial and social protection, decentralizing rehabilitation into primary healthcare, increasing the availability of rehabilitation professionals, enforcing rights-based care, and increasing disability awareness. These multitiered, advocacy-informed strategies are essential for building an equitable and responsive rehabilitation system that meets the needs of in-service adolescents with disabilities and their families.

6 | Strengths and Limitations

This study significantly advances knowledge on improving access to rehabilitation services for adolescents with disabilities in Ghana. It is the first research documenting recommended solutions directly from adolescents with disabilities and their family members. Notably, it amplifies marginalized voices (fathers, mothers, grandmothers, aunts, and uncles) typically overlooked in disability research, enriching the insights obtained. Additionally, the study assessed the practical applicability of participants' recommendations, aligning with calls by disability researchers [53], for actionable insights to influence policy and practice.

However, certain limitations are acknowledged. Rehabilitation service providers' perspectives were not included; their viewpoints could have enhanced understanding and in-depth insights to the findings. Adolescents with disabilities and families who face barriers that prevent them from engaging with rehabilitation services at all may experience distinct access challenges that were not captured in this study. Also, participants were recruited exclusively from a single municipality where they already accessed healthcare services, potentially limiting the generalizability to adolescents with disabilities and families outside this setting. Future research should explore experiences from participants at other municipalities, as well as those who are yet to make contact with rehabilitation services, to gain diverse perspectives. Finally, as a secondary analysis, this study lacked the depth achievable through primary data analysis, and member checking was impossible due to loss of direct contact with original participants, many of whom had resumed school or relocated.

7 | Conclusion

The study highlights critical barriers and potential solutions for improving rehabilitation services for adolescents with disabilities in Ghana. It emphasizes restructuring the NHIS to cover direct and indirect rehabilitation costs, thereby reducing financial barriers for marginalized families. Additionally, increasing rehabilitation resources and qualified professionals at local community and school levels is essential to ensure timely, tailored support. The findings highlight respecting adolescents' rights during therapy, particularly ensuring privacy and confidentiality, aligned with professional ethical standards. Furthermore, raising public and healthcare-provider awareness about disability and rehabilitation is crucial. Integrating disability training into healthcare education and ongoing professional development can significantly enhance service delivery. Recommendations provided by

adolescents and their families offer practical guidance to bridge existing gaps, helping stakeholders achieve equitable, high-quality rehabilitation services aligned with the 2030 Rehabilitation Agenda and Sustainable Development Goal 3 in Ghana and similar low- and middle-income settings.

Author Contributions

Ebenezer M. Gyimah, Ebenezer Dassah, and Maxwell P. Opoku contributed to the study's conceptualization and data collection. Ebenezer M. Gyimah, Ebenezer Dassah, Maxwell P. Opoku, Reshma P. Nuri, and Folson C. Okyere contributed to the study design, data analysis, and the writing and review of the manuscript.

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Ethics Statement

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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