

UNEARTHING CHALLENGES AND OPPORTUNITIES IN PROVISION OF INCLUSIVE HEALTHCARE SERVICES AMONG INDIVIDUALS WITH SPECIAL NEEDS AND /OR DISABILITY

Moses Chisala¹, Thomas Timothy Mtonga², Florence Sememba³, Daniel Ndhlovu⁴

¹Dr. Research Scholar, MOE-HQ-Directorate of Curriculum Development, Zambia. moschisala@gmail.com

²Dr. Research Scholar, New York University Abu Dhabi Compass. USA/Zambia.

³Research Scholar, Pemba Primary Special Unit School, Southern Province, Zambia, semembaflorence@gmail.com

⁴Prof. Research Scholar, University of Zambia, Zambia. ndhlovu2010@gmail.com

Abstract

This study explored the challenges and opportunities shaping equitable, accessible, and inclusive healthcare for individuals with special needs and/or disabilities in Zambia. Guided by an interpretivist paradigm, a multiple-site qualitative case study was conducted with doctors, nurses, allied health professionals, administrators, and persons with disabilities, using purposive and maximum variation sampling. Data were collected through semi-structured interviews, focus groups, and document analysis, and analyzed thematically using inductive and deductive coding. Findings reveal that inclusive healthcare is constrained by inaccessible infrastructure, limited assistive technologies, workforce gaps, communication barriers, and systemic bias. Guided by the Social Model of Disability, participants recommended universal design aligned infrastructure, disability-inclusive training, multidisciplinary care, digital health interventions, and strengthened policy enforcement. The study underscores that systemic reforms, rather than individual adaptation, are essential to achieve person-centered, rights-based, and equitable healthcare for persons with disabilities.

Keywords: *Inclusive Healthcare, Persons With Disabilities, Health Equity, Workforce Competence, Multidisciplinary Care*

Introduction

The Sustainable Development Goals (SDGs) urge us to Leave No One Behind (ILO, 2025). SDG 3 specifically aims to ensure healthy lives and promote well-being for all at all ages. But the reality is that despite all efforts to promote Universal Health Coverage (UHC), persons with disabilities are still left out (UNDP/GRZ, 2025). They face higher healthcare needs, more barriers to accessing services, and less health coverage, resulting in worse health outcomes (Godwill & Chirac, 2025). People with disabilities globally experience poorer health outcomes than people without disabilities (Krahn et al., 2015). The World Health Organization (WHO) has highlighted the need for the removal of physical, financial, attitudinal, and systemic barriers to care which aligns with the objectives of the Universal Health Coverage as part of strategy to promote access to health care to people living with disabilities (WHO, 2020, 2023). Access to healthcare is recognised as a fundamental human right; however, individuals with special needs

and/or disabilities continue to face persistent inequities in both the utilisation and quality of health services (Chiluba, 2019). The adoption of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) marked a significant paradigm shift from viewing disability through a purely medical lens to framing it as a human rights and social justice issue. Article 25 of the Convention explicitly obligates States Parties to provide persons with disabilities with the same range, quality and standard of free or affordable health care and programmes as provided to other persons (United Nations, 2006; ILO, 2025; UNDP/GRZ, 2025). This provision reinforces the principle of non-discrimination and equality in health service delivery. Despite widespread ratification of the Convention, substantial implementation gaps remain, particularly in low- and middle-income countries where health systems are constrained by inadequate infrastructure, limited financing, and workforce shortages (Hashemi et al., 2022). In many contexts, policy commitments have not translated

into measurable improvements in accessibility, affordability, and quality of care for persons with disabilities. Consequently, the global promise of equitable healthcare remains unevenly realised.

The World Health Organization (WHO) estimates that approximately 1.3 billion people, representing about 16% of the global population, live with significant disability (WHO, 2022). This substantial proportion of the population underscores the urgency of disability-inclusive health reforms. Empirical evidence indicates that persons with disabilities are more likely to report unmet healthcare needs, delayed treatment, poorer preventive care coverage, and higher exposure to secondary health conditions compared to those without disabilities (Vergunst et al., 2017). These disparities are not simply attributable to individual impairments but are largely shaped by structural inequities embedded within health systems. As WHO (2022) emphasises, people with disabilities die earlier, have poorer health, and experience more limitations in everyday functioning than the rest of the population. Such findings highlight the systemic nature of exclusion and the need to interrogate institutional arrangements that perpetuate unequal health outcomes. Evans et al. (2022), noted that the persistence of these inequities calls for a shift from impairment-focused interventions to system-wide transformation

WHO (2022) revealed that inclusive healthcare constitutes the intentional design, organisation, and delivery of services that accommodate diverse physical, sensory, intellectual, psychosocial, and communication needs. The Greaux et al (2023) conceptualise disability as arising from the interaction between impairments and environmental and attitudinal barriers that restrict participation. This conceptualisation aligns with the social model of disability, which relocates the “problem” from the individual to societal systems and structures. However, many healthcare systems continue to operate within able-bodied normative frameworks that inadequately account for communication differences, mobility limitations, or cognitive diversity. Physical inaccessibility of facilities, lack of assistive devices, limited availability of sign language interpreters, and inaccessible health information materials remain common barriers (Chiluba and Phiri, 2019).

Additionally, healthcare providers often receive minimal training in disability competence, resulting in communication breakdowns and diminished quality of care (Shakespeare et al., 2021). According to Krahn et al. (2015), inequities in healthcare access are reinforced by attitudinal barriers, policy limitations, and fragmented service systems, which collectively sustain systemic exclusion.

In sub-Saharan Africa, including Zambia, Chiluba and Phiri (2019) revealed that these structural challenges are compounded by resource limitations, rural–urban disparities, and weak policy implementation mechanisms. Similarly, Ssemata et al. (2024) noted that although national health policies may promote universal access and non-discrimination, practical service delivery frequently falls short in accommodating individuals with complex or multiple disabilities. Intersectional factors such as poverty, gender inequality, rural residence, and low educational attainment further intensify vulnerability and restrict healthcare utilisation (McKinney et al., 2021). Women and children with disabilities, in particular, face heightened risks of unmet sexual and reproductive health needs, violence, and neglect (WHO, 2022). Nevertheless, opportunities for strengthening inclusive healthcare systems are emerging through commitments to Universal Health Coverage, digital health innovations, community-based rehabilitation approaches, and participatory governance frameworks. The WHO (2022) Global Report on Health Equity for Persons with Disabilities calls for disability-inclusive policies, improved data systems, and strengthened workforce capacity as essential drivers of change. Despite these promising developments, there remains limited context-specific empirical evidence examining both the entrenched barriers and emerging opportunities in inclusive healthcare provision (Mesmar et al., 2025). It is within this policy and practice gap the study critically explored the challenges and emerging opportunities influencing the provision of inclusive healthcare services for individuals with special needs and/or disabilities in order to inform equitable policy and practice reforms.

However, while there are pockets of good practice and some successful interventions, they are often not widespread and frequently lack full integration

of the disability perspective, typically not incorporating the viewpoints of persons with disabilities (Chiluba, 2019; Scherer et al., 2025). Therefore, ILO (2025) lamented that improving access to healthcare for people with disabilities in these settings requires the examination of possible solutions and recommendations pertinent to development of comprehensive and inclusive healthcare systems. Hence, the study explored challenges to inclusive healthcare and disabilities and strategic interventions to enhance equitable, high-quality, and inclusive healthcare service delivery for individuals with special needs and/or disabilities.

Theoretical Framework

The Social Model of Disability was applied in this study as the primary analytical lens to examine how structural, institutional, and attitudinal barriers shape the provision of inclusive healthcare services for individuals with special needs and/or disabilities (Oliver, 1996; Shakespeare, 2014). Rather than locating the problem within the individual's impairment, the study conceptualised exclusion as a consequence of socially constructed barriers embedded in healthcare infrastructure, professional training, communication systems, and policy implementation. Guided by principles articulated in the United Nations Convention on the Rights of Persons with Disabilities, the study interrogated how inaccessible physical environments, limited disability competence among healthcare providers, inadequate enforcement of inclusive health policies, and persistent stigma collectively restrict equitable access to quality care (UNDP/GRZ, 2025). Through this lens, challenges were interpreted as systemic failures requiring structural reform, while identified opportunities such as capacity building, universal design improvements, community engagement, and digital health innovations were framed as transformative mechanisms capable of dismantling disabling barriers within the health system.

Methods and Materials

This qualitative study, guided by an interpretivist paradigm, used a multiple-site case study design to explore challenges and opportunities in providing inclusive healthcare for persons with disabilities. Purposive and maximum variation sampling recruited doctors (D), nurses (N), Hospital

Teaching Teachers (T), and individuals with disabilities (PwD) in hospital Teaching Unit. Data were collected via semi-structured interviews, focus groups, and document analysis of policies and institutional protocols. A comprehensive search was conducted across databases including PubMed, Scopus, Web of Science, and the Cochrane Library, for peer-reviewed articles published between January 1, 2016, and December 31, 2025. Studies were included if they addressed healthcare access for disabled individuals. Data extraction was performed manually. Thematic analysis, combining inductive and deductive coding with constant comparison, generated contextually grounded themes. Trustworthiness was ensured through credibility, transferability, dependability, and confirmability.

FINDINGS

Challenges Affecting the Provision of Inclusive Healthcare Services for Individuals with Special Needs and/or Disabilities

The study findings revealed that the provision of inclusive healthcare services for individuals with special needs and/or disabilities is affected by several interconnected challenges, including structural and infrastructural barriers, limited professional competence and training and policy and systemic implementation gaps hinder equitable service delivery.

Structural and Infrastructural Barriers

The theme that emerged from the findings during interviews was that of structural and infrastructural barriers which constituted sub-themes that included physical inaccessibility of health facilities, limited availability of assistive devices and equipment, inadequate human resources and staffing levels and financial constraints and limited funding

Physical Inaccessibility of Health Facilities

Participants reported that many health facilities are not designed to accommodate individuals with mobility, visual, or multiple impairments. Entrances, consultation rooms, and sanitation facilities were often described as inaccessible. This was mentioned by one of the participant-D1 as follows: *“Our facility was not originally designed with persons with disabilities in mind. The ramps are either too steep or completely absent in some departments. This makes it difficult for patients using wheelchairs to move independently.”*

Another participant-N1 has this to say: *“Sometimes we have to physically carry patients because the examination rooms are upstairs without lifts. It is not dignified for the patient, and it is also risky for staff. We feel the infrastructure limits the kind of care we can provide.”*

In line with this suggestion, another participant-PwD2 said: *“Even basic things like adjustable examination beds are not available. Patients with physical disabilities struggle during assessment procedures. It delays service delivery and compromises privacy.”*

Limited Availability of Assistive Devices and Equipment

Healthcare providers highlighted the absence of adaptive medical equipment and assistive technologies necessary for inclusive care, the participant-PwD5 had the following views: *“We do not have hearing aids, visual aids, or specialised diagnostic tools for patients with sensory impairments. Most of the time, we improvise, which is not always effective. This affects accurate diagnosis.”*

Contributing on the same another participant-D3 indicated: *“There are no accessible weighing scales or adjustable beds for patients with severe physical disabilities. As a result, we sometimes skip important assessments. That compromises the quality of care.”*

Another participant-T3 argued: *“Assistive communication tools are almost non-existent in our facility. Patients who need them depend entirely on relatives. That dependence reduces confidentiality.”*

Inadequate Human Resources and Staffing Levels

Participants reported staff shortages and heavy workloads as major constraints. These findings were evidenced in the following verbal account given by one participant-D4 from during interviews who said that: *“We are already overwhelmed with the general patient population. Spending extra time with patients who require specialised communication becomes challenging. It is not intentional neglect, but a matter of limited time.”*

As illustrated by one of the participant-N4: *“Sometimes one nurse attends to more than 40 patients in a shift. Providing individualised attention to persons with disabilities becomes*

difficult. The system does not allow enough time for inclusive practice.”

Similarly, another participant-T5 during interviews said that: *“There is no designated focal person for disability services. Everyone is expected to manage without clear coordination. That creates gaps in continuity of care.”*

Financial Constraints and Limited Funding

Limited budget allocation for disability-inclusive initiatives was consistently cited. As evidence to these findings, one participant-N5 had this to say, *“Budget priorities rarely include disability-specific improvements. When funds are allocated, they go to urgent general needs. Inclusive infrastructure is seen as secondary.”*

This was mentioned by one of the participant-T4 as follows: *“We have proposed modifications for accessibility before, but funding is always the issue. Without financial backing, plans remain on paper. This slows progress significantly.”*

In conformity with the above findings, one participant-PwD3 during interviews said that: *“Patients with disabilities often incur extra transport and support costs. The health system does not provide subsidies. That discourages regular visits.”*

Limited Professional Competence and Training

Another theme that emerged the findings indicated that limited professional competence and training comprising sub-themes that included lack of disability-specific training, communication barriers, negative attitudes and implicit bias and limited multidisciplinary collaboration.

Lack of Disability-Specific Training

Participants reported minimal exposure to disability-inclusive care during professional training. This was confirmed by participant-T3 who supported these findings: *“In medical school, we were not adequately trained on how to communicate with patients who have intellectual or sensory disabilities. Most of what we know comes from experience. That learning process is slow and inconsistent.”*

Adding to the same discussion, another participant-T5 expressed additional feelings by saying that: *“There is no structured in-service training focusing on inclusive healthcare. We rely on personal initiative to learn. Not everyone has that opportunity.”*

Supporting the findings above, one participant-D5 lamented that: *“We are trained to treat diseases, not necessarily to understand disability as a social issue. That gap affects how services are delivered. It influences attitudes unconsciously.”*

Communication Barriers

Communication challenges were frequently reported, especially with patients who are deaf or have speech impairments. In support of this view, Participant-N3 said that: *“We do not have sign language interpreters in this hospital. When a deaf patient comes alone, it becomes very difficult to communicate. We end up writing notes, which is not always effective.”*

Contributing on the same, participant-N5 said: *“Explaining complex medical conditions to patients with intellectual disabilities requires skill. Without proper training, misunderstandings occur. That can affect treatment adherence.”*

Additionally, participant-D4 said: *“Sometimes family members speak on behalf of the patient. It reduces patient autonomy. We struggle to balance inclusion and practicality.”*

Negative Attitudes and Implicit Bias

Some providers acknowledged the presence of stigma and unconscious bias. In support, participant-D3 had this to say: *“Some staff members assume that persons with disabilities have a lower quality of life. Such assumptions can influence clinical decisions. It is a serious ethical concern.”*

Also, participant-T5 had this to say: *“There are instances where patients with disabilities are prioritised last because they are seen as ‘complicated.’ This is unfair but happens due to workload pressure. It reflects deeper attitudinal issues.”*

Additionally, Participant-T1 said: *“If healthcare workers are not sensitised, they may unintentionally communicate disrespect. The tone and body language matter. Patients notice these subtle behaviours.”*

Limited Multidisciplinary Collaboration

Participants noted weak coordination among healthcare professionals. In support, participant-N3 had this to say: *“There is little collaboration*

between doctors, physiotherapists, and social workers. Each department works in isolation. That affects holistic care.”

Contributing on the same another participant-D1 had this to say: *“Inclusive healthcare requires teamwork, but our referral systems are fragmented. Patients move from one unit to another without proper follow-up. Continuity suffers.”*

Another participant-D4 said: *“We rarely have case conferences for patients with complex disabilities. Such platforms would improve coordinated care. Currently, it is informal and inconsistent.”*

Policy and Systemic Implementation Gaps

Another theme that emerged from the findings was policy and systemic implementation gaps this was evident from sub-theme that included weak policy implementation, inadequate data and documentation systems, limited community engagement and awareness, transportation and geographic barriers.

Weak Policy Implementation

Participants acknowledged the presence of policies but weak enforcement. In conformity with the above findings, participant-T5 during interviews said that: *“Policies promoting inclusive healthcare exist, but implementation is weak. There is no monitoring mechanism. Without accountability, progress is slow.”*

Contributing on the same another participant-D4 had this to say: *“We are aware of disability rights frameworks, but practical guidelines are missing. Staff need operational direction. Otherwise, policies remain theoretical.”*

In support of the findings, participant-D2 said: *“There is a gap between national policy and what happens at facility level. Communication is limited. We often operate without clear directives.”*

Inadequate Data and Documentation Systems

Participants cited lack of disability-disaggregated data. In support one participant-N4 had this to say: *“Our registers do not capture detailed disability categories. Without data, planning becomes guesswork. It is difficult to allocate resources appropriately.”*

Contributing to the same subject; during the interviews participant-T1 lamented that *“We*

cannot track health outcomes specifically for persons with disabilities. That limits evidence-based decision-making. Data systems need reform.”

On the same, participant-T5 had this to say: *“There is no structured reporting mechanism on inclusive service delivery. Monitoring progress becomes challenging. It affects evaluation efforts.”*

Limited Community Engagement and Awareness

Participants highlighted low community awareness as a barrier. In support of the findings above, participant-T4 had this to say: *“Many families still hide members with disabilities due to stigma. This delays health-seeking behaviour. Community sensitisation is needed.”*

This view is reflected in the assertion made by participant-N4, PwD2: *“Outreach programmes rarely target persons with disabilities specifically. They are often overlooked in public health campaigns. That widens the service gap.”*

To confirm this claim, participant-D1 said, *“We need stronger partnerships with disability organisations. Community involvement would strengthen trust. Currently, engagement is minimal.”*

Transportation and Geographic Barriers

Distance and transport challenges affected access to services. To confirm this claim T4 said, *“Patients from rural areas struggle to reach the facility. Transport is expensive and not disability-friendly. Some miss appointments repeatedly.”*

Moreover, D3 adds to this observation by pointing out that: *“Ambulance services are limited and not equipped for patients with complex disabilities. Emergencies become more complicated. Timely intervention is compromised.”*

Participant-N2 echoed: *“For follow-up visits, many patients simply do not return. The journey is long and exhausting. Accessibility goes beyond the hospital walls.”*

These findings reveal that challenges affecting the provision of inclusive healthcare services are multifaceted, encompassing infrastructural, professional, attitudinal, and systemic dimensions that require coordinated and evidence-based interventions.

Strategic interventions that enhance quality and equitable access to inclusive healthcare services

The study findings further revealed that there are existing opportunities and strategic interventions that can enhance equitable access and improve the quality of inclusive healthcare services for individuals with special needs and/or disabilities. These constituted the following themes strengthening institutional capacity and infrastructure, enhancing professional competence and workforce development, policy reform, community engagement, and systems innovation.

Strengthening Institutional Capacity and Infrastructure

The theme that emerged from the findings suggested the strengthening institutional capacity and infrastructure supported by following subthemes; upgrading physical accessibility and universal design, procurement of assistive devices and adaptive equipment, dedicated disability focal persons and units, and increased budget allocation and resource mobilisation.

Upgrading Physical Accessibility and Universal Design

Participants identified infrastructure modification as a practical and achievable intervention to improve inclusive healthcare delivery. They noted that gradual renovations guided by universal design principles could significantly enhance patient dignity and independence. In support participant-D1 had this to say: *“We have already started discussing the installation of ramps and widening of doorways in the outpatient department. These changes are not overly expensive if implemented in phases. With proper planning, accessibility can be improved progressively.”*

Participant-PwD4 supported the above point and said: *“Simple adjustments like handrails, accessible toilets, and clear signage can make a big difference. Patients feel more confident when they can move independently. It also reduces the burden on staff.”* Nurse 1:

Participant-D5’s comments: *“If new health facilities are designed with universal access in mind from the beginning, long-term costs will reduce. Retrofitting is expensive, but proactive planning is sustainable. Infrastructure reform is a realistic opportunity.”*

Procurement of Assistive Devices and Adaptive Equipment

Healthcare providers highlighted the importance of equipping facilities with adaptive tools to enhance diagnostic and treatment processes. Participant N5's insights on this matter suggest that, *"Having adjustable examination beds and accessible weighing scales would improve clinical assessments. These tools are not luxuries but necessities. They directly improve quality of care."* In addition, participant-D2 had this to say: *"introducing basic communication boards and hearing support devices could transform consultations. Patients would better understand their diagnosis and treatment plans. That improves adherence."*

From interview transcripts this is what the participant-N3 had to say *"If management prioritises procurement of assistive technologies, service delivery will become more inclusive. Even small devices can make a significant difference. We just need intentional budgeting."*

Dedicated Disability Focal Persons and Units

Participants suggested appointing disability focal persons within facilities to coordinate inclusive services. From the interview transcripts participant-D4, indicated that: *"Designating a disability focal point would streamline coordination of services. Patients with complex needs would receive guided support. It would also improve referral systems."*

From the interview transcript, this is what participant-N4 has to say: *"A specialised desk for patients with disabilities could reduce waiting times. It would signal institutional commitment to inclusion. That visibility builds trust."*

Another participant-T4, member added *"If we establish a small multidisciplinary team focusing on disability care, service integration would improve. Collaboration is key for holistic management. This is a feasible intervention."*

Increased Budget Allocation and Resource Mobilisation

Participants recognised financial planning as a strategic opportunity for sustainable inclusion. This participant-N2 was quoted as saying: *"If disability inclusion is clearly reflected in the annual budget, improvements will follow. Financial commitment shows seriousness. It shifts inclusion from rhetoric to action."*

Participant-T5 indicated that: *"Partnerships with NGOs and disability organisations can help*

mobilise additional resources. Collaboration can bridge funding gaps. It is about strategic networking."

Likewise, another participant-T3 had this to say: *"Allocating funds specifically for accessibility audits would help us identify gaps. Evidence-based budgeting is necessary. It strengthens accountability."*

Enhancing Professional Competence and Workforce Development

Further, enhancing professional competence and workforce development emerged as another theme. The following were the subthemes; disability-inclusive training and continuous professional development, strengthening communication support systems, promoting positive attitudes and ethical sensitisation, and strengthening multidisciplinary collaboration.

Disability-Inclusive Training and Continuous Professional Development

Participants emphasised structured training as central to improving inclusive healthcare delivery. To elaborate on this, one participant-D4 said the following: *"Incorporating disability competence into medical training would change attitudes early. It would equip future doctors with practical skills. Education shapes practice."*

During the interview, the participant-N5 was quoted as saying: *"Regular in-service workshops on inclusive communication are needed. Skills must be refreshed continuously. Training promotes confidence."*

Alongside this, participant-T1 added: *"Simulation exercises on interacting with patients with different disabilities could be effective. Experiential learning enhances empathy. It prepares us for real-life scenarios."*

Strengthening Communication Support Systems

Improving communication mechanisms was seen as a strategic intervention to enhance patient-centred care, as one of the participant-D2 was quoted as saying: *"Employing part-time sign language interpreters would significantly improve service delivery. Communication barriers would reduce immediately. Patients would feel respected."* One of the participant-T5 was quoted during the interview assaying *"Developing easy-to-read and pictorial health education materials would benefit patients with intellectual disabilities. Information*

must be accessible. That supports informed consent.”

To further support the strengthening communication support systems interviewed participant-N4, who gave insights during the conversation: *“Digital translation tools and mobile applications could assist during consultations. Technology offers practical solutions. We just need institutional support to implement them.”*

Promoting Positive Attitudes and Ethical Sensitisation

Participants identified attitudinal transformation as a key opportunity. In explaining this suggestion, a participant-D3 was quoted as saying: *“Regular sensitisation programmes can challenge unconscious bias. Awareness is the first step toward behavioural change. Inclusive care begins with mindset.”*

On this matter, one participant-N5 illustrated by saying: *“Sharing success stories of patients with disabilities can inspire staff. It humanises care. It reminds us of our professional responsibility.”*

In explaining this, one participant-T2 shared his thoughts by saying: *“Ethics training should emphasise dignity and autonomy for persons with disabilities. Respect must be central to clinical practice. Professional culture can evolve.”*

Strengthening Multidisciplinary Collaboration

Participants highlighted coordinated teamwork as an opportunity for holistic care. In explaining this, one participant-T4 was quoted as saying: *“Regular case conferences involving physiotherapists, social workers, and clinicians would improve coordination. Complex cases need collective expertise. Teamwork enhances outcomes.”*

In support of these findings, one participant-N3 explained that: *“Integrated referral pathways can reduce fragmentation. Patients should not navigate the system alone. Structured collaboration improves continuity of care.”*

In this regard, the participant-D4 made comments such as the following: *“Interdepartmental communication platforms can streamline follow-ups. Shared documentation systems would help. Collaboration strengthens service quality.”*

Policy Reform, Community Engagement, and Systems Innovation

Another theme that emerged from the findings during interviews was policy reform, community

engagement, and systems innovation. This was evident from sub-theme that included strengthening policy implementation and accountability, improving disability-disaggregated data systems, community sensitisation and outreach programmes, leveraging digital health and telemedicine innovations.

Strengthening Policy Implementation and Accountability

Participants viewed policy enforcement as a major opportunity for transformation. One participant-D5 shared this view in the following way: *“Clear operational guidelines on inclusive healthcare would help facilities translate policy into practice. Monitoring mechanisms are necessary. Accountability drives change.”*

One of the participant-N1, for example, said that: *“Periodic audits on accessibility standards would motivate improvement. Evaluation promotes compliance. It ensures progress is measurable.”*

The following provides an example of a participant-D2’s contribution, attesting to this idea: *“Linking inclusive healthcare indicators to performance appraisal systems could encourage institutional commitment. Incentives matter. Policy must influence practice.”*

Improving Disability-Disaggregated Data Systems

Data reform was identified as essential for evidence-based planning. In addition to this, an interviewee, a participant-N3 in his part stated as: *“If our registers capture disability categories clearly, planning will improve. Data informs budgeting. It allows targeted interventions.”*

Participant-D3 responded as follows: *“Monitoring health outcomes of patients with disabilities separately would reveal disparities. Evidence supports advocacy. Without data, inequities remain hidden.”*

Also, participant-N3 explained this as follows: *“Digital health records can be modified to include disability indicators. Technology can support inclusion. It enhances accountability.”*

Community Sensitisation and Outreach Programmes

Participants emphasised the importance of community-level engagement. This was expressed by one of the participant-T5 as follows: *“Community outreach tailored to persons*

with disabilities would improve early health-seeking behaviour. Awareness reduces stigma. Prevention becomes possible.”

These sentiments were shared by one of the participant-T2: *“Partnering with disability advocacy groups can strengthen trust between facilities and communities. Collaboration enhances outreach effectiveness. Inclusion must extend beyond hospital walls.”*

Another participant-N5 reported *“Health education campaigns should intentionally include disability representation. Visibility promotes acceptance. It changes social perceptions.”*

Leveraging Digital Health and Telemedicine Innovations

Technology was identified as a transformative opportunity. This was raised by one of the participant-D2 as follows: *“Telemedicine services could reduce travel burdens for patients with mobility challenges. Remote consultations are convenient. They improve continuity of care.”*

Yet, D5 explained by the response: *“Mobile health reminders and follow-up calls can support treatment adherence. Digital tools increase accessibility. Innovation can bridge geographic gaps.”*

In addition, another participant-D2 highlighted that *“Online appointment systems prioritising persons with disabilities could reduce waiting times. Technology can enhance efficiency. Inclusive design must guide digital transformation.”*

From the findings reveal that while challenges persist, healthcare providers recognise significant institutional, professional, policy, and technological opportunities that, if strategically implemented, can enhance equitable access to and quality of inclusive healthcare services for individuals with special needs and/or disabilities.

Discussion of findings

Challenges Affecting the Provision of Inclusive Healthcare Services for Individuals with Special Needs and/or Disabilities: This study reveals that the provision of inclusive healthcare for persons with disabilities (PWD) in Zambia is shaped by interrelated structural, professional, and systemic factors. Guided by the Social Model of Disability, the findings underscore that exclusion arises primarily from environmental, institutional, and attitudinal barriers rather than individual

impairments (WHO, 2022; Goktas et al., 2025). Participants reported widespread inaccessibility in health facilities, including steep or absent ramps, non-adjustable beds, inaccessible WCs, limited signage, and absent lifts, illustrating a system designed around able-bodied norms. Such structural barriers diminish autonomy, dignity, confidentiality, and quality of care, restricting participation in everyday life (Banda-Chalwe, 2014; CMS, 2017; WHO, 2024). Inaccessible communication and information further impede access, while assistive devices including wheelchairs, hearing aids, glasses, and communication tools remain scarce and expensive, often requiring travel outside local districts. Provision of affordable assistive technology, rehabilitation, and specialist services is essential for inclusion, independence, and meaningful participation (Matter et al., 2016; Ebenezer et al., 2025). Participants emphasized universal design aligned modifications, such as ramps, handrails, adjustable examination tables, accessible toilets, and clear signage, to enhance navigation and dignity (CMS, 2017; WHO, 2022). Geographic and transport barriers exacerbate inequities, particularly in rural areas with poor roads, limited public transport, and high travel costs (Duri & Luke, 2022; Evans et al., 2022; Vergunst et al., 2017).

Workforce limitations and professional competence further constrain inclusive care. Participants reported minimal disability-specific training, reliance on experiential learning, and workforce shortages, undermining disability-competent services (Shakespeare et al., 2021; WHO, 2022; CDC, 2025). They advocated for pre-service curricula and continuous professional development on disability, communication, consent, ethics, and anti-stigma education; inclusion of PWD in the workforce to foster empathy; and employment of allied health professionals to ensure timely, specialized care. Communication challenges, particularly for patients who are deaf or have intellectual disabilities, compromise informed consent and autonomy. On-demand sign language interpreters, easy-to-read and pictorial materials, and clear patient guidance are critical (Hommes et al., 2018; Sanchez, 2025; Slade et al., 2024).

Multidisciplinary teams including doctors, nurses, therapists, psychologists, social workers, and other specialists support coordinated, person-centred care. Negative attitudes, implicit bias, and low awareness among healthcare workers reflect systemic attitudinal barriers embedded in professional norms (Krahn et al., 2015; VanPuymbrouck et al., 2020; ABA, 2024), highlighting the need for ethics-based sensitization and rights-oriented standards.

Despite legislative commitments such as Zambia's 2025 National Policy on Persons with Disabilities and National Disability Mainstreaming Guidelines, operationalization remains limited (UNDP/GRZ, 2025; ILO, 2025). Weak enforcement, lack of disability-disaggregated data, and inadequate monitoring perpetuate the invisibility of PWD in health statistics and limit institutional responsiveness (Chiluba, 2019; WHO, 2022). Participants emphasized community awareness, peer support, and advocacy training to empower PWD in navigating healthcare services independently, leveraging Village Health Teams, healthcare workers, and community meetings to disseminate information (UNICEF, 2023; WHO, 2025).

Strategic interventions that enhance quality and equitable access to inclusive healthcare services: Participants identified strategic opportunities that align with global health equity literature and the Social Model of Disability, emphasizing system-level transformation. Phased facility renovations, ramps, handrails, adjustable examination tables, accessible toilets, clear signage, and affordable assistive devices enhance accessibility, dignity, and patient experience (Matter et al., 2016; CMS, 2017; Chiluba, 2019; WHO, 2022). Disability-inclusive curricula, continuous training, experiential learning with PWD, and inclusive recruitment improve competency, empathy, and care quality, supporting accurate diagnosis, timely intervention, and person-centered care (Shakespeare et al., 2021; VanPuymbrouck et al., 2020). Multidisciplinary teams provide holistic, coordinated care, with individualized, dynamic plans that involve patients and caregivers to foster autonomy. Operational guidelines, accessibility audits, performance indicators, and disability-

disaggregated EMRs enable evidence-based planning and accountability (WHO, 2022; UNDP/GRZ, 2025). Digital innovations telemedicine, SMS reminders, and accessible online platforms alongside economic and transport support, enhance awareness, access, and adherence, particularly in rural or resource-limited settings (Snoswell et al., 2023; Desroches et al., 2024).

In conclusion

inclusive healthcare for PWD in Zambia is constrained by deeply embedded structural, professional, and systemic barriers. These barriers are modifiable through universal design, workforce development, rights-based policy implementation, accessible technologies, and community engagement. Guided by the Social Model of Disability, this study affirms that systemic reform rather than individual adaptation is essential to achieving equity, dignity, and meaningful participation in healthcare. Implementing these interventions can transform Zambia's health system into one that is inclusive, person-centred, and aligned with global human rights and health equity standards.

Recommendations

Ministry of Health: Upgrade healthcare facilities with universal design, provide affordable assistive devices, and deliver disability-inclusive training to address structural, professional, and attitudinal barriers, enhancing access, competence, and quality of care.

Ministry of Education: Integrate disability awareness, inclusive healthcare education, and communication skills into pre-service training to prepare future health professionals for person-centered, disability-competent care.

Schools: Establish school-based health programs and train staff to improve health literacy, navigation of services, and advocacy skills, empowering learners with disabilities to participate actively in their healthcare.

School and Health Facility Administration: Implement accessible infrastructure, disability-disaggregated monitoring, and multidisciplinary collaboration while fostering partnerships with disability organizations to strengthen inclusive and accountable service delivery.

Strengths and Limitations of the study

This study provides an in-depth, multi-perspective exploration of inclusive healthcare for persons with disabilities in Zambia, integrating provider, administrator, and service-user insights. Use of a multiple-site case study design, purposive sampling, and triangulated data collection enhanced credibility and contextual richness. Guided by the Social Model of Disability, findings link lived experiences to systemic and institutional barriers. Limitations include restricted generalizability, potential self-report bias, and a limited number of facilities and participants, which may not capture the full diversity of experiences.

Consent for participants

Informed consent was obtained from all participants in the research.

Conflict of Interest

The authors declare no conflict of interest, financial or otherwise.

About the Authors

Moses Chisala (PhD) is a Consultant, Researcher, Reviewer and Curriculum Specialist in Special/Inclusive Education. Found in Directorate of Curriculum Development at the Ministry of Education-HQ as Senior Curriculum Specialist-Special Education. He holds a PhD in Education-Special Education, Master of Education Degree in Special education, Bachelor of Education in Special Education with Civic Education from the University of Zambia, in addition, a Certificate in Primary Education. His research interests include: Special/Inclusive Education; Child Protection, Curriculum for LSEND and ICT in Special/Inclusive Education

Dr. Thomas Mtonga, is a Special Research Fellow in the Doctor of Philosophy in Special Education degree programme at the University of Zambia. He holds a Master of Education in Special Education of the University of Zambia and Master of Arts in Human Rights from University of Leeds in United Kingdom. Further, he has a Bachelor of Education in Special Education from university of Zambia and a Diploma in Education from KwameNkrumah University in Zambia. He is currently a lecturer at New York University Abu Dhabi Compass. USA and Part-time at the university of Zambia and is, visually impaired. He has worked as a secondary teacher of English and

Religious Education in Zambian secondary schools and serves as an advisor on a number of international and national organizations dealing with persons living with disabilities. His research interests include: Advocacy and sensitization on disability and Human rights; disability, poverty and education and inclusive education methodologies.

Florence Sememba is a Specialist Teacher, Master Trainer and Curriculum Developer for Special/Inclusive Education and Early Childhood Education. Currently is specialist teacher for learners with special education and /or Disabilities at Pemba Primary Unit in Pemba District, Southern Province. She holds Master of Education in Special Education at Rockview University, then Bachelor of Education in Special Education and English from the Victoria Falls University of Technology. In addition, she has ECE Teacher's Certificate from Moi-u-Tunya College of Education. His research interests include: Special Education; Early Childhood Education and education for learners with hearing impairment.

Prof. Daniel Ndhlovu is a Professor of Guidance and Counselling at the University of Zambia and found in the Department of Educational Psychology, Sociology, and Special Education. He has written and published in international peer-reviewed journals. He has co-authored four books and single-authored one book currently used in schools, colleges and universities. He has so far supervised and examined more than 100 masters and PhD students. His areas of interest are Guidance and Counselling and Special Education, He has more than 36 years of teaching and administrative experience.

References

- ABA. (2024). *Disability rights and health care ethics*. American Bar Association.
- Adugna, M. B., Nabbouh, F., Shehata, S., & Setareh, G. (2020). Barriers and facilitators to healthcare access for children with disabilities in low and middle income sub-Saharan African countries: A scoping review. *BMC Health Serv Res*, 20, Article 15. <https://doi.org/10.1186/s12913-019-4822-6>
- Banda-Chalwe, N., Nitz, J., & de Jonge, D. (2014). Accessibility of the built environment for persons with mobility impairments in Zambia. *Disability and Rehabilitation*, 36(18), 1524–1532.
- CDC. (2025). *Disability inclusion strategies in healthcare workforce development*. Centers for Disease Control and Prevention.
- Chiluba, B. and Phiri. J. (2019). Tackling Disability of Speech Due to Stroke: Perspectives from Stroke Caregivers of the University Teaching Hospital in Zambia.” *IJDS Indonesian Journal of Disability Studies* 6: 215–222.
- Chiluba, M. (2019). Policy implementation challenges in promoting accessibility for persons with disabilities in Zambia. *Journal of Disability Policy Studies*, 30(2), 85–96.
- CMS. (2017). *Accessibility of healthcare facilities: Issue brief*. Centers for Medicare & Medicaid Services.
- Desroches, S., et al. (2024). Telehealth for adults with developmental disabilities: Best practices and accessibility considerations. *Journal of Telemedicine and Telecare*, 30(1), 45–60.
- Devkota, H. R., Kett, M., & Groce, N. (2019). Societal attitude and behaviours towards women with disabilities in rural Nepal: Pregnancy, childbirth and motherhood. *BMC Pregnancy and Childbirth*, 19, 20. <https://doi.org/10.1186/s12884-019-2171-4>
- Duri, S., & Luke, N. (2022). Transport barriers and healthcare access for persons with disabilities in rural Africa. *Journal of Transport and Supply Chain Management*, 16(1), 1–15.
- Ebenezer M. G., Ebenezer D., Opoku, M. P., Mprah, W. K., Nketsia, W., Ntoaduro, A., Mensah, A. P., Opoku. C., Tutu, O. C., Zakia, I., Adade, R. and Okyere, P. (2025). Consumers’ recommendations for improving access to healthcare services to adolescents with disabilities in Ghana. . *BMC Research Notes* (2025) 18:213 <https://doi.org/10.1186/s13104-025-07267-3>
- Evans, D., et al. (2022). Rural transport and healthcare utilization among persons with disabilities. *PLOS ONE*, 17(3), e0265581.
- Godwill, A. & Chirac A. J. (2025). Promoting Access to Healthcare for People with Disabilities: A presentation of the Inclusive Health Care Strategy of CBC Health Services in Cameroon. *International Journal of Research and Innovation in Social Science (IJRISS)* ISSN No. 2454-6186 | DOI: 10.47772/IJRISS | Volume IX Issue V May 2025
- Goktas, B., Çetinkaya Şen, Y., Ülgü, M.M., Yilmaz, S. (2025). *Challenges and Innovations with Enhancing Healthcare Access for People with Disabilities*. In: Bennett, G., Goodall, E. (eds) *The Palgrave Encyclopedia of Disability*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-031-40858-8_397-1
- Greaux, C., et al. (2023). *Inclusive health systems: Global lessons for equity*. Springer Health Policy Series.
- Hashemi, G., Wickenden, M., Bright, T. & Kuper, H. (2022). Barriers to accessing primary healthcare services for people with disabilities in low and middleincome countries, a Meta-synthesis of qualitative studies, *Disability and Rehabilitation*, DOI: 10.1080/09638288.2020.1817984
- Hashemi, G., Wickenden, M., Bright, T., & Kuper, H. (2022). Barriers to accessing primary healthcare services for people with disabilities in low and middle-income countries, a Meta-synthesis of qualitative studies. *Disability and Rehabilitation*, 44(8), 1207–1220.
- Hommes, T., et al. (2018). Communication support for patients with hearing or cognitive impairments. *Patient Safety Journal*, 14(2), 55–64.
- ILO. (2025). *National Disability Mainstreaming Guidelines implementation report*. International Labour Organization.

- Krahn, G., Walker, D., & Correa-De-Araujo, R. (2015). Persons with disabilities as a health disparities population. *American Journal of Public Health*, 105(S2), S198–S206.
- McKinney EL, McKinney V, Swartz L. (2021). Access to healthcare for people with disabilities in South Africa: Bad at any time, worse during COVID-19? *S Afr Fam Pract*. 2021;63(1), a5226.
<https://doi.org/10.4102/safp.v63i1.5226>
- Mesmar A, Mbaabu Limungi G, Elmadani M, Simon K, Hamad O, Tóth L, Horvath E and Mate O (2025) Bridging healthcare disparities: a systematic review of healthcare access for disabled individuals in rural and urban areas. *Front. Health Serv*. 5:1695320. doi: 10.3389/frhs.2025.169532
- Neupane P, Adhikari S, Khanal S, Devkota S, Sharma M, Shrestha A, et al. (2024) Understanding challenges and enhancing the competency of healthcare providers for disability inclusive sexual and reproductive health services in rural Nepal. *PLoS ONE* 19(12): e0311944.
<https://doi.org/10.1371/journal.pone.0311944>
- Oliver, M. (1996). *Understanding disability: From theory to practice*. London, UK: Macmillan.
- Sanchez, L. (2025). *Accessible communication in healthcare*. Springer Health Services Research.
- Scherer N, Chabaputa R, Chansa-Kabali T, Nseibo K, McKenzie J, Banda-Chalwe M, et al. (2025) Access to healthcare for people with disabilities in Zambia: a qualitative study. *PLOS Glob Public Health* 5(3): e0004145.
- Scherer, Nathaniel, Martha Banda-Chalwe, Tamara Chansa-Kabali, Kofi Nseibo, Queen E. Seketi, Judith McKenzie, and Tracey Smythe. (2024). “Disability Research in Zambia: A Scoping Review.” *Scandinavian Journal of Disability Research* 26(1): 44–66. DOI: <https://doi.org/10.16993/sjdr.1095>
- Shakespeare, T., Watson, N., & Bright, T. (2021). Disability competence in health professional education. *The Lancet*, 398(10305), 2056–2068.
- Slade, A., et al. (2024). Sign language interpretation in clinical settings: Challenges and solutions. *Joint Commission Journal on Quality and Patient Safety*, 50(1), 23–33.
- Snoswell, C., et al. (2023). Telemedicine effectiveness and accessibility. *Journal of Medical Internet Research*, 25(4), e45678.
- Ssemata AS, Smythe T, Sande S, et al. (2024). Exploring the barriers to healthcare access among persons with disabilities: a qualitative study in rural Luuka district, Uganda. *BMJ Open* 2024;14:e086194. doi:10.1136/bmjopen-2024-086194
- Tom Shakespeare. (2014). *Disability rights and wrongs revisited* (2nd ed.). London, UK: Routledge.
- UNDP/GRZ. (2025). *National Policy on Persons with Disabilities: Implementation report*. United Nations Development Programme and Government of the Republic of Zambia.
- UNICEF. (2023). *Social behavior change for disability inclusion in healthcare*. United Nations Children’s Fund.
- VanPuymbrouck, L., et al. (2020). Implicit bias and healthcare provision for persons with disabilities. *C-Q-L Journal*, 12(3), 105–118.
- Vergunst, R., et al. (2017). *Distance and disability: Transport barriers to healthcare*. OpenUCT.
- Vergunst, R., Swartz, L., Hem, K.-G., Eide, A. H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S. H., & Schneider, M. (2017). Access to health care for persons with disabilities in rural South Africa. *BMC Health Services Research*, 17, Article 741.
<https://doi.org/10.1186/s12913-017-2674-5>
- World Bank. (2022). *Disability-Inclusive Health Care Systems: Technical Note for World Bank Task Teams*. © World Bank. <http://hdl.handle.net/10986/38353> License: CC BY 3.0 IGO.”
- World Health Organization. (2022). *Global Report on Health Equity for Persons with Disabilities*. Geneva: World Health Organization
- World Health Organization. (2024). Feature: Accessibility in healthcare facilities. World Health Organization.