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PERSPECTIVES IN REHABILITATION

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Education and social inclusion of people with disabilities in five countries in West Africa: a literature review

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ABSTRACT

Purpose: An estimated 1 billion people worldwide live with some form of disability. With the adoption of the Sustainable Development Goals and the "Leave no one behind" agenda, there is a global momentum to ensure that disadvantaged groups, not least people with disabilities, are included and accounted for, in mainstream development efforts. However, in many low-income settings little is known about disability and the policies and programs in place to improve the lives of those affected.

Method: This literature review describes the extent and quality of published and unpublished literature on education and social inclusion of people with disabilities in five West African countries: Cameroon, Liberia, Mali, Sierra Leone and Senegal.

Results: Fifty-four unique documents met inclusion criteria of the review and described related policy and legislation; national and international stakeholders; intervention programs and primary research related to disability and inclusion. The majority of documents were from Sierra Leone (19); and four described more than one country. Primary research included mainly qualitative studies and cross-sectional surveys; 33 sources were critically appraised with the majority being attributed unclear risk of bias (20).

Conclusions: The findings call for (i) standardized tools for monitoring the implementation of programs and policies at national level; (ii) improved stakeholder coordination mechanisms; (iii) development and adoption of coordinated approaches to measuring disability and social exclusion; (iv) rigorous evaluations of the effectiveness of disability programs and (v) disaggregation of routine data by disability.

➤ **IMPLICATION FOR REHABILITATION**
- There is a need for standardized tools for monitoring the implementation of programs and policies at national level.
- Countries that have not yet ratified the UNCRPD or the protocol should be supported to do so.
- Stakeholder coordination mechanisms need to be improved.
- Improved coordination between stakeholders involved in disability at the country level could help improve the quality of services delivered.
- Development and adoption of coordinated approaches is key to measuring disability and social exclusion.
- There are few, if any, rigorous evaluation of the effectiveness of disability-specific evaluations in the five countries.
- There is a need for disaggregation of routine data from development programs by disability to inform implementation.

Introduction

The World Health Organization estimates that 15% of the world's population, i.e., over one billion people, live with some form of disability [1]. Women, older people and people in low income settings are disproportionately affected by disability due to increased health risks and limited access to services. The United Nations Convention on the Rights of Persons with Disabilities is a global treaty that affirms the rights and fundamental freedoms of people with disabilities and describes how adaptations must be made for people with disabilities to participate fully in society [2]. Although 166 countries signed the United Nations Convention on the Rights of Persons with Disabilities, its implementation varies and remains a challenge in many settings.

The World Report on Disability published by the World Health Organization in 2011 suggests that the prevalence of severe and moderate disabilities is higher in Africa than in many other regions of the world, especially in younger (<60 years) population groups [1]. Infectious diseases and injuries are likely to be responsible for much of this burden although the evidence on causes is limited [3,4].

Poverty and disability are closely linked [5], and in low income settings such as sub-Saharan Africa, the relationship between the two is extremely strong [6]. The limited resources available in these settings coupled with the lack of knowledge on disability have limited governments' capacity to invest in social inclusion, leaving this group increasingly marginalized and vulnerable. Efforts to improve the lives of people with disabilities in many

African settings have traditionally fallen on faith-based organizations and charities that have provided education, livelihood and healthcare services through a range of targeted but often small scale programs [7]. While these parallel services have undoubtedly been beneficial for many, their separate provision has compounded the idea of "segregation" and even unintentionally exempted governments from investing in services accessible to all citizens.

With the adoption of the Sustainable Development Goals and the "Leave no one behind" agenda, there is a global momentum to ensure that marginalized groups, not least people with disabilities, are included, and accounted for, in the mainstream development efforts [8]. While this renewed emphasis on inclusion is an achievement in itself, putting inclusion in to practice at scale will require robust evidence on both the current situation of people with disabilities in different settings and on the effectiveness of various approaches to support inclusion.

The literature review presented here was conducted as an integral part of a social inclusion program supported by the international non-governmental organization Sightsavers in West Africa. The review focused specifically on five West African countries: Cameroon, Mali, Liberia, Senegal and Sierra Leone. The program was funded by Irish Aid and the purpose of the review was to gain an understanding of the current situation regarding education and social inclusion of people with disabilities in the five target countries. More specifically, the review focused on four research questions:

1. Which state and non-state actors are involved in the education and social inclusion of people with disabilities in the five countries, and what is the extent of their involvement?

2. What international and national legislation and policies pertaining to the education and social inclusion of people with disabilities have been passed in each of the countries?

3. What programs, projects and other activities focusing primarily or substantively on the education and social inclusion of people with disabilities have been documented in the literature and what are their key features?

4. What is the scope and findings of the published research on the education and social inclusion of people with disabilities in the five countries?

The review was conducted with the intention of identifying the key policy and program implementation challenges and evidence gaps, and to develop recommendations for future programs in the region.

Methods

Search strategy

We searched for both published and unpublished literature. Published literature was identified through a number of electronic databases including the Campbell Collaboration Database, Education Resources Information Centre; Web of Science, Google Scholar, OVID, the British Library for Development Studies and the Leonard Cheshire Disability and Development Database combining search terms "disability", "education" and "social inclusion" and drawing on their thesaurus and non-thesaurus alternatives; the search was done for West Africa and for each of the five countries. We supplemented these sources with gray literature searched through the websites of research institutes, international non-governmental organization and donor organizations working in the region.

Sifting and inclusion criteria

Following the search and de-duplication, document abstracts were screened for eligibility based on the inclusion criteria:

- referring to the international frameworks on children, education, equality or disability signed by any of the five countries;
- describing national and local policies or legislation with the reference to equal opportunities and/or disability;
- describing international, national and local stakeholders working in the area of education, social inclusion or disability in any of the five countries;
- describing national and local programs, projects and activities in the area of disability;
- presenting primary research on disability and education and social inclusion of people with disabilities.

We included documents written in English or French and published between 1st January 2000 and July 2016. Documents published before 2000; written in other languages or referring to other countries in West Africa or elsewhere were excluded.

Data extraction and critical appraisal

Full texts of the eligible documents were read and key data were extracted and recorded using data extraction sheets and tabulation. Research studies eligible for inclusion were critically appraised using a validated appraisal checklist to assess the risk of bias in the case of qualitative studies and the trustworthiness or credibility in the case of qualitative studies. Papers referring to international frameworks and papers describing policies or legislation were not critically appraised. Papers reporting surveys were appraised using the Centre for Evidence-based Management checklist [9] and papers reporting qualitative studies were appraised using the Critical Appraisal Skills Programme qualitative checklist [10]. Based on the methods described in the paper, the documents were attributed the following grading: (i) likely to be credible or low risk of bias or (ii) unclear credibility or risk of bias, (iii) unlikely to be credible or high risk of bias. In the case of quantitative studies a source was attributed low risk of bias if it reported using reliable methods to collect the data (e.g., validated tools) and ensured the sample was representative of the population to which the findings were extrapolated. The risk of bias was considered unclear if the reviewers could not tell from the paper if the methods used were appropriate to answer the research question and/recruit participants; or if the study did not clearly report how potential biases and confounding factors were accounted for. High risk of bias was attributed if the sampling and data collection methods were not appropriate to answer the research question, and the study did not account for biases or confounding. In the case of qualitative studies a source was considered likely to be credible if it reported using appropriate and valid methods to sample participants and collect and analyze the data and the results reported were reliable and demonstrated responsiveness to the data and theoretical congruity. The credibility was considered to be unclear if the reviewers could not tell from the paper if the methods used were valid or if the study did not clearly demonstrate the reliability of the results. The paper was considered unlikely to be credible if the methods were not valid for the research question or if the results could not be considered to be reliable.

Data analysis

The data were analyzed using a narrative synthesis approach where the papers were read and the data were extracted into the

key themes which broadly corresponded the research questions. As the sources included in the review were heterogeneous, no meta-analysis was possible. However, the results from different sources are presented and contrasted alongside each other to identify similarities and differences.

Results

We retrieved 54 unique documents that met our inclusion criteria. Eight focused on policy and legislation; nine discussed specific programs and activities; 33 reported findings of primary research; and four provided information on more than one of the above topics.

The majority of documents were from Sierra Leone (19); and four described more than one country. Primary research included mainly qualitative studies and cross-sectional surveys. The majority of sources were attributed unclear risk of bias (20), as these failed to include information on methods to recruit participants or the validity of the tools used; and in many cases the papers did not report how they avoided selection bias. Low risk of bias was attributed to eight research papers, while five papers were attributed high risk of bias. Please refer to the supplemental file for more details on the characteristics of documents included in this review.

National and international stakeholders

The reviewed literature revealed a wide array of stakeholders involved in education and social inclusion of people with disabilities in the five countries. These included various governmental ministries; quasi-governmental agencies set up to implement government policies; multinational organizations; national and international non-governmental organizations; and national and international academic institutions. The most frequently named ministries were health, education and social welfare. Multinational organizations included the European Commission and various United Nations agencies, most often the International Labor Organization, the United Nations Educational Scientific and Cultural Organization and the World Health Organization. International non-governmental organization were multiple and included Handicap International, World Vision, Plan International, Leonard Cheshire, Sightsavers, Comic Relief, Missionaries Friends Association, Rotary Club and many others. Among academic institutions the International Centre for Disability and Rehabilitation at the University of Toronto; the International Centre for Evidence in Disability at the London School of Hygiene and Tropical Medicine and the Inclusive Development Centre at University College London were frequently named.

The most comprehensive description of stakeholders was found in the documents from Sierra-Leone, where the Ministry of Social Welfare, Gender and Children's Affairs have the mandate to assist vulnerable groups but most other ministries have disability desks to ensure issues pertaining to people with disabilities are mainstreamed in government policies and programs. For example, the Ministry of Education, Science and Technology, and the Special Educational Needs Unit within it, declares access of children with disabilities to education as a priority. Outside the public sector, stakeholders involved in education and social inclusion programs include Mercy Ships, Sightsavers, Christian Aid for Under-Assisted Societies Everywhere (Sierra Leone), Family Homes Movement – Association of Volunteers in International Service, Missionaries Friends Association, Cooperazione Internazionale, St Joseph's School for the Hearing Impaired (Makeni), Global Forum, Norwegian Friends of Sierra Leone, the National Council of Cheshire Service-SL, Cheshire Service Kabala, Sir Milton Margai Cheshire Home Bo, Comic Relief, Guernsey Overseas Aid Commission, Plan International and International Centre for Disability and Rehabilitation at the University of Toronto. These multiple stakeholders were reputedly involved in both advocacy and programs, including rehabilitation, health, education, housing and livelihood [11].

Legislation and policy

All five countries are signatories to and have ratified the United Nations Convention on the Rights of the Child. Although all the countries are signatories to the United Nations Convention United Nations Convention on the Rights of Persons with Disabilities and the optional protocol, to date (February 2017) only Mali had ratified both (in 2008). Senegal, Sierra Leone and Liberia had ratified the Convention (in 2010, 2010 and 2012, respectively) but not the protocol, while Cameroon is yet to ratify both the documents.

The governments also passed a range of national legislations to support equal opportunity policies in their countries. The most comprehensive description of disability-related policy frameworks was found in Sierra Leone, where the Disability Act was passed and the National Commission for people with disabilities and the National Development Fund for people with disabilities were established in 2011 [11]. The Act describes the composition, tenure, function, funding and accountability of the National Commission for people with disabilities and legally ensures the rights and privileges of people with disabilities [12]. A range of other national documents refer to the needs of specific subgroups of people with disabilities. For example, the post-conflict Truth and Reconciliation Commission and the War Victims Reparation Programme set up in Sierra Leone in 2004 articulate the needs of people with disabilities affected by war [11]. The National Social Security and Insurance Trust established in 2001 sets out the legal rights of formal sector employees and includes provisions for disability [13].

In education, in 2011, the government of Liberia passed a revised Education Act, which declares basic compulsory education for all children and requires children with disabilities to attend mainstream schools. Similarly, in Senegal, Law 91/22 (1991) declares schooling compulsory by law for all children aged 6 to 16 years irrespective of their background or characteristics [14]. Mali and Senegal also developed policies on early childhood development and education of all preschool children including children with disabilities [14,15].

The main challenge identified in the reviewed documents was a gap between policy formation and policy implementation, often due to the lack of resources available to the governments. For example, the Ministry of Health and Sanitation in Sierra Leone undertakes a formal responsibility for ensuring that people with disabilities have access to free medical care including rehabilitation services; in reality, however, insufficient resources are allocated to support these provisions making the implementation of the policy difficult, if not impossible [11]. Similarly, in Liberia, the 10 year Health and Social Welfare Policy was passed with the objective to expand access to basic health care services for all Liberian citizens on an equal basis. The practical implementation of this policy, however, has been constrained by poor infrastructure and the lack of funding within the system [16].

Another policy criticism identified in the literature was the non-explicit statement of the needs of people with disabilities, which often led to their marginalization and exclusion from the benefits of the general policies. Several examples to illustrate this were found in Cameroon, where the Ministry of Education and

Social Affairs put in place a number of measures to assist academic progress of students [17]. These include bursaries of the Department of Educational Planning, Cooperation and Assistance and prize-giving awards by schools, both based on academic excellence. These initiatives, however, did not make any provisions for children with greater support needs and resulted in the inability of these students to benefit from the policy. Similarly, trained Guidance counselors were made available in some government schools in Cameroon to cater for the academic, vocational and psycho-social needs of all students. However, no provisions have been made to the plight of vulnerable children, such as orphans or children with disabilities, which limited access of these students to the scheme.

We also found that some policy provisions limited to specific groups of people with disabilities had led to increased inequalities within the disability group. For example, an inter-ministerial action between the Ministries of Social Affairs and Secondary Education in Cameroon targets students with disabilities and aims at the exoneration of registration fees and Parent Teacher Association levies. This action, however, has been limited only to students with physical disabilities and children of disabled parents in public schools [17].

We identified only one example of a documented impact of disability legislation on the lives of people with disabilities. In Sierra Leone the 2011 Disability Act is thought to be a reason for prioritizing employment of people with disabilities in the government sector. As a result the national police force for the first time recruited four disabled officers to work in the communication center; the evaluation of the policy suggested that the employability of people with disabilities within the police structures had an opportunity to expand further, including among those working in the street [18].

Programs and activities

Two intervention programs were reported in Liberia. The objective of a project funded by the European Commission was to foster participatory and sustainable development in rural communities, improving the quality of lives of people with disabilities through a more effective, efficient and equitable access to education, healthcare, livelihood and empowerment [19]. Another project focusing on five counties: Montserrado, Bong, Nimba, Bassa and Margibiand aimed to pay school fees and provide uniforms, shoes, learning and assistive devices and educational materials to students with disabilities in primary schools. The project also appointed one disabled representative in each of the five counties' school boards and trained 45 teachers on issues related to disability [20].

In Senegal, a case study of a prosthetics and orthopedic rehabilitation center supporting people with physical disabilities of all ages was documented. The project targeted around 25% of the estimated number of people with physical disabilities; the key challenges reported by the project were engaging local community organizations and Disabled People Organisations and developing evidence for scaling up [21]. There was also a high patient to rehabilitation worker ratio resulting in long waiting times and reduced quality of care [21].

A range of programs were described in Sierra Leone. The World Bank supported multiple initiatives including vocational skills training centers, physical and psychological rehabilitation programs and advocacy works [11]. The National rehabilitation project targeting mobility and physical impairments aimed to identify infants with disabilities early on through community outreach and screening and refer them for treatment to specialist centers in three towns in Sierra Leone [22].

A number of programs in Sierra Leone targeted livelihoods or employment of people with disabilities. Leonard Cheshire Disability reported the National Social Action project that promoted waged employment for people with various impairments [23]. Another project called "Improving social inclusion and increasing employment opportunities for disabled people in Tanzania, Uganda and Sierra Leone" aimed to lift people with disabilities out of poverty by engaging them in to income generating activities. The project established or expanded Livelihoods Resource Centres in six locations in Sierra Leone. The Livelihoods Resource Centres provided space for people with disabilities to receive career guidance, counseling, job information and training. The project also built links with local employers and micro-finance institutions and supported people with disabilities to form community groups, which provided guidance on employment and access to loans and savings schemes [24].

The National Integrated Education Project jointly implemented by the Sierra Leone Ministry of Education and Sightsavers supported children with visual impairments by raising awareness about special educational needs; and providing teaching materials and in-service teacher training. Mainstream secondary schools were targeted to facilitate integration of children with disabilities in the mainstream education systems [20]. Youth clubs were supported to include over 200 disabled and non-disabled children, who learnt from each other and took part in a wide range of activities such as theater, singing, dancing and storytelling. The evidence highlighted the importance of awareness raising campaigns through community meetings, congregations at churches and mosques, posters and banners, and radio show interviews. The awareness raising was described as a significant boost for the project, encouraging more parents of children with disabilities to send their children to school, although no statistical data was presented to support this.

The project supported by Sightsavers in the rural village of Tienfala in Mali in 2006 provided water and sanitation facilities to blind people. The project replaced the old well, which was dangerous. The new well included a lower section with a ramped access suitable for wheelchair users and children [25].

Research evidence

Evidence from the research included in this review has been organized in four broad themes: (i) prevalence and types of disability, (ii) impact of disability on access to services and social participation; (iii) perception of disability by different population groups and (iv) description of enablers and barriers for disability inclusion.

Prevalence of disability

A number of publications reported prevalence, types and causes of disability but the results varied greatly between the settings, as the studies used different methodologies and tools. Thus, the reported prevalence of disability in the general population varied from 1.7% in Mali [26] to 17.1% in Sierra Leone [27]. Other reported prevalence estimates were 2.4% in the 2004 Census in Sierra Leone [28], 3.3% in Mali [29]; and 10.5% in a survey in the North-West region of Cameroon [30]. Prevalence of disability in children was reported in the Sierra Leone Census (0.37%) and in the analysis of the database of children supported by Plan International in Senegal (0.5%).

Prevalence of disability was generally higher in the rural populations [26] and among women [30,31]. The most common disabilities reported were lower-body impairments; visual impairments; auditory impairments and communication impairments [28,29]. For children, Plan International reported communication impairments as the most common type of disability, followed by physical impairments, learning difficulties, hearing impairments and visual impairments [32].

A study in a district in the West region of Cameroon showed that many disabilities were due to traffic accidents and inappropriate medical interventions [33]. In Mali congenital abnormalities, trauma, polio and leprosy were reported to be the most common causes [26]; while in Liberia mental health disabilities were related to war and postwar experiences [34].

Impact of disability. A large number of studies explored the effect of disability on health, education, social participation and livelihoods of people with disabilities. The evidence of the relationship between disability and marginalization has been reported in all five settings.

Adults with disabilities were more likely to experience serious health problems [30] and report limited access to healthcare and rehabilitation services [30]. A few studies examined specifically the relationship between disability and sexual health. People with disabilities were reported to be a vulnerable group for HIV and other sexually transmitted infections due to high levels of poverty, low literacy, and low likelihood of marriage, risky sexual behaviors and sexual violence in this population group [35–38].

In many settings both adults and children with disabilities reported significant limitations and environmental barriers in their domestic life, interpersonal relationships and self-care [30]. In Cameroon women with disabilities reported facing triple discrimination resulting from their gender, perceived inabilities and low socio-economic status [39].

A study conducted in Liberia among people with mental health issues reported limited access to education, employment and positive social relationships [34]. Another study in Liberia identified extreme poverty as the main challenge for people with disabilities, particularly in rural areas, where social protection services and access to justice were not available and opportunities for engagement in remunerative jobs barely existed [19].

In Sierra Leone people with disabilities reported difficulties in accessing educational institutions, healthcare facilities, workplaces, polling stations, municipal buildings and micro-finance institutions and schemes [40]. In Cameroon a study of the tourism and hospitality sector in the South West Region showed that the industry was not developed to accommodate needs of people with disabilities and the key barriers included inaccessible information and physical environment, social stigma and financial constraints [41].

Research in Mali focused on disability in the context of Water and sanitation programs and found that only 40% of people with disabilities could fetch water and the most common reasons for not being able to do so were physical or sensory limitations and disapproval of the family. Although the majority of people with disabilities were able to wash themselves once a day, some reported problems with moving the water to the bathing areas. Most households where people with disabilities lived did not have latrines and many had issues with both the access and use of sanitation facilities [29]. Another study from a small town of Kolokaniin in Mali reported that transportation of water and access to hand pumps were the key challenges for many people with physical impairments [42].

Many studies explored the impact of disability on education but the data varied greatly between the settings. Thus, in the Sierra Leone Census boys and girls with disabilities were 7% points and 10% points less likely to be in school than their non-disabled peers [28]. Among children supported by Plan International in Senegal girls and boys with disabilities were 3.7 times and 6.6 times less likely to receive formal education than their non-disabled counterparts [32]. In Cameroon children with disabilities were 20 times more likely to be out of school than children without disabilities [30].

The proportion of adults who were illiterate was also higher among people with disabilities in many settings but the data varied. Thus, a study in Sierra Leone reported that 46.5% of people with disabilities had never been to school and 63.9% were illiterate compared to 34.3% and 50.7% for people without disabilities respectively [40]. In Senegal 75% of the people with disabilities were illiterate compared to 60% among those without disabilities. The study also reported poor access to quality schooling for children with disabilities, especially in rural areas, as specialist schools were mainly located in or around Dakar [43].

A range of studies focused on social protection and access to labor markets. All reported lower rates of employment by people with disabilities but the data varied greatly. Thus, an International Labor Organization assessment of labor market participation by people with disabilities in Cameroon showed that 69.1% of study participants with disabilities were employed compared to 75.8% of those without disabilities [44]. Another study from Cameroon used data from the 2007 Household Survey and suggested that disability was a barrier to employment in urban areas, particularly for women [39]. Women with disabilities were 5.5% less likely to enter the labor market than their non-disabled counterparts [39].

In Senegal, 21% of the study participants with disabilities and 53% of those without disabilities were reported to be employed [43]. Another study in Dakar, Senegal used qualitative methodology with families of people with physical disabilities and found that people with disabilities had low socio-economic status and often earned their living either as beggars or apprentices in workshops [45]. In Mali around 53% of people with disabilities had an income generating activity; others fulfilled their basic needs with the help of the family, neighbors or by begging [29].

The data from the Sierra Leone Census suggests an 8% gap (38% vs. 46%) in employment rates among people with and without disabilities [28]. The rates of employment were lower for women (31%) and people with specific impairments (26% for people with mental disabilities; 25% for those with visual impairments; and 8% for those with hearing or speech impairments). The average earnings were also lower among all disability groups compared to the general population [28]. Another study in Sierra Leone suggested lower employment rates overall and a 12% gap (10.4% vs. 22.4%) in employment of people with and without disability. The same study suggested that people with disabilities were significantly more likely to be unemployed for health reasons (25.2% vs. 2.7%) [40].

Perception of disability
A few studies focused on perception of disability and the results varied across the settings. Thus, survey in Cameroon secondary schools showed that teachers were generally positive about supporting students with special educational needs [46]. However, another study in a mainstream primary school in Yaounde in Cameroon examined perceptions of both teachers and special needs children and showed less positive attitudes, particularly among teachers [47]. Similar findings were reported in a survey of University students in Yaounde, where one in six of those

interviewed were unwilling to work with people with disabilities in the future [48].

An evaluation of a disability inclusive development project in a rural district of Senegal found that local project staff was largely unaware of the social model of disability and their personal attitudes and practices towards people with disabilities were aligned more closely with the charity model. They identified people with disabilities as a separate group in need of specific programs rather than able to be included in mainstream development programs. The focus of the project was often on the most articulate and least isolated people; there was no representation of people with psycho-social special needs; and little attention was given to ensuring that project environments were as accessible as possible [49].

A Handicap International study aimed to understand how disability is dealt with in West African media by analyzing press articles and electronic newspapers in a range of West African settings. Findings suggest that disability is not widely communicated across West African countries. The majority of reports spoke of disability in general terms with many media pieces being no more than half a page long. Causes of disability were not widely reported and most articles related to disability rights only. Although language used was found to be neutral, findings suggest that a few articles described people with disabilities as victims in need of help [50]

A qualitative study in Sierra Leone explored expectations of people with disabilities and their vision of their role in society. The study identified the desire to live in a community; be recognized as equal citizens; be given equal opportunities; and become economically independent as critical points of inclusion expressed by people with disabilities themselves, although they also expressed a high expectation of assistance from the government as well as national and international agencies [51].

Enablers and barriers for disability inclusion

Barely any research focused on measuring the effectiveness of disability-related interventions in any quantifiable way. The sources that referred to interventions were largely descriptive focusing primarily on perceived enablers and barriers for inclusion.

Many studies focused specifically on education settings. Thus, a study from Liberia focused on the role of educational centers in Monrovia and found that the centers had a significant positive impact on the quality of life of children with disabilities and their families; the study identified a need for further inclusion of children with disabilities in decision-making and planning. Stigma towards people with disabilities was reported to limit access to education, and the lack of governments' political will was reported to impact social attitudes and stigma [52].

A multicomponent research in Sierra Leone also found that both the school environment and the attitudes of students and staff impacted on the education experiences and outcomes; and the quality of education was often undermined by the lack of skills and unpreparedness of teachers [53]. Similar findings were reported by two studies from Cameroon. A study in secondary schools reported that the teachers lacked appropriate skills, educational resources and support from the Principal, which resulted in the high levels of anxiety and stress among the teachers [46]. Another study showed that the teaching curriculum and attitudes had a significant impact on inclusion within the classroom, and that the negative attitudes towards children with disabilities could be avoided by the provision of high quality teacher training on disability and inclusive practices [54].

A study in Liberia identified cultural beliefs and social behaviors as constraints to participation of people with disabilities in decision-making processes. Family in many cases was not referred to as a supportive environment, while disability associations and self-help groups were [19]. A research in Senegal also identified negative societal perceptions of disability and stigma as the key factors contributing towards the exclusion of people with disabilities from daily life activities [43].

A study from four low- and middle-income countries, including Sierra Leone outlined the key challenges and opportunities for skills development among young people with disabilities It concluded that wide ranging measures, from policy development, through to attitudinal change at all levels of society were necessary to improve the employment situation for youth with disabilities. It also highlighted that both an understanding of the local labor market and of the needs of local youths is vital to ensure programs are tailored to their specific needs [55].

Nishimuko discussed the role of non-governmental organizations and faith-based organizations in the provision of primary education to children with disabilities in Sierra Leone [56]. The study concluded that collaboration between local and international organizations improved access to funding and strengthened interaction between governmental and non-governmental players.

Another study from Sierra Leone investigated enablers and barriers for mental health advocacy and concluded that networking, interacting with the government and raising awareness about mental health played critical roles in policy, service delivery and training [57].

A study conducted across several African countries, including Sierra Leone addressed the challenge of getting disability on the development agenda, specifically Poverty Reduction Strategies and suggested that ratification of the United Nations Convention on the Rights of Persons with Disabilities, a stronger evidence base, mechanisms for direct policy participation and strengthening capacities of the Central government and Disabled People Organisations were effective strategies to influence policy and promote disability inclusion [58].

Discussion

This literature review identified a considerable number of documents describing the existing normative frameworks, stakeholders, activities and research on social inclusion of people with disabilities in five West African settings.

We found that not all countries had ratified the UNCRPD (Cameroon) or the protocol (Cameroon, Liberia, Senegal and Sierra Leone), a move they should undertake with support from local players. We found that although all studied countries had put in place progressive policies and legislation to support access of people with disabilities to public services, the implementation of the pledges made lags behind due to insufficient financial resources and multiple competing priorities faced by governments. The inclusion of disability-related issues in general policies such as health, education and social welfare is undoubtedly an important step to keeping disability on the political agenda. This, however, does not necessarily result in direct benefits for people with disabilities due to the untargeted nature of general policy provisions and the dilution of limited funds available for implementation. Interestingly, although a number of tools for monitoring the implementation of international agreements on disability have been developed in recent years (e.g., World Health Organization Model Disability Survey [59]), we did not find any information on the application of these tools in the countries we studied.

This finding highlights an urgent need to consolidate national and international efforts in monitoring the implementation of the agreed policies in standardized and coordinated way and to develop country-specific strategies for reducing the policy implementation gaps.

We also identified a broad range of national and international stakeholders involved in education and social inclusion of people with disabilities in the countries we studied. We, however, could not identify any reference to either communication channels or coordination mechanisms used by these stakeholders to share information and avoid duplication. International development literature has multiple examples where uncoordinated international efforts and funds can be inefficient and disruptive [60–62]. There is a need to establish effective mechanisms for coordination and sharing information between multiple stakeholders involved in disability advocacy and programs.

The review identified a number of documents describing interventions and research but there were considerably more papers reporting research findings than describing programs. The finding likely reflects the fact that research often involves academic institutions, who give higher priority to publications than non-governmental organizations or other program implementers. Program implementers often have limited capacity to analyze data systematically and often lack ethical clearance for the data collected, a common requirement for publishing in peer-reviewed journals. This suggests that it is likely that much programmatic activity in the area of disability remains undocumented and unshared; and there is an urgency to encourage implementing agencies to be more systematic in documenting, analyzing and reporting their experiences and learning. This lack of documentation severely limits our ability to draw conclusions or make recommendations about policy and practice that are based on robust evidence, which will have a detrimental effect on our ability to practicing inclusion in these settings.

The reviewed research suggests that there is a growing body of epidemiological data on the magnitude and causes of disability. However, despite the availability of the standardized definitions and tools, such as the Washington Group questions, [63] there are significant problems with comparability of data. In the research reviewed here, the prevalence of disabilities in the general population varied from 1.7% to 17%. Not all studies reported the definition of disability they used or how they measured and categorized different types of disability. It is, therefore, critical to consolidate international efforts to ensure that disability is measured and classified in a standardized way to produce comparable data. One way to ensure the availability of such data sets would be to support countries in their efforts to integrate the Washington Group questions in the census and to build their national capacity to appropriately collect and analyze these data. Although the Washington Group questions have been validated for use on people aged 5 years and over (and a child functioning module is validated for children aged 0–18 years), there is an acknowledged limitation that they may underrepresent people with psychosocial difficulties.

Furthermore, the research included in this review showed that people with disabilities experienced significant disadvantages in accessing schooling, engaging in the labor force and actively participating in society. However, the evidence on the degree of exclusion varied, which may again reflect variations in definitions and methods used for measuring exclusion.

Finally, while the documents identified in this review suggest improvements for people with disabilities in terms of policies and programs, the evidence of the quantifiable impact of these efforts is almost non-existent. Most of the data contained within the documents reviewed was descriptive with little evidence of the effectiveness of the interventions applied. Without such evidence we cannot definitively say which services should be supported further and which require reconfiguring or reconceptualization. It is therefore essential to strengthen the evaluation function within both mainstream and disability-specific development programs. It is important to ensure that interventions focusing specifically on disability have sufficient funds to evaluate their impact in a systematic and rigorous way. It is also critical that mainstream development programs focusing on health, education or social participation apply standardized tools for disaggregating data from their evaluations and assess the benefits of these interventions for people with disabilities and other disadvantaged groups.

This literature review focused on five West African countries only and reviewed primarily the documents available in the public domain. Despite this limitation the review has important policy and program implications, namely: (i) application of standardized tools for monitoring the implementation of programs and policies at national level; (ii) improving stakeholder coordination mechanisms at the country level; (iii) supporting countries in using unified approaches to measuring disability and social exclusion; (iv) strengthening the rigor of the evaluations of the effectiveness of disability-specific interventions and (v) disaggregation of routine data from development programs by disability.

It is also worth noting that the policies and programs for people with disabilities are rapidly evolving and some information presented in this review may soon become outdated. It is therefore important to regularly update this review using newly published data and an extensive search of unpublished sources.

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