# Intervention Services for People with Disabilities in Tanzania (1961-2022): What Lessons do we Learn?

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#### **Abstract**

The study aimed to determine intervention services for people with disabilities in Tanzania from 1961–2022, specifically for specific types of disabilities such as visual, hearing, deaf-blind, intellectual, autism, and physical impairments. Data were collected using Google Scholar, and interviews. The study involved a sample of 26 respondents. The data were analysed using thematic analysis approach. Findings indicated that efforts were made to document the need for intervention services for people with disabilities, but these services were disconnected and disorganised. Challenges related to accessibility, affordability, acceptability, availability, and quality of intervention services for people with disabilities were also documented. The study recommends that the Government, policymakers, and researchers should invest in intervention services for people with disabilities to enhance their participation and contribution to socioeconomic development.

**Keywords:** intervention services, disability, adapted curricular, adapted skills training

#### Introduction

People with disabilities face challenges in accessing social services due to limitations caused by the disabling conditions and availability of intervention services (Njelesani et al., 2011; Kuper et al., 2016; Lee, 2012). According to Kisanji (1995), disability is the disadvantage or restriction of activity caused by a contemporary social organisation which takes no or little account of people who have physical impairment and thus excludes them from the mainstream of social activities. Over 80% of people with disabilities live in developing world where poverty and limited access to health services affect their development and lead to severe occupational deprivation (Hansen & Blaskowitz, 2018; Sofo & Wicks, 2017; WHO, 2005; WHO, 2011).

According to Saran et al. (2020), people with disabilities have many unmet needs in low and middle-income countries resulting from low availability of intervention services in the six domains including: health, education, livelihood, social and empowerment. For the case of health intervention, people with disabilities in most developing world do face challenges related to rehabilitation needs, accessing mainstream health-care services, and consequently have poor health (Njelesani et al., 2011). Kisanji (1995) notes that though education interventions started in 1950s in Tanzania, few children with disabilities access education as a result of community's folk belief system, customs and values within the cultural system. In order to increase access to education, it was proposed to develop a sense of ownership, participation and involvement of parents, people with disabilities and the community at large in decision making and choice of actual disability intervention services (Kisanji, 1995). Further, Kuper et al. (2016) notes that where interventions are planned to improve the quality of life of people with disabilities in most cases are not adapted to their needs.

Studies in Tanzania indicate prevalence of disability to be on increase and less effort are documented on disability and intervention services (Hansen et al., 2018; Njelesani et al., 201: United Republic of Tanzania [URT], 2008). According to Hansen et al. (2018) there is a critical need to reduce stigma to people with disabilities as they are frequently shunned by neighbours, seen as a financial burden by their families, and even occasionally killed. Reduction of stigma calls for education interventions including allowing people with disabilities to have access to vocational education to free them from dependence. Each type of disability does have special intervention strategies. For example, Witchger et al. (2018), found improvement in six occupational performance areas: self-care and personal hygiene, household activities, farming, animal husbandry, community and church participation, incomegenerating activities during their evaluation to an intervention toward vocational skills training for people with physical disabilities in Tanzania. Mnyanyi (2014) found that teachers' facilitation on teaching and learning of children with visual impairment enrolled in inclusive classrooms improved when teachers prepared and used inclusive teaching and learning resources.

According to Bright et al. (2018), health related interventions including rehabilitation services for people with disabilities to optimize functioning through a range of specific health services—diagnosis, treatment, surgery, assistive devices, and therapy in low – and middle-income countries (LMICs) is limited. With increased improvement in health services in developing world, life expectancy is increasing and fewer efforts are needed in place for old people and people with disabilities in terms of lifelong learning, disability experts, access to skills training and access to intervention services. Kisanga and Kisanga (2020) note that learners with visual

impairment in higher education are dependent users of assistive technology devices as they depend on sighted people and more skilled users. Reducing overdependence of people with disabilities require developing curricular and training resources that will cater for the needs of people with disabilities. Creating and using adapted curriculum empowers people with disabilities on the use of technology so that they can improve in using the technological resources and enhance accessibility to social services including access to education and information.

Special education as an intervention to access to education for children with disabilities in Tanzania started being implemented to children with visual impairment in 1950 and later on schools for children with hearing an intellectual impairment were established (Mnyanyi, 2014). Another intervention on access to education for children with disabilities was the implementation of inclusive education that calls for school culture, policy and practice to change so as to allow all children including those with disabilities to access education (Vetoniemi & Kärnä, 2021). UNESCO (2018) identified different elements needed for inclusive education as government and finance; laws and policy; curriculum and learning materials; personnel (teachers, school leaders and support staff); schools; and communities, parents and students. The implementation of inclusive education is in line with the United Nations Convention that 'the right to inclusive education encompasses a transformation in terms of culture, policy and practice in all formal and informal educational environments to accommodate the different requirements and identities of individual students (UN 2016). The UN (2016) statement calls for education system to remove barriers to learning for all children. School practices that limit implementation of inclusive education include competitive ethos, rigid curriculum compliance, disregard on diversity, and survival in the face of resource limitations (Andrews et al., 2021).

The current study was conducted to assess provision of intervention services for people with disabilities in Tanzania from 1961 to 2022 in the hope of planning for better services for people with disabilities. The main objective is to identify and summarise the information available about disability and intervention services in Tanzania. The study is guided by the following question, "What is known from the existing literature on intervention services for people with disabilities in Tanzania? This study responds to two objectives

- 1) to determine intervention services for people with disabilities documented between 1961-2022 in Tanzania
- 2) to determine intervention services for specific types of disabilities: visual impairment, hearing impairment, deaf-blind, intellectual impairment, autism and physical impairments in Tanzania

## Methodology

The study employed a systematised scoping methodology as proposed by Munn et al., (2018) and a documentary review for the interventions for people with disabilities in Tanzania from 1961 to 2022. After the documentary review, a total of 26 (13 Special needs trained teachers, 9 persons with disabilities and 4 parents of children with disabilities) were selected to participate in this study. These respondents (13 experts and 13 recipients of intervention services) were selected by purposive and snowballing techniques as indicated in Table 1. The special needs education teachers were included in the study for the purpose of providing information regarding interventions made in the provision of education for people with disabilities. People with disabilities were selected to provide information on availability of intervention services and their perception of the quality of the services. The nine people with disabilities in this study included 2 persons with intellectual impairment who participated in vocational education at Dar Es Salaam Vocational Training Centre in Dar Es Salaam and 4 people with visual impairment who participated in ICT skills training at the Open University of Tanzania. Three people with physical impairment were pursuing their studies at degree level at the Open University of Tanzania and one was a tri-cycle driver providing transport services in Dar es Salaam. The consulted experts in special needs education had a teaching experience of over 10 years and among the 26 respondents 9 were people living with disabilities. Data were collected from January 10th to February 9th, 2023.

Table 1: Type of Respondents

Type of respondents	Specialisation	Number	Total
Special Needs	Visual Impairment	2	
Education Teachers/	Deafblindness	3	
facilitators	Deaf	2	13
	Intellectual impairment	3	
	Autism	3	
People with	Physical Impairment	3	
disabilities	Intellectual impairment	2	09
	Visual Impairment	4	
Parents	Parents of children with Autism	2	04
	Parents of children with intellectual impairment	2	04

The Google Scholar search engine was chosen for the purpose of obtaining published data from different sources that can easily be accessed. In the advanced search words phrases used included "Intervention services for people with disabilities in Tanzania", and changed at the exact phrase "disability", "visual impairment", "deafblind", "deaf', "intellectual impairment", "physical impairment" and "autism". Further in the advanced search changed "with at least one of the words" in each

of the exact word: "Intervention Tanzania Disability Handicap", "Intervention Tanzania visual impairment blind low-vision", "Intervention Tanzania deafblind", "Intervention Tanzania deaf hearing impairment, hard of hearing", "Intervention Tanzania intellectual impairment cognitive", "Intervention Tanzania physical impairment" and "Intervention Tanzania autism" respectively. In all the searches conducted at least one word "intervention" was to be included in all the searched documents for years from 1961-2022 without including patents and citations. The idea behind was to obtain all the literature on intervention available online through Google Scholar search engine. The study was limited to online resources and 26 respondents who were interviewed.

The selected documents were thematically classified and analysed to obtain information on intervention services for people with disabilities in Tanzania with a specific focus on the intervention for people with disabilities, interventions for specified type of disability and the challenges facing provision of intervention services. Data from key informants and the literature were analysed using open coding (Corbin & Strauss, 2007) that generated themes.

### **Findings and Discussion**

The literature search indicated that, a number of studies have been conducted from 1961 to 2022 with regard to disability and intervention in Tanzania in different areas of disability as a general concept and specific types of disability including visual impairment, hearing impairment, deafblind, intellectual impairment, physical impairment and autism (Table 2).

Table 2: Studies on Intervention Services for People with Disabilities in Tanzania

Type of studies	Number of articles	Percentage
Disability	17,700	58.4%
Visual impairment	3,110	10.3%
Deafblind	97	0.3%
Deaf	4,430	14.6%
Intellectual impairment	429	1.3%
Physical impairment	889	2.6%
Autism	3,730	12.5%
Total	30,285	100.0%

# Intervention services for people with disabilities

Findings indicate 58.4% of studies focused on intervention services for people with disabilities in a general sense. The interventions were related to education, screening services, training special needs teachers, rehabilitation services, access

to lifelong learning and access to adapted social protection (Table 3). The quality of people with disabilities depends on willingness of community members to accept and include them in all forms of activities including the development of factual knowledge, beliefs, languages, leadership system, religion, works of art, values and a set of economic activities (Kisanji, 1995). Improving the quality of life of people with disabilities requires rehabilitation services from six domains: health, education, livelihood, social and empowerment. There is a shortage of rehabilitation services in Tanzania which are mostly found in hospitals where they are expensive (Njelesani et al., 2011).

Kuper, et al. (2016) propose an intervention on having social protection schemes that are adapted to meet people with disabilities specific needs. Similarly, Kuper et al. (2020) stress on disability-inclusive development as often people with disabilities fall behind in income, education, health, and wellbeing. This poses challenges in the quality of their life.

A review study by Lehtomäki et al. (2014) focused on studies related to access to education from 1998-2008 that indicated challenges related to shortages of teachers specialising in special needs education, shortages of materials, for example, for people with visual impairment, shortages of braille machines, typewriters, textbooks and audio-books; less access to equipment and learning resources after completing the education cycle, especially, for the people who are blind; less use of assistive technology and ICT related solutions in education; and shortages of professional development courses among teachers. There is less evidence on professional development for teachers facilitating braille skills learning for children with visual impairment. The World Health Organisation [WHO] (2012) proposes an intervention to start in early childhood education to enhance access to education and learning.

Table 3: Disability Intervention Services Studies

Studies	Intervention strategy
Kisanji (1995)	Increasing access to basic education for children with Physical
	(motor) disabilities, blindness deafness, intellectual disabilities
Tungaraza (2012a).	Increasing access and success for learners with disabilities through
	screening, increased resources, training special needs teachers
Njelesani et al. (2011)	Increasing access to rehabilitation services for people with
	disabilities
Kuper et al. (2016)	Increasing access to adapted social protection
Aldersey et al. (2011)	Calls for accountability to be included in the National Disability
	Policy
Lehtomäki et al. (2014).	Increasing access to lifelong learning for persons with disabilities
WHO (2012)	Calls for improved access to intervention in early childhood
	education

## Intervention services for specific type of disability

In this study, one of the objectives was on availability of intervention services for each type of disability. In this paper representation was from people with visual impairment, deaf people, deaf-blind people, people with hearing impairment, autism, and intellectual impairment.

## Visual impairment

People with visual impairment experience functional limitations of the visual system that may be characterised by irreversible vision loss, restricted visual field and decreased contrast sensitivity, increased sensitivity to glare as well as decreased ability to perform activities of daily living, such as reading or writing (Kavitha et al., 2015; Naipal & Rampersad, 2018). In other words, visual impairment refers to impairment in vision such that, even with correction, it adversely affects a student's educational performance. The term includes both partial sight and blindness. Partial sight refers to the ability to use vision as one channel of learning if educational materials are adapted, for example, use of large print or vision devices like calibrated glass or video or a computer screen with enlarged text. Blindness refers to the prohibition of vision as a channel of learning, regardless of the adaptation of materials. According to Kisanga and Kisanga (2020) people with visual impairment in higher education are over dependent. To reduce dependence of students with visual impairment, there is a need to increase availability and accessibility of assistive technology (AT) devices and products usage and skills training opportunities.

Several studies focused on prevalence, causes and possible intervention strategies for visual impairment (Dineen et al., 2006; Kingo & Ndawi, 2009). Causes of visual impairment included cataract, trachoma, glaucoma and congenital anomalies. Intervention proposed were as follows: increased awareness to the community on causes of visual impairment, conducting eye screening for early treatment and intervention programmes and creating partnership between school and health organizations for supporting teachers so that they can identify early signs of visual impairment from students. In terms of school setting, Kapinga and Aloni (2023) notes that there is a need to enhance people with disabilities self-esteem through providing opportunities that build self-esteem including accessibility to education and skills training.

Table 4: Visual Impairment Intervention Studies

Studies	Intervention strategy
Kisanga & Kisanga (2020)	Increasing availability and accessibility of AT devices and
	products usage and training opportunities
Mnyanyi (2009, 2014)	Increasing in-service teacher-training on special education to
	support learners with visual impairment and supporting teachers
	in changing their teaching practices.
Tungaraza (2012b)	Increasing efforts on screening for informed early intervention
	and proper curriculum adaptation
De Groot, Meurs and	Increasing use of contact intervention to reduce stigma among
Jacquet (2019).	people with visual impairment including those with albinism

## Deafblind

According to Zwanenburg and Tesni (2019) 'deaf-blindness' refers to combined hearing and vision loss. Although most individuals with deaf-blindness have some functional use of vision and hearing. The combination of the two losses greatly impairs the ability to gather auditory and visual information. This creates intensive communication and learning needs that cannot be met by programmes designed solely for persons who are blind or have low vision, or persons who are hard of hearing or deaf. People who are deaf-blind require modifications to suit their needs in all kinds of information; social interaction and communication; orientation and mobility; activities of daily life and in reading and writing (Göransson, 2008; Gullacksen et al., 2011). As such, people who are deafblind pose challenges in facilitating teaching and learning process and in participating in socio-economic activities (Zwanenburg &Tesni, 2019).

In Tanzania education services for people with deaf-blindness started in 1993 at Uhuru Mchanganyiko unit in Dar es Salaam. Since then, more children with deaf-blindness are being enrolled. In 2021, the government of Tanzania through Tanzania Institute of Education prepared an adapted curriculum for children with deaf-blindness. In a search of documents about deaf-blindness, only 97 (0.3%) were found, indicating the field is at its infancy stages and more research is needed. Enrolment for children with deaf-blindness in 2021 was 271(19 in pre-primary) indicating increased awareness to the community about the disability. However, none of the studies met the criteria set for further analysis. According to WHO and UNICEF (2022), there is a need to increase access to assistive technology for persons with deaf-blindness.

## Deaf

Deaf community have challenges in spoken language and as a general rule deaf people depend on sign language of which the general community do not use and are unaware. According Batamula and Pudans-Smith (2017) deafness can be understood in terms of pathological or medical that considers deafness as a physical disability and cultural model that looks at a deaf person as belonging to a culture with its language and norms. The deficit model focuses on how to give the deaf person ability to hearing. Developing sign language skills among community members in which the deaf and non-deaf participate can ensure fully participation of the deaf community in the socio-economic activities in the society and receive gainful employment and or establish income-generating activities.

Lee (2012) notes that there are interventions in Tanzania to people with disabilities including access to information, access to learning and using sign language, creating support networks, participation in community development initiatives, and providing school supplies. In ensuring participation of deaf individuals, there is a need to ensure they participate in designing, implementing and evaluating targeted deaf interventions projects in the community. Intervention in education has to focus on the issue of linguistic access to curricular material and about pedagogy in deaf education that started way back 1870 (Johnson, 1989). Similarly, Hall et al. (2019) found that a deaf person needs to master at least one language (spoken or signed) to reach their full potential. Barriers to full participation of deaf community in developing nations is attributed to severely low funding for prevention, early detection, inflexible curriculum and rehabilitative programs (Tungaraza, 2012a). Other barriers include delays in diagnosis, social attitudes, local customs, and cultural bias. Learning among deaf children is influenced by communication, degree of hearing loss, presence or absence of other disability, age of hearing loss, social and family environment, early identification and early intervention, context and intensity of services that call for enhanced early screening, assessment and intervention to enhance access to information and learning (Mkongo, 2019; Batamula & Pudans-Smith, 2017).

Table 5: Hearing Impairment Intervention Studies

Studies	Intervention strategy
Batamula &Pudans-Smith	Increasing community participation among deaf through
(2017).	facilitating Tanzania Sign Language to deaf and non-deaf
Lee (2012)	Access to information, learning and using sign language, creating
	support networks, aid, access to school
Boonstra et al. (2015).	Increasing access to education and training of deaf people
Mkongo (2019)	Increasing access to early identification, assessment and
	intervention in pre-primary education
	Increasing supply of teachers with knowledge and skills to
	facilitate learning of deaf children in pre-primary education.

## Intellectual impairment

Intellectual impairment is referred to as a disability characterized by significant limitations both in intellectual functioning and in adaptive behaviour as expressed in conceptual (language and literacy; money, time, and number concepts; and self-direction), social (interpersonal skills, social responsibility, self-esteem, gullibility, naïveté (i.e., wariness), social problem solving, and the ability to follow rules/obey laws and to avoid being victimized), and practical skills (activities of daily living (personal care), occupational skills, healthcare, travel/transportation, schedules/routines, safety, use of money, use of telephone) that are learned and performed by people in their everyday lives manifested before age 18 (Harris & Greenspan, 2016; Shree & Shukla, 2016).

Table 6: Intellectual Impairment Intervention Studies

Studies	Intervention strategy	
Machogu (2014).	Increased participation in learning focusing on the content or what	
	to teach; teaching and learning methods; methods of assessment;	
	the organization and management of the classroom; and the	
	organization and management of the school timetable	
Stone-MacDonald (2012).	Increased participation in socio-economic activities through	
	developing adapted culturally and socially relevant curriculum	
Sylivester (2017).	Increased participation of learners with intellectual disability	
	through developing and adapting primary school adapted syllabus	

Interventions services for people with intellectual disability include dietary and language interventions. Dietary intervention prevents intellectual disability caused by Metabolic disorders and language intervention increases functional communication. People with intellectual disability show delayed functioning on pragmatic aspects of language, such as turn taking, selecting acceptable topics for conversation, knowing when to speak, knowing when to be silent, and similar contextual skills (Shree & Shukla, 2016). According to Stone-MacDonald (2012) people with intellectual impairment require adapted culturally and socially relevant curriculum providing knowledge and skills they will be able to use after graduation.

Special needs teachers interviewed in this study indicated that people with intellectual disability had interventions about training on adaptive games as in many cases they participated in Special Olympics, training in units where they learn functional skills and some joined vocational training for developing technical skills. All the interviewed teachers trained in special education to facilitate learning of people with intellectual impairment indicated a shortage of curriculum for formal and vocational education. One of the teachers said:

I feel challenged when it comes to intervention for people with intellectual impairment. There are fewer opportunities to learn functional skills. In their school education, less consideration is given to developing adapted curriculum for these children. For example, adapted syllabus for children with intellectual impairment Level I to III has not been updated since 2007. For children with severe intellectual impairment, there is no continuation after basic education, as there is still not developed adapted curriculum for vocational education. Only few in Dar es Salaam join Chang'ombe Vocational Training Centre for vocational skills. I do not know how they are certified in vocational education [RTII1, 12.10.2022].

These findings are in line with those of Machogu (2014) and Sylivester (2017) who see a need for flexibility in the implementation of school curriculum. For effective provision of intervention services for people with intellectual impairment, there is a need to capacitate educators and develop adapted curriculum to meet their learning needs in formal, non-formal, informal and vocational skills training (Tungaraza, 2012a; Kuper et al. (2016).

### Physical impairment

In this aspect, physical impairment is taken as a form of disability that prevents individuals from walking and participating in daily activities. According to Bright et al. (2018) studies on rehabilitation for persons with disabilities in low-and-middle-income countries, indicated a diversity of measures taken to address disability issues and that there was evidence that access to rehabilitation is low among people with disabilities. The right to health is a global concern. The aim of WHO (2018) on Universal Health Coverage (UHC) is to "ensure that all people have access to needed promotive, preventive, curative, rehabilitative, and palliative services they need, of sufficient quality to be effective, while ensuring that the use of these services does not expose the user to financial hardship", People with disabilities in developing countries can hardly achieve the goal of UHC. In this study findings indicate fewer efforts have been made toward supporting persons with physical impairment (Kuper et al., 2016; Seif, 2017). There are uncoordinated services and less training of experts for further innovation in the area of physical impairment.

Table 7: Intellectual Impairment Intervention Studies

Studies	Intervention strategy
Kuper et al. (2016).	Access to health care
Mahande et al. (2007).	Access to surgical services
Seif, S. (2017).	Provision of mobility support devices

For people with physical impairment, like others, intervention services are invisible. Rarely, one gets information as to where to get services. As one of the physically impaired persons noted:

I got accident and lost my both legs. I got treatment in hospitals and I had challenges on obtaining a wheelchair due to the high cost and later I had to start using a wheelchair that I learnt myself on how to operate as I had no one with such knowledge. I think we need some disability centres where one can get all the services including assistive devices and training on how to use the device (RP1, A physically challenged individual, 8.12.2022).

The findings indicate uncoordinated efforts between the health sector and other providers of services that enhance coping skills for social partition in the community.

#### Autism

Autism is considered a disability from a medical and legal standpoint. According to these perspectives, the condition makes it difficult for a person to interact with their environment

Autism interventions in Tanzania are few. According to WHO (2004), autism spectrum disorder (ASD) or autism is a neurodevelopmental disorder characterized by marked impairments in social interaction and communication accompanied by a pattern of repetitive, stereotyped behaviours and activities, with delay in social interaction and language occurring prior to the age of three. People with autism have challenges in both receptive and expressive language. Learners with autism have difficulties understanding body language, context, abstract and figurative language. Interventions services include behavioural interventions, speech therapy and special facilitation skills like eye gaze intervention and picture exchange communication. Generally, no one intervention works for all, calling a need to develop adapted curricular that guide their learning progress.

Studies	Intervention strategy
Harrison et al. (2016).	To enhance knowledge and skills about autism to medical
	doctors for early screening, diagnosis and intervention
Harrison et. al. (2014).	To enhance Autism assessment competency among practitioners by developing assessment/ observation tools and training on how to use for early identification, screening, assessment and intervention
Naqvi et al. (2022).	Increasing knowledge on autism among teachers so as to be able
	to provide appropriate

In an interview with trained teachers in facilitating learning of children with disabilities and the parents of children with autism it was found that intervention services were inadequate. Teachers indicated challenges on having adapted curriculum for children with autism. Similarly, parents faced a challenge to find academic and vocational education institutions that provide education for children with autism for enhancing their partition in socio-economic development. This is what respondents said:

I have some knowledge on disability. But not much on how to support people with autism. I learnt as a general subject knowledge during college training. I later specialised on intellectual impairment. I face challenges in my work as I did not learn about autism and how to facilitate learning. I received some knowledge during a seminar. It is that knowledge I use to facilitate learning. However, I teach what I can manage as there is no adapted curriculum for persons with autism even that of intellectual impairment has never been updated since 2007 (Duliduli, Specialist teacher 10.10.2022).

Where parents can afford sending children to school, teachers are not knowledgeable about how to support the children. Teachers face challenges related to capacity building on how best to support children with disabilities (Harriso et al., 2016; Harrison et al., 2014). Issues on intervention are related to: accessibility, affordability, acceptability, availability and quality. Intervention services for people with disabilities, if available, are rarely known. Where intervention services are available in most cases, they are unaffordable. With shortages of adapted curriculum and capacity building for staff rarely are institutions offering the services acceptable as it is difficult to ensure the quality of training. Developing intervention services for people with disabilities faces challenges in developing countries where chances for innovation are limited, training institutions are not adequately funded and disability is on increase due to challenges in health sector and less developed social support services.

#### **Conclusions**

In Tanzania since 1961 to 2022 there are a number of improvements made in providing intervention services to persons with disabilities. Intervention services provided are mainly on medical treatment, assistive devices, access to education, skills training, counselling, economic empowerment, and creation of lifelong learning opportunities. With medical treatment one of the challenges is the shortages of the links between health practitioners and those providing intervention services. For example, after one is diagnosed having impairment, there are few referrals to

institutions providing intervention services. Where intervention is available, they are difficult to locate. In the education sector, there are efforts on education services for people who become disabled at adult age, as there are less available centres where one can receive coping strategies after becoming disabled. Based on these findings, in Tanzania, intervention services for people with disabilities since 1961 to 2022 were offered and were uncoordinated. Most of the intervention services were linked to health and education. Fewer efforts have been made to develop intervention services for people who become disabled at adult age and there are less intervention services related to vocational skills training.

#### Recommendations

This study recommends for the government to support institutions to develop intervention services to support people with disabilities. This will enable these people to learn functional and vocational skills that enhance their participation and contribution to socio-economic development. The intervention services for people with disabilities have to be linked to the health sector. For the education and vocational institutions, there is a need for the government and other stakeholders to support development and implementation of adapted curriculum for vocational skills training. On locating for intervention services, there is a need for the government and stakeholders to create a database for intervention services for each type of disability.

#### References

- Aldersey, H. M., & Turnbull, H. R. (2011). The United Republic of Tanzania's national policy on disability: A policy analysis. *Journal of disability policy studies*, 22(3), 160-169.
- Andrews, D., Walton, E., & Osman, R. (2021). Constraints to the implementation of inclusive teaching: a cultural historical activity theory approach. *International journal of inclusive education*, *25*(13), 1508-1523.
- Batamula, C., & Pudans-Smith, K. (2017). Examining language and access for deaf in Central Tanzania. *International journal of education and social science* 4(9)20-29
- Boonstra, S., Duffy, D., Hartzell, Z., Keech, B., & Polga-Hecimovich, P. (2015). Improving and expanding access to primary education for deaf/hard of hearing children in Tanzania. Minnesota: University of Minnesota.
- Bright, T., Wallace, S., & Kuper, H. (2018). A systematic review of access to rehabilitation for people with disabilities in low-and middle-income countries. *International journal of environmental research and public health*, 15(10), 2165.

- De Groot, T., Meurs, P., & Jacquet, W. (2019). The effect of contact interventions on the stigma of people with albinism in Tanzania. *Journal of Visual Impairment & Blindness*, 113(5), 464-469.
- Dineen, B., Foster, A., & Faal, H. (2006). A proposed rapid methodology to assess the prevalence and causes of blindness and visual impairment. *Ophthalmic epidemiology*, *13*(1), 31-34.
- Göransson, L. (2008). *Deafblindness in a life perspective: Strategies and methods for support*. Malmo: Mo gårds förlag.
- Gullacksen, A. C., Göransson, L., Rönnblom, G. H., Koppen, A., & Jørgensen, A. R. (2011). Life adjustment and combined visual and hearing disability/ deafblindness an internal process over time. *Stockholm: Nordic Centre for Welfare and Social*, (2011).
- Hall, M. L., Hall, W. C., & Caselli, N. K. (2019). Deaf children need language, not (just) speech. *First Language*, 39(4), 367-395.
- Harris, J. C., & Greenspan, S. (2016). Definition and nature of intellectual disability. In: Singh, N. (eds). *Handbook of evidence-based practices in intellectual and developmental disabilities. Evidence-based practices in behavioural health*. Switzerland: Springer
- Harrison, A. J., Long, K. A., Manji, K. P., & Blane, K. K. (2016). Development of a brief intervention to improve knowledge of autism and behavioural strategies among parents in Tanzania. *Intellectual and developmental disabilities*, *54*(3), 187-201.
- Harrison, A. J., Zimak, E. H., Sheinkopf, S. J., Manji, K. P., & Morrow, E. M. (2014). Observation-centered approach to ASD assessment in Tanzania. *Intellectual and Developmental Disabilities*, *52*(5), 330-347.
- Johnson, R. E. (1989). Unlocking the curriculum: principles for achieving access in deaf education. Working Paper 89-3.
- Kapinga, O. S., & Aloni, M. (2023). Measuring levels of self-esteem of students with visual impairments in regular schools in Tanzania. *British Journal of Visual Impairment*, 41(2), 388-399.
- Kavitha, V., Manumali, M. S., Praveen, K., & Heralgi, M. M. (2015). Low vision aid—A ray of hope for irreversible visual loss in the paediatric age group. *Taiwan journal of ophthalmology*, *5*(2), 63-67.
- Kingo, A. U., & Ndawi, B. T. (2009). Prevalence and causes of low vision among schoolchildren in Kibaha District, Tanzania. *Tanzania journal of health research*, 11(3), 111-115.

- Kisanga, S. E., & Kisanga, D. H. (2020). The role of assistive technology devices in fostering the participation and learning of students with visual impairment in higher education institutions in Tanzania. *Disability and Rehabilitation: Assistive Technology*, 17 (7), 791-800.
- Kisanji, J. (1995). Interface between culture and disability in the Tanzanian context: Part I. *International journal of disability, development and education*, 42(2), 93-108.
- Kuper, H., Davey, C., Banks, L. M., & Shakespeare, T. (2020). Trials and tribulations of collecting evidence on effectiveness in disability-inclusive development: A narrative review. *Sustainability*, *12*(18), 7823.
- Kuper, H., Walsham, M., Myamba, F., Mesaki, S., Mactaggart, I., Banks, M., & Blanchet, K. (2016). Social protection for people with disabilities in Tanzania: A mixed methods study. *Oxford Development Studies*, 44(4), 441-457.
- Lee, J. C. (2012). They have to see us: An ethnography of deaf people in *Tanzania* (Doctoral dissertation, University of Colorado at Boulder).
- Lehtomäki, E., Tuomi, M. T., & Matonya, M. (2014). Educational research from Tanzania 1998–2008 concerning persons with disabilities: What can we learn? *International journal of educational research*, *64*, 32-39.
- Machogu, M. (2014). Teachers' knowledge and adoption of inclusive education for children with intellectual impairment in Tanzania: The case of inclusive primary schools in Bunda district (Doctoral dissertation, The University of Dodoma).
- Mahande, M., Tharaney, M., Kirumbi, E., Ngirawamungu, E., Geneau, R., Tapert, L., & Courtright, P. (2007). Uptake of trichiasis surgical services in Tanzania through two village-based approaches. *British journal of ophthalmology*, *91*(2), 139-142.
- Mkongo, J. I. (2019). *Inclusion/integration of children with hearing impairment in pre-primary education in Tanzania* (Doctoral dissertation, lmu).
- Mnyanyi, C. B. (2009). Developing teachers' work for improving teaching and learning of children with visual impairment accommodated in ordinary primary schools. *European Educational Research Journal*, 8(2), 336-351.
- Mnyanyi, C. B. (2014). Changing Teachers' Practices in Regular Schools Enrolling Children with Visual Impairment: An Action Research Project in Tanzania. Åbo Akademis Förlag, Abo Akademi University Press.

- Munn, Z., Peters, M. D., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology*, 18(1), 1-7.
- Naipal, S., & Rampersad, N. (2018). A review of visual impairment. *African Vision and Eye Health*, 77(1), 1-4.
- Naqvi, N. C., Wong-Goodrich, S. J., Martinage, A., Gordon, S. L., DeCuffa, J. A., & Collins, M. (2022). Increasing knowledge of autism spectrum disorders among urban special educators in Tanzania: Results from three teacher training workshops. In *Research anthology on inclusive practices for educators and administrators in special education* (pp. 880-898). IGI Global.
- Njelesani, J., Couto, S., & Cameron, D. (2011). Disability and rehabilitation in Tanzania: a review of the literature. *Disability and rehabilitation*, *33*(22-23), 2196-2207.
- Saran, A., White, H., & Kuper, H. (2020). Evidence and gap map of studies assessing the effectiveness of interventions for people with disabilities in low-and middle-income countries. *Campbell Systematic Reviews*, 16(1), e1070.
- Seif, S. (2017). The Role of CHAWATA in facilitating the provision of rehabilitation services to people with physical disability in Tanzania a case of Nyamagana district, Mwanza (Master dissertation, SAUT).
- Shree, A., & Shukla, P. C. (2016). Intellectual Disability: Definition, classification, causes and characteristics. *Learning Community-An international journal of educational and Social Development*, 7(1), 9.
- Sofo, F., & Wicks, A. (2017). An occupational perspective of poverty and poverty reduction. Journal of Occupational Science, 24(2), 244-249.
- Stone-MacDonald, A. (2012). Preparing children with developmental disabilities for life in the community: A Tanzanian perspective. *Education and training in Autism and developmental disabilities*, 255-268.
- Sylivester, S. M. (2017). An investigation on the management of the 2007 Tanzanian syllabus for intellectually impaired pupils in promoting life skills (Master dissertation, The Open University of Tanzania).
- Taasisi ya Elimu Tanzania. (2021). Mtaala Rekebifu wa Elimu ya Msingi kwa Mwanafunzi mwenye Uziwikutoona Hatua I-III. Dodoma: Wizara ya Elimu, Sayansi na Teknolojia
- Tungaraza, F. D. (2012a). Inclusive education in Tanzania: Are all learners identified and their needs known? *LWATI: A journal of contemporary research*, *9*(3).

- Tungaraza, F. D. (2012b). Sixty years of special needs education in Tanzania: Celebrating audacity, commitment and resilience. *Lwati: A Journal of Contemporary Research*, 9(1).
- Vetoniemi, J., & Kärnä, E. (2021). Being included—experiences of social participation of pupils with special education needs in mainstream schools. *International Journal of Inclusive Education*, 25(10), 1190-1204.
- WHO & UNICEF (2022). *Global report on assistive technology*. Geneva: World Health Organization and the United Nations Children's Fund (UNICEF).
- Witchger Hansen, A. M., & Blaskowitz, M. (2018). From dependence to interdependence: A holistic vocational training program for people with disabilities in Tanzania. *Annals of International Occupational Therapy*, *1*(3), 157-168.
- World Health Organization (2005). *Preventing chronic diseases: a vital investment. WHO global report.* Geneva: World Health Organization.
- World Health Organization. (2011). World report on disability. Geneva: WHO.
- World Health Organization. (2012). *Early childhood development and disability: A discussion paper*, Geneva: WHO.
- World Health Organization (2018). *Universal Health Coverage and Health Financing*. Geneva: WHO.
- Zwanenburg, A., & Tesni, S. (2019). *Guidelines on best practice for persons living with deafblindness*. CBM: Germany.