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EDUCATING STUDENTS WITH PHYSICAL DISABILITIES IN KENYA: PROGRESS AND PROMISES

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A B S T R A C T

The road to provision of educational and other services to individuals with disabilities the world over has been long. From intolerance and extermination, most world communities are now at an age where such phrases as "empowerment" "equal rights", and "self-determination", among others, are very significant in handling issues of education and employment for people with disabilities. However, there is not much literature on services for students with physical and/or other disabilities in Kenya. While this paper sheds light on this area of education, it also adds to the meager literature available on educating students with physical disabilities in Kenya. It focuses on identification, assessment, and current educational placement and services for this population. It begins with a brief review of the history of services for students with physical disabilities and discusses assessment, placement options and current services, and vocational and rehabilitative services available for this group of individuals. The article concludes with an overview of the various obstacles that preclude effective educational services for these children and youth in the country.

Keywords: Disability, students, Kenya, education, national special needs education policy framework.

INTRODUCTION

A quick peek at available literature indicates that like services for individuals with other types of disabilities in Kenya, services for individuals with physical disabilities have followed a similar developmental sequence. These services have also been influenced by societal perspectives and attitudes towards and about those with disabilities and their potential to contribute to the community. During those times when individuals with disabilities were seen as not only completely incapable of contributing to the society in any way but also a drain on the community's resources, extermination in various ways including drowning, euthanasia, dropping from a cliff top, and abandonment, was viewed as an acceptable way of dealing with those with disabilities by certain groups of people in various parts of the world (Devlieger, 1989; Evans, 2004; Friedlander, 1995; Scheerenberger, 1982). However, even at this time, there are accounts of the few parents and relatives who, unwilling to exterminate their infant, opted to hide it and continue to tend to it without the knowledge of the rest of the community. There are also accounts of custodial assistance provided to people with disabilities by individuals and groups of people during this period. With time, and largely due to the influence of the humanitarian, religious, and other factors, (Gargiulo 2010; Hallahan & Kauffman, 2012; Heward 2009), accepting, advocating for the "less fortunate", and providing for their needs ushered in the custodial phase. This is the period when taking care of individuals with disabilities in society was seen as a noble course to take and the right thing to do. During this period, individuals with disabilities were not provided with anything more than companionship, food, and shelter. Fortunately, in most countries of the world, this phase has been replaced by another which holds strongly the rights and privileges of individuals with disabilities as citizens of the respective countries, believes in their ability to learn and in their potential to contribute meaningfully to their economy, and takes active steps to ensure their rights are protected. This is the age when society advocates the

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necessary supports and services for individuals with disabilities to have equal opportunity, full participation, and economic self-sufficiency, and contribute in the process of making decisions about their lives. This paper examines the progress of educational services for students with physical disabilities in Kenya. Following is an overview of disabling conditions included under this category.

Definition of physical and other health impairments: The Individuals with Disabilities Education Act (IDEA), the United States-based special education legislation that guides and protects the education of students with disabilities in the country, refers to physical disabilities as orthopedic impairments and defines the term as a severe physical condition that adversely affects a child's education. IDEA includes under this category of eligibility for special education, conditions caused by congenital anomaly, disease, and other causes when these conditions are severe and affect a child's education adversely (Pakula, Braun, & Yeargin-Allsopp, 2009; Pellegrino, 2007). Physical impairments include a range of conditions affecting individuals of all age ranges. Among these are cerebral palsy, multiple sclerosis, muscular dystrophy, polio, seizure disorders, spinal cord disorders, juvenile arthritis, limb deficiency, and skeletal disorders (Bigge, 1991; Berge, 2006; Felix & Hunter, 2010; Smith, 2005; Taylor, English, & Barnes, 2010). Physical disorders are usually classified into the two categories of neuromotor impairments and muscular skeletal conditions (Au, Ashley-Koch & Northrup, 2010; Drew, Egan, & Hardman, 2005 & Smith 2005). Neuromotor impairments result from a damaged central nervous system, the brain and the spinal cord, and individuals so affected have difficulty controlling their muscles and movement (Liptak, 2007). While individuals with muscular/skeletal impairments also have difficulty with muscular and movement control, the cause of these impairments may not be neurological. Individuals with either neuro-motor or muscular/skeletal conditions may need the same educational, therapeutic, and recreational services (Bigge, Best, & Heller, 2001& Drew, Egan, & Hardman, 2005) to realize their potential. In cases where the physical disabilities are very significant and necessitate it, some individuals may need to use special devices and technology to accomplish such tasks as walking, eating, or writing, that most people take for granted (Smith, 2005). Learners, especially those with lower limb paresis and other forms of lower limb mobility limitation may also require assistive devices such as wheel chairs, canes, crutches, and artificial limbs for mobility (Hallahan & Kauffman, 2006).

IDEA defines Other Health Impairments as conditions in which those affected exhibit limited strength, vitality or alertness including a heightened alertness to environmental stimuli that result in limited alertness with respect to the educational environment. These conditions are due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia (Benbadis & Berkovic, 2006; O'Shea, 2008; Robb & Brunner, 2010; Weinstein & Gaillard, 2007). These conditions adversely affect educational performance. Sometimes conditions under Other Heath Impairments are included under physical disabilities.

In a study conducted in a Kenyan school for students with physical disabilities, for example, Mwaura (2010) described physical disabilities as a broad range of disabilities which include pulmonary, cardiovascular, orthopedic, and neuromuscular conditions that significantly limit students' functional capabilities. Participants in this study on the other hand, described physical disabilities as the external, visible, physical conditions that affect individuals' motor functioning and named such conditions as cerebral palsy, polio, club foot, spina bifida, and loss of limb as examples of these in their classrooms. Writing on physical and other health impairments in Kenya, Ndurumo (1993) divides them into orthopedic, neurological, and health disabilities. Under orthopedic disabilities are such conditions as polio, amputations, arthrogryposis muliplex congenital, clubfoot, osteogenesis imperfecta, congenital dislocation of the hips, leg-calves, perthes, and leprosy. In Ndurumo's classification, neurological disabilities include cerebral palsy, spina bifida, spinal cord injury, and childhood muscular atrophy while health disabilities include juvenile rheumatoid arthritis, heart disease, tuberculosis, schistosomiasis, and guinea worms, among others. Although students with physical disabilities might also have other health impairments, this article centers on physical body disorders that interfere with the body's functioning and execution of tasks such as movement.

Causes of physical disabilities in Kenya: The causes of physical disabilities are as varied as the conditions

caused (McIntyre, Taitz, Keogh, Gold-Smith, Badawi, & Blair, 2013). A damaged central nervous system is a major cause of physical impairments that may affect movement. Damage to the brain and/or the spinal cord from trauma, infections, tumors, and autoimmune disorders, among other causes, may result in a myriad of physically disabling conditions such as cerebral palsy. While some physical disabilities are congenital, other causes of physical impairments include motor vehicle and water and diving accidents, gunshot wounds, injuries sustained from sports such as boxing, skiing, and football, child abuse, poisonings/toxins, diseases such as polio and measles, premature birth, infectious diseases, the Human-Immuno deficiciency virus (HIV), genetic disabilities, seizures, hydrocephaly, and asthma (Felix & Hunter, 2010; Nelson & Chang, 2008; Smith, 2001; Warchausky, White, & Tubbergen, 2010). While most of these causes, such as, polio and measles, premature birth, infectious diseases, HIV, seizure, asthma, genetic disabilities, hydrocephaly, and asthma, are prevalent in Kenya, a study by Kennedy (1990) on causes of physical impairments in Kenya revealed polio to be a leading cause of these impairments. Kennedy (1990) lists brain injuries before, during, at, and after birth, amputations, muscular dystrophy, hydrocephaly, and malformations of the spinal cord among other causes of physical and other health impairments in Kenya. A report of the Kenya National Survey of Persons with Disabilities (2008) lists domestic violence, in-home and vehicle accidents, heredity, environmental pollutants, diseases, and lack of immunization as other causes of disabilities. Road accidents are cited as the leading cause of physical disabilities in Kenya (Global Status Report on Road Safety, 2010). Though cases of physical disabilities due to polio have greatly decreased the world over largely due to the polio vaccine (Black, 1997), there are still many children who have been affected by this condition in schools in Kenya.

History of educational services for individuals with physical disabilities in Kenya: As pointed out earlier, religious and humanitarian factors (Munyi, 2012) paved the way for the establishment of the first educational centers for individuals with physical and other disabilities in Kenya (Mwangi, 2013; Ndurumo, 1993). Educational services for individuals with physical disabilities in Kenya were initiated by religious and secular organizations among them the Salvation Army, the Red Cross Society, and the Round Tables International. It is worth noting that the polio epidemic that began in the 1950's in Kenya left many children unable to attend their regular schools due to the physical deformities caused by the disease and the negative attitudes about the deformities from the general population. To provide custodial care to these children and those with cerebral palsy, the Dagoretti Children's Center in Nairobi was established and operated by the British Red Cross Society, a society that also run orthopedic and poliomyelitis clinics (Makumi, 1987). The late 1950s also saw the establishment of the Association for the Physically Disabled in Kenya (APDK), an organization that initially concerned itself with the medical care and treatment of individuals with cerebral palsy and polio, and later with other issues of physical and other disability conditions.

The Salvation Army is often credited with the first formal educational services for individuals with physical impairments. Between the early 1960's and 1980's, the Salvation Army established two primary and one secondary school(s) for students with physical disabilities in Kenya. These efforts were recognized by the Mombasa Round Tables which established the Mombasa Secondary School for individuals with physical disabilities who were graduating from the primary schools. Depending on their abilities, students in these schools, especially those with non-sensory disabilities in addition to the physical disability, were instructed in the same academic skills as their peers in the regular education schools and classrooms. These students were also instructed in basic self-care skills, manual skills, and rehabilitation and they were provided with the necessary equipment for mobility. It is worth noting that like schools for students with other types of disabilities in Kenya, these early schools for students with physical disabilities were largely financially maintained by their founding organizations until the late 1970's when the government took over much of the financial burden (DRPI, N.D; Kiarie, 2005; Ndurumo, 1993).

A review of the early educational services for students with physical disabilities in Kenya reveals that while many students with significant physical disabilities were provided medical and custodial care, many with average to above average cognitive abilities were integrated into regular education schools and classrooms along with those who had mild physical limitations (Ndurumo, 1993). To overcome the inconveniences associated with transportation to and from home to their regular

education schools, many schools, with the assistance of their communities established "small homes" in close proximity to the regular education school to serve as hostels or boarding rooms for these students to reside in during the school term. Members of the community served as "house mothers" or caregivers for these children and provided them with basic care in these facilities. This accommodation ensured that students with physical disabilities could continue being served in regular education schools. The existence of the "small home" services is probably one reason for the slow growth rate in residential educational programs for students with physical disabilities in Kenya during the period 1960 to 1986 despite the increase in the number of cases identified (Ndurumo,1993). This is because with the "small home" accommodation, students were able to attend mainstream schools and therefore did not require a separate educational setting. Two significant comments about the "small homes" are in order at this point. First "small homes" is still an accommodation provided for students with severe physical disabilities who have average to above average intellectual abilities. Students with a combination of physical and other disabilities including intellectual impairments causing severe limitations in the ability to learn in the general education setting are most likely to be served in separate settings. Second, in addition to basic care services, larger "homes" also provide such services as surgery, physical and occupational therapy, hydrotherapy, and other services for these individuals (Auka & Afedo, 1985 & Ndurumo, 1993).

Prevalence of physical disabilities in Kenya: The Kenya Ministry of Education Report of 1986 noted that students with physical disabilities were the largest group of students with disabilities receiving special education services in Kenya. Ndurumo (1993) noted that students with physical disabilities receiving special education services in Kenya made up 25% of all students with disabilities receiving educational services in Kenya. This data is supported by a report of the Kenya National Survey of Persons with Disabilities (National Coordinating Agency on Population and Development, 2008) which notes that about 30% of all individuals with disabilities in the country have physical disabilities. Although current data is not available, the latest that is indicates a majority of students receiving special education services in Kenya have physical disabilities. Unlike the situation in the United States, physical disability is a high incidence disability in Kenya.

Assessment and placement: Conditions resulting in severe forms of physical disabilities are diagnosed in hospitals while conditions that are less obvious at birth are noted by parents, teachers and caregivers as the infants grow. The Kenya Ministry of Education's handbook (1995) for parents and teachers on how to handle children with special educational needs, notes that infants with disabilities may not be able to suck on the breast or their sucking may be very weak and that they may be very significantly delayed in reaching developmental milestones compared to infants without physical disabilities. This handbook also notes that paralysis, wasted muscles, chronic health problems, and other indicators may leave the attending physicians and caregivers with no doubt that these infants have physical disabilities. Whether or not the conditions are obvious, the handbook advises parents, physicians and caregivers of such children to refer them to any of the 111 Educational Assessment and Resource Centers (EARC) (Handicap International, 2010; Kristensen, 1992) for assessment and appropriate placement for educational services. Alongside identification and placement, the assessment centers also serve as places where students with physical disabilities are provided with and fitted with the necessary aids. Crutches and walking frames in particular, for students with ambulatory-related physical disabilities are provided at these centers. When available, wheel chairs are also provided. Wheelchairs, manual or electric, are oftentimes too expensive for parents to afford and most depend on donor companies for assistance. In other instances, community projects called "harambee" meaning "pulling together" generate funds which are used for educational purposes (Mwiria, 1985).

Physical therapists work with younger and older children with physical disabilities to improve their large muscle skills to improve their ability to achieve developmental milestones. Occupational therapists also engage the children to facilitate execution of such fine motor skills as pen and pencil grip, buttoning clothing, and eating, among others. Students placed in the "small homes" in the regular education schools receive itinerant teacher consultation services on an intermittent basis. As resources permit, renovations in the physical environment of the school are made to facilitate movement for the students with physical disabilities. The Kenya Ministry of Education handbook on handling students with special educational needs

referred to earlier notes that many children with physical handicaps have average intellectual functioning. These are most often the students who are placed in regular education schools and follow the same academic curriculum as their typical peers. A majority commute from home where their care giving, undoubtedly a major drain on the physical and other resources of the family, is placed upon their parents, siblings, and other caregivers (Geere, Gona, Omondi, Kifalu, Newton, & Hartley, 2013). For students in separate settings, very basic academic skills are taught. These students receive instruction in self-care and manual skills and effort is made to provide them with functional skills in activities of daily living. A lot of emphasis is placed on teaching appropriate social behavior along with community values (Muuya, 2002) and religious morals.

Although the number of programs for students with physical disabilities in Kenya has grown over the years, data available is not consistent on this issue. Handicap International (2010) states that there are 122 schools for persons with physical disabilities in Kenya although only 13 are listed in its directory. Mwaura (2010) states that there are 17 residential primary schools for students with disabilities 9 of which are public government-ran institutions and 3 high schools (Matheri & Franz, 2009; Mwaura, 2010). The 17 residential primary schools are inclusive learning institutions in that though they started out with only students with disabilities, they now serve students who are typically developing as well. Typically developing students integrated in these schools are "day scholars", who are required to leave school at the end of the day and report back into the school in the morning. These residential schools also have large open fields for sports and other outdoor extra-curricular activities and a laboratory in which assistive devices for mobility and other materials and aids necessary for these students are manufactured or assembled and repaired. Along with these, some schools have physical therapy rooms that are used for physical therapy sessions for the students, ramps, wide doors, and windows (Mwaura, 2010). Some schools also have assistive technology in the form of computers with adapted keyboards and other devices and recreational facilities such as swimming pools.

The Kenya Ministry of education handbook on handling students with disabilities encourages teachers and other care givers for students with physical and other disabilities to engage the students in activities that improve their range of movement, and, for younger children, to include toys that are interesting to touch and manipulate, encourage achievement of major developmental milestones, the ability to view their environment, encourage independence, and encourage the students to communicate their needs in any mode possible. Important priority skills identified for teachers of these students in the handbook include activities of daily living and communication.

After the eight years of primary and secondary school education, students with physical disabilities who pass the national examinations designed for that level go on to high school and then to college. A majority are students whose disabilities are mainly physical and who receive education and other services through inclusive regular education classrooms (Phitalis, 2014). Although no data is available on their numbers, students with physical disabilities who go on to receive high school and college education are grossly under-represented. However, compared to students with other forms of disabilities who go on to higher education, students with physical disabilities appear to be a majority (Opini, 2012; Mugo, Oranga & Singal, 2010).

It is worth noting that a number of individuals with combinations of very severe physical disabilities, cognitive and other disabling conditions, receive custodial care from their families, relatives and friends without being accessible to the outside world because they are deemed uneducable, an embarrassment to their families, and are hidden away in the homes hence missing out on much needed services. It is also worth noting that the status of educational and related services for students with physical and other disabilities in Kenya, is expected to improve with the enactment, five years ago, of a comprehensive policy for the education of students with disabilities and other special needs, the Kenya National Special Needs Education Policy Framework of 2009 (Republic of Kenya, 2009). With effective implementation of the policies in this framework, the government aims to achieve, among others: Equal opportunities for all learners with special needs, equal access to all educational institutions by learners with special needs and disabilities and equitable access to services that meet the needs of individual learners with special needs and disabilities within diverse learning environments. The government also plans to achieve non-discrimination in enrolment and retention of learners with special needs and

disabilities in every institution of learning, barrier free transition of learners with special needs and disabilities through the various educational levels in accordance with their abilities, learner-centered curriculum and responsive learning systems and materials, holistic realization of the full potential of learners with special needs and disabilities, and protection of the human dignity and rights of learners with special needs and disabilities (Republic of Kenya, 2009). It is because of those students who still have not accessed education and other services that the advocacy services promoted by the Kenya National Special Needs Policy Framework are necessary so that these children and youth too, can participate in the society and enjoy equal rights as other citizens. It is for these individuals that the principle of "zero-reject" in the schools is imperative. It is important for families to be assured that no matter how significantly affected their child is, they will receive the necessary assistance with their education and related services in spite of society's sometimes patronizing looks and negative attitudes (Nash, 2010).

Rehabilitation and employment services: As adults, individuals with physical disabilities receive vocational and rehabilitation services (Rehabilitation International, World Congress, Association of the Physically Disabled, National Rehabilitation Committee, & Ministry of Culture and Social Services, 1993). The National Rehabilitation Program established in 1968 is the main coordinator for rehabilitation services for people with disabilities in Kenya. Rehabilitation and employment services are available for individuals with physical and other disabilities through the Vocational Rehabilitation Division (VRD) of the Department of Social Services (DSS) although they are not accessible to many. The VRD is responsible for 12 rural vocational rehabilitation centers throughout the country. It is also responsible for the Nairobi Industrial Rehabilitation Center (IRC) established in 1971 as a result of the recommendations of the Ominde Education Commission in a document, Care and Rehabilitation of the Disabled (Republic of Kenya, 1968; DRPI, N.D). The vocational rehabilitation division and the Nairobi Industrial Rehabilitation Center train people with disabilities for jobs. These centers offer skills-training courses in carpentry, metal work, tailoring, traditional crafts, printing, jewellery, textile manufacture, agriculture, commercial studies, telephone operations, and computer courses (Kimani, 1992 & Wandera, 1992). The National Rehabilitation Committee of the department of social services provides vocational rehabilitation services through 41 district rehabilitation centers. The Association for the Physically Disabled of Kenya (APDK) is also very instrumental in enabling self-sufficiency needs for adults with physical disabilities. This association runs workshops that train and employ persons with physical disabilities in handicraft production and related business skills. The many people employed here produce jewellery, hand printed textiles, woodcarvings, and leather crafts. The products are sold and exported to other countries. The association also operates a micro-finance scheme for entrepreneurs with disabilities, and a factory producing furniture.

Another association, the Handicapped Mobility Appliances Center (HAMAC) builds wheelchairs and trains users in maintaining and repairing them. Its other major aims include: creating income generating activities for individuals with disabilities, providing employment and training in wheelchair construction, promoting the integration and participation of parsons with disabilities in the Kenyan society, promoting mobility through the use of local materials and new technology, overcoming the negative attitude of the community towards people with disabilities, and providing information on prevention of disabilities.

The Kenya government continues to actively engage in issues of creating awareness of disability and the potential of persons with disabilities. In January 2004, for instance, the ministry of Gender, Sports, Culture, and Social Services organized a National Conference on the African Decade for Persons with Disabilities 1999-2009. At this conference, government and civil society representatives met to translate the decade objectives into a proposed National Plan of Action. This plan aims at improving and promoting participation, equality, and empowerment of people with disabilities in Kenya. Another important step is the enactment of the Persons with Disabilities Act of 2003 with its privileges, right, and protections for the adult population with disabilities.

Obstacles to effective services for students with physical disabilities: Teacher lack of skills to work with students with physical disabilities, the fact that some peers are not prepared to work with students who are not like them due to ignorance or negative attitudes and believes about disability, a hostile environment that is not adapted to the mobility needs of students with physical disabilities, lack of adaptive aids and lack of

adequate materials to enhance the quality of education for all learners, are just a few of the issues cited in the education of learners with physical disabilities (Handicap International, Canada, N.D). A report by the Kenya Ministry of Education (MOE) on the status of special education in Kenya makes some observations and recommendations reflecting barriers to effective services for students with physical and other disabilities in Kenya (Ministry of Education, 2003). There is a dire need for assistive technology for students who need them. The report noted that at school and at home, students with physical disabilities require adapted seats, writing equipment, adapted computers, therapy equipment, sports and recreational facilities, therapy balls, audio-visual recorders, wheelchairs, crutches, orthoses such as calipers and braces, prosthesis, and adapted functional aids among others. To this end, the MOE report recommends that the government provide learners with physical disabilities with basic assistive devices needed to access both the educational environment and the curriculum. With regard to coordination of assistive technology services for these students, the report recommends that a central body be established at the Kenya Institute of Special Education (KISE) or the Ministry of Education, Science and Technology (MOEST) with branches at the district level for the procurement, disbursement, and maintenance of assistive and functional devices. To develop personnel capacity to use and maintain these devices, the report recommends that teachers in schools with learners who have disabilities be in-serviced on how to assess the continued need for these devices by the students and how to maintain these material resources.

Another obstacle to serving students with physical disabilities efficiently relates to their ability to access both the learning environment and the learning materials. Even where students reside in the "small homes" discussed earlier, they face certain obstacles in the school and in community environment. Fortunately, the group reviewing the status of special education in Kenya also noted the inaccessibility issues facing students with physical disabilities. In this regard, the MOE report noted that because the main problems of learners with physical disabilities in the general education environment relate to mobility, manipulation of learning materials and access to the learning environment, there is need to restructure the physical environment in all schools to accommodate these learners who are constantly faced with such obstacles as inaccessible toilets, doorways, desks, chairs, tables, reading and writing materials and lighting systems in their effort to access the learning environment, materials, and the curriculum.

Other barriers to effective services for students with physical and especially those with other conditions in addition to physical impairments relate to availability of trained personnel. Prospective in-service teachers for the special needs population can either undergo a three-month training course and receive a certificate in education for special needs students or train residentially for two years for a diploma in special needs education. In-service special needs teacher candidates can also train for 3 years through distance learning for the same. Both certificate and diploma training is conducted at the Kenya Institute of Special Education. In addition teachers can train for four years at either of the two universities, Kenyatta or Maseno, and receive a bachelor of education degree in special education. Training at the Masters level is a new program that is available for special needs teacher candidates. The major problem relates to the availability of opportunities and resources for capacity building. The most recent data with regard to personnel training indicates that only 20% of teachers for students with special needs are qualified and that the teacher student ratio in most cases is about 1:15 on average (MOE, 2003). Along with lack of trained teachers is the lack of required related services providers for students with physical and other special needs. These include teacher aides, house/hostel maintenance volunteers, note takers, readers, counselors, social workers, rehabilitation personnel, and physical therapists, among others. When teachers serve inclusive general education classrooms where there is no additional support staff for students with disabilities, valuable time is spent on management and students lose out on the learning.

More barriers are those common to most students with disabilities and they relate to the society's attitude towards people who have disabilities (Crume, Moran,& Shiekh, 2001; Mamboleo, 2009). In a country where poverty is rampant and resources very limited, education for a child with a disability may not be the priority that it should. Education is seen as an investment so that it is looked upon in terms of its returns. Society's perceptions of and its attitudes towards disability are yet to change. A child with a

disability may be less likely than a "typical" person to get a job after their education and contribute to the family welfare. Given this perspective, a parent's priority, faced by inadequate resources will more often be to educate a "typically developing" child first. Although with the Education For All Act, educational opportunities for students with disabilities seem to be guaranteed, it is one thing for a school to throw open its doors for students with disabilities and quite another to ensure that students "access" the social and physical environment and the educational curriculum. Large scale overcrowding along with inadequate educational services for those with and those without disabilities have resulted from the enforcement of the Education for All (EFA) United Nations declaration to which Kenya is a signatory. It is also important to note that while "free primary education" exists for all, special education is expensive and requires thoughtful funding for adequate appropriate services. There is undoubtedly a lot to do to equal the playing field for the child with physical and/or other disabilities in Kenya. The progress made in this direction so far, is undeniable.

CONCLUSION

Educational services for students with physical disabilities in Kenya have come a long way. Currently, there is a lot of advocacy relating to the needs of individuals with physical and other disabilities from the many community-based, nongovernmental organizations, and associations for people with disabilities. This national awareness, especially with the passing of the Persons with Disabilities Act in 2003, its amendment bill in 2007, the new constitution, and the Kenya National Special Needs Policy Framework (Republic of Kenya, 2009), is already benefiting students with physical and other disabilities in many ways. In addition to the work of disability advocacy groups such as the Association for the Physically Disabled of Kenya, steps taken to enforce the educational services for students with disabilities in accordance with the National Special Needs Policy Framework, are making headway in improving access to and quality of education for these students. The Education for All (EFA) policy ensures all primary pupils' free education and in the interest of ensuring equity to educational opportunity, there are plans to increase funding for students with disabilities from its current level of 0.2% of the education allotment. To effectively serve students with physical and other disabilities in Kenya, there is need to enforce and to fund the provisions of the National Special Needs Policy Framework in order to finally make quality free and appropriate educational and related services for all students with disabilities in an environment as "normal" as possible, a reality.

REFERENCES

Au, K.S., Ashley-Koch, A., & Northrup, H. (2010). Epidemiologic and genetic aspects of spina bifida and other neural tube defects. *Developmental Disabilities Research Reviews, 16, 6-15.*

Bigge, J.L., Best, S.J., & Heller, K.W. (2001). *Teaching individuals with physical, health, and multiple disabilities* (4th ed.). Upper Saddle River, NJ: Merrill/Prentice Hall.

Benbadis, S.R., & Berkovic, S.F. (2006). Absence seizures. In E. Wyllie (Ed.), *The treatment of epilepsy: Principles and practice* (4th ed., pp. 305-315). Philadelphia: Lippincott, Williams, & Wilkins.

Berg, A.T .(2006). Epidemiologic aspects of epilepsy. In E. Wyllie (Ed.), *The treatment of epilepsy: Principles and practice* (4th ed., pp 109-116). Philadelphia: Lippincott, Williams, & Wilkins.

Bigge, J.L. (1991). *Teaching individuals with physical and multiple disabilities* (3rd edition). MacMillan Publishing co. New York, NY.

Black, K. (1997). *In the shadow of polio: A personal and social history*. Massachusetts: Addison-Wesley.

Crume, P., Moran, N., & Shiekh, S. (2001). *Barriers to effectively educating the deaf in Kenya.* Downloaded on July 26, 2014 from http://owitie.blogspot.com/2012/10/barriers-to-effectively-educating-deaf.html.

Drew, C.J., Egan, M.W., & Hardman, M.L. (2005). Human exceptionality: School, community, and family (8th edition).Boston, MA. Allyn & Bacon.

Disability Rights Promotion International (DRPI). (N.D). Downloaded on July 25, 2014 from http://drpi.research.yorku.ca/Africa/resources/KenyaRep07/Section3.

Evans, S.E. (2004). *Forgotten crimes: Euthanasia and people with disabilities.* Ivan R. Dee, Publisher.

Felix, L. & Hunter, S.J. (2010). Pediatric aspects of epilepsy. In J. Donders (ED.), *Principles and practices of lifespan developmental neuropsychology* (pp. 359-370). Chicago. University of Chicago Press.

Friedlander, H. (1995). *The origins of Nazi Genocide:*

From Euthanasia to the final solution. North Carolina University Press.

Geere, J. L., Gona, J., Omondi, F. O., Kifalu, M. K., Newton, C. R., and Hartley, S. (2013). Caring for children with physical disability in Kenya: Potential links between caregiving and carers' physical health. *Child Care Health Development, 39*(3): 381–392.

Handicap International (2010). The Kenya Disability Directory (2009-2010 ed.). Author.

Handicap International, Canada. (N.D). Project profile: Basic education of children with disabilities in Kenya. Downloaded on July 24, 2014 from http://www.acdicida.gc.ca/cidaweb/cpo.nsf/vWebCSAZEn/880A738D9A606A6D8525763C00376789.

Kiarie, M.W.(2005). Teaching students with Disabilities in Kenya: Changing Trends. Journal of International Special Needs Education, 8, 39-44.

Kennedy, W. M. (1990). *An investigation of current practices in education of the physically handicapped in Kenya and their effects on curriculum development, examinations, and methods of teaching*. Nairobi: Kenya Institute of Education.

Kimani, J. K. (1992). *Employment opportunities for self employment*: Paper presented at the 17th World Congress on Rehabilitation International.

Kochung, E. (2011). Role of higher education in promoting inclusive education: Kenyan perspective. *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(3) 144-149.

Kristen, K. (1992). *Educational assessment and resources services (EARS) programme.* Paper presented at the 17th World Congress on Rehabilitation International. Nairobi, Kenya.

Liptak, G.S. (2007). Neural tube defects. In *Children with disabilities* (6th ed., pp.419-438). Baltimore: Brookes.

Makumi, E. N.(1987). *A study of special education programs in Kenya with special emphasis on education of hearing impaired children and the causes of the semi-literacy*. M.Ed Thesis. Kenyatta University, Nairobi, Kenya.

Mamboleo, G.I. (2009). Predictors of attitudes towards disability and employment policy issues among undergraduate students at the University of Nairobi. Unpublished doctoral dissertation, University of Arizona, Department of Special Education.

Matheri, J.M. & Frantz, J.M. (2009). Physical activity levels among young people with physical disabilities in selected high schools in Kenya and their perceived barriers and facilitators to participation. *Journal of Community and Health Sciences, 4*(1): 21-26.

McIntyre, S., Taitz, D., Keogh, J., Gold-Smith, S., Badawi, N., & Blair, E. (2013). A systematic review of risk factors for cerebral palsy in children born at term in developed countries. *Developmental Medicine and Child Neurology, 55*(6), 499-508.

Ministry of education. (1995). *How to handle children with special needs: Guidelines for teachers, parents, and all others*. Nairobi: Author.

Ministry of Education. (2003). *Report on Special Needs Education: Appraisal Exercise.* Nairobi: Government Printer.

Mugo, K. J., Oanga, J. & Singal, N. (2010).*Testing youth transitions in Kenya: Are young people with disabilities falling through the cracks?* Research Consortium on Educational Outcomes and Poverty (RECOUP) Working Paper No. 34. University of Cambridge Retrieved July 24, 2014 http://ceid.educ.cam.ac.uk/researchprogrammes/recoup/publications/workingpapers/WP34_MUGO_ORANGA_SINGAL_final.pdf.

Muuya, J. (2002). The aims of special education schools and units in Kenya: A survey of head teachers. *European Journal of Special Needs Education,* 17 (3), 229-239.

Mwangi, L. (2013). Special needs education in Kenyan public primary schools: exploring government policy and teachers' understandings. Unpublished doctoral dissertation. London. Brunel University.

Mwaura, G.T.. (2010). Responding to the challenges of physical education in inclusive classes in Kenya: A descriptive case study in an inclusive school. Unpublished Masters thesis. Master of Philisophy in Special Needs Education, University of Oslo, Norway, Spring 2010.

Mwiria, K. (1985). *The Harambee School Movement: A Historical Perspective.* Unpublished Ph. D. Thesis. University of Wisconsin.

Munyi, C. (2012). Past and present perceptions towards disability: A historical perspective. *Disability Studies Quarterly,* 32 (2).

Nash, W. (2010). *Treatment of people with disabilities in Kenya and the United States*: A cross country study

of the roles of the three sectors on the acceptance and integration of people with intellectual and physical disabilities. VDM Verlag Dr. Muller.

National Coordinating Agency for Population and Development (2008). Kenya National Survey of Persons with Disabilities. Author.

Ndurumo, M.M. (1993).*Exceptional Children*. Longman: Nairobi, Kenya.

Okech, S. (2009). Special education in Kenya evolution or devolution: Comparison with the British system of education. Unpublished Masters thesis. Special Education Department, Wichita University.

O'Shea, T.M. (2008). Diagnosis, treatment, and prevention of cerebral palsy. *Clinical Obstetrics and Gynecology, 51*(4), 816-828.

Phitalis, M. W.(2014). Inclusion of the physically disabled in secondary schools in Kenya. Lambert Academic Publishing.

Opini, B. (2012). Barriers to participation of women students with disabilities in education in Kenya. *Journal of Postsecondary Education and Disability, 25(1), 65 – 79.*

Pakula, A.T., Braun, K.V., & Yeargin-Allsopp, M. (2009). Cerebral palsy: Classification and epidemiology. *Physical Medicine and Rehabilitation Clinics of North America, 20*(3)425-452.

Pellegrino, L. (2007). Cerebral palsy. In *Children with disabilities*,(6th ed., pp.387-408. Baltimore: Brookes.

Republic of Kenya. (1964). *The Committee on Care and Rehabilitation of the Disabled, the Ngala Mwendwa Report.* Nairobi, Kenya. Government printer.

Republic of Kenya. (1964). *Kenya Education Commission Report, the Ominde Report*. Nairobi, Kenya: Government press.

Republic of Kenya (2009). The National Special Needs Policy Framework. Nairobi: Government Printer.

Rehabilitation International, World Congress, Association of the Physically Disabled, National Rehabilitation Committee, & Ministry of Culture and Social Services, 1993). 17th World Congress of Rehabilitation International: 7th-11th September, 1992, Nairobi, Kenya : Accelerating efforts to equalization of opportunities : strategies for the 1990's. Association of the Physically Disabled of Kenya.

Robb, J. E & Brunner, R. (2010). Orthopaedic management of cerebral palsy. In M. Benson, J. Fixsen, M. Mcnicol, and K. Parsch (Eds.), *Children's orthopaedics and fractures* (3rd ed., pp. 307-325). New York: Springer.

Smith, D. (2005*). Introduction to special education: Teaching in an age of opportunity* (5th edition). Boston, MA: Allyn & Bacon.

Taylor, H.B., Landry, S.H., English, L.,& Barnes, M. (2010). Infants and children with spina bifida. In J. Donders and S.J.Hunter (Eds.), *Principles and practice of lifespan developmental neuropsychology* (pp. 169-182). New York: Cambridge University Press.

Wachianga, W.J.O. (2012). *Support services to learners with physical disabilities in Kenya*. An investigation into the provision of support services to learners with physical disabilities in Kisumu East district. Lap Lambert Publishing.

Wandera, N.B. (1992). *Community integration program: Vocational Rehabilitation with greater community participation*. Paper presented at the 17th World Congress on Rehabilitation International. Nairobi, Kenya.

Warchausky, S., White, D., & Tubbergen, M.V. (2010). Cerebral palsy across the lifespan. In J. Donders and S. J. (Eds.), *Principles and practice of lifespan developmental neuropsychology* (pp. 205-220). New York. Cambridge University Press.

Weinstein, S.L & Gaillard, W.D. (2007). Epilepsy. *In Children with disabilities* (6th ed., pp. 439-460. Baltimore: Brookes.

World Health Organization. (2010). *Global Status Report on Road Safety*. Author.