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Visual impairment in childhood has implications in all aspects of the child's development. It possesses educational, occupational and social challenges, with affected children being at risk of behavioral, psychological difficulties, impaired self-esteem and poor social integration. Moreover, visual problems are an important contribution to poor school performance. Visual problems are known to deteriorate and become visual impairments if they are not identified and treated early. Despite this realization, high risk learners in primary schools remain unnoticed, undiagnosed and do not benefit from special education services and interventions. The purpose of this study was to document challenges that teachers in public primary schools experienced in identifying and assisting children with visual problems. Utilizing a descriptive survey design, a study involving 36 teachers was conducted in 12 public primary schools selected in Central Kenya. Questionnaires and observation schedules were used. The study established the major challenges faced by teachers in identifying learners with visual problems as: lack of knowledge and skills in special education and visual screening as well as lack of school visual screening programs. Strategies suggested to address the challenges included special education training and special education seminars for teachers and introduction of school visual screening programs for all the learners.

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Abstract

Visual impairment in childhood has implications in all aspects of the child's development. It possesses educational, occupational and social challenges, with affected children being at risk of behavioral, psychological difficulties, impaired self-esteem and poor social integration. Moreover, visual problems are an important contribution to poor school performance. Visual problems are known to deteriorate and become visual impairments if they are not identified and treated early. Despite this realization, high risk learners in primary schools remain unnoticed, undiagnosed and do not benefit from special education services and interventions. The purpose of this study was to document challenges that teachers in public primary schools experienced in identifying and assisting children with visual problems. Utilizing a descriptive survey design, a study involving 36 teachers was conducted in 12 public primary schools selected in Central Kenya. Questionnaires and observation schedules were used. The study established the major challenges faced by teachers in identifying learners with visual problems as: lack of knowledge and skills in special education and visual screening as well as lack of school visual screening programs. Strategies suggested to address the challenges included special education training and special education seminars for teachers and introduction of school visual screening programs for all the learners.

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Introduction

Visual impairment is a significant problem world-wide. Globally, about 285 million people have visual impairment although 80% of the visual impairment is preventable or treatable if identified early (WHO, 2012). According to WHO (2009), the number of people who have visual impairments globally will escalate to 360 million by 2020 unless elaborate interventions are undertaken. In Africa, there are 35 million people with visual impairments (WHO, 2009) and every year, an estimated 2000 children develop visual impairments (WHO, 2005). In Kenya, the census statistics of 2009 indicated that the population of people with disabilities in the country was about 1.3 million, with 25% having visual impairments (Government of Kenya, 2010).

Lack of early identification of visual problems and inappropriate intervention strategies have been attributed to the unnecessary multiplication of visual impairments globally (WHO, 2006). Visual problems

are experienced as mild visual losses or visual deviations which if not checked can progress to visual impairments. Signs of visual problems among school children include holding book close when reading, omission of letters and words when reading, frequent blinking of eyes, following line with finger when reading, unwillingness to engage in reading tasks, tendency to move near or away from light, difficulty in reading from the chalkboard, screwing up face or frown when trying to see, moving the head when reading instead of the eyes, complaining of blurred or double vision and complaining of eye strain or headache when reading. Visual screening programmes have been recommended as a prerequisite towards prevention of visual loss in children [ICEVI (2010), American Academy of Ophthalmology (2007), Sight Savers International (2005)]. Since visual cues are key to how children learn and function, visual problems can have a negative effect on learning, and thus affect all other aspects of a child's development by potentially limiting the range and types of information and experiences the child processes (Kingo & Ndawi, 2009). Studies have documented that early identification of visual problems decreases the risk of developing visual impairment (Marshall, Meetz & Harmon, 2007; Roch-Levecq, Brody & Thomas, 2008).

The major challenges in preventing visual impairment in Africa is mainly delayed detection, lack of awareness about early signs of visual impairment and their potential effects at personal, family, school as well as community level; non-availability of services for visual testing, and misconceptions about visual problems (Barbara, 2010 and Ira, 2008). According to International Council for Education of People with Visual Impairments (ICEVI, 2005), millions of school children remain at risk of visual loss due to under-identification. Delayed identification and management of visual problems may impede the child's ability to adapt in school, family and community (Schaumburg, 1996 and Foster and Gilbert, 2001, PAVE, 2000).

Through the Kenya Special Needs Education Policy, the government has committed itself towards re-examining the existing physical facilities, curriculum, instructional materials and teacher preparation to ensure that all learners with visual impairments are supported (Ministry of Education, 2009). Every child with visual problems is entitled to receive required school support and interventions so that they may learn (Hoffman, 2006, Heward, 2005 and Crissy, 2009). Modification of the classroom environment, the curriculum and the teacher's instructional behaviours are important measures to be considered. This may involve the use of modified instructional techniques, more flexible administrative practices, modified academic requirements, or provide modified or alternative educational processes (Baraga & Erin, 1992). Kenya has a population of 9.4 million children in primary schools (GoK, 2010). As a result, teachers need to be well equipped with the relevant knowledge and skills of dealing with learners with all kinds of disabilities. Currently special education teachers are being trained for degree courses in some universities and for diploma courses at Kenya Institute of Special Education (KISE). Despite this, there is insufficient number of trained special education teachers to meet the capacity in public primary schools (Republic of Kenya, 2003). Teachers require special education training to acquire the necessary knowledge and skills to successfully identify children with visual problems (Hoffman, 2006). Most school districts in developed countries conduct some form of developmental screening before children enter school (American Optometric Association, 2006). Thorough eye and visual examinations during the preschool years, and

consistently through the school years is the most effective approach to early detection of visual problems in children (Groffman, 2006).

Learners with visual impairment have unique educational needs and require specialized instructions from teachers who have expertise in addressing visual disabilities and specific needs (Heward 2006). According to Kluwin (1996), a great deal of informal assessment of visual problems should be completed by the school personnel. Teachers and other school personnel should note behaviours that might indicate a vision loss or any change in the vision of the child. However, for the teachers to be able to perform this kind of assessment, they need to be made aware of the behaviours to look out for (Flax, 2006 & Borsting, 2006). Children with visual problems form a heterogeneous group. The visual problems impact the level and type of special education support they need in order to function to their full capabilities. Teachers should be made aware of the classroom and environmental adaptations to cater for the learners' visual needs. This can be done through seminars and special education programs. In Kenya, the Kenya Institute of Curriculum Development (KICD) is mandated to develop relevant curriculum and support materials for use by learners with special needs. Providing the right kind of support, along with good interventions, can ensure success in the life of a child with visual problems (Alberta, 2006).

Parents are often the first to suspect that their child may have visual problem (American Optometric Association, 2006). There should be no delay in seeking for appropriate assessment, correction and interventions (Elbaum, 2005). Communication with education professionals about the diagnosis, proposed management plan, and expected outcomes should be initiated. Other education and health care professionals should be informed about the presence and nature of the vision problems and their relationship to extant learning difficulties (Cotter, 2006). Interdisciplinary communication, consultation, and referral are vital for the most effective management of the individual with vision problems (Scheer, 2003 and Groffman, 2006).

Objectives of the Study

- To determine the teachers' level of training in special education.
- To find out the challenges teachers faced in identifying learners with visual problems.
- To make recommendations for identification and support of children with visual problems.

Methodology

The study was conducted in twelve sampled schools in Kiambu, Murangá and Kirinyaga counties of Central Kenya. Questionnaires consisting open ended and closed ended questions and observation schedules were used. The sample of the study comprised thirty six (36) teachers. Data analyses were mainly descriptive, using statistical tables.

Findings and Discussion

Teachers' level of training in Special education

Teachers were asked to indicate their level of training in special education in the area of Visual Impairment (VI). The results are presented in Table 1.

Table 1: Teachers' level of training in Special education (n=36)

Special Education Qualification	Frequency	%
Masters in Visual Impairments	0	0
Degree in Visual Impairments	1	2.8
Diploma in Visual Impairments	0	0
Certificate in Visual Impairments	0	0
Other special Ed. Training	7	19.4
No special Ed. Training	28	77.8

Table 1 show that only one teacher (3%) had trained up to the degree level in the area of Visual Impairments. A very significant number of teachers (78%) had not undertaken any special education training. Training in special education is necessary for effective identification and teaching of learners with special needs. For this study, training in visual impairments was crucial for the teacher to be able to meet the needs of learners with visual problems effectively.

The results of this study showed that majority of the teachers had not trained in special education. To make it worse, the only one who had trained in visual impairments was not very confident about his training and expressed inadequacy in identifying and addressing visual problems in learners. Most respondents felt that low level of professional preparedness hindered them from appropriately identifying and supporting learners with visual problems. Teachers who have adequate knowledge and skills about visual impairments stand a better chance of identifying and supporting children with visual problems as opposed to those without (Hunt & Marshall, 2002). This study exposed a dire need for special education teachers in public primary schools. Special education training equips teachers with the relevant knowledge and skills to meet the unique needs of learners with specific disabilities (Bailey, 2006 & Marge, 2010). Information required by the teachers should include curriculum, environmental and classroom adaptations, referrals and placement. The benefits of training teachers in special needs education has been emphasized by several authors (Groffman, 2006 & Flax, 2006, Criss, 2009 & Zindi, 1997).

Challenges faced by teachers in identifying learners with Visual Problems

The teachers were asked whether they were able to identify visual problems in learners easily. They hesitatingly mentioned some of the eye related problems they noticed among children as: tearing eyes, red eyes, painful eyes, close reading, not seeing chalkboard clearly, itchy eyes and squinted eyes. According to them, these problems were just allergies and nothing of special concern. Nine teachers (25%) said that it was very difficult to identify learners with visual problems; twenty-four teachers (67%) thought it was moderately difficult while three teachers (8%) thought that it was easy. The findings indicated the need for teacher sensitization about visual problems and the necessity for early identification and interventions. When the teachers were asked to give their opinions why they found it difficult or moderately difficult to identify visual problems, twenty-eight teachers (78%) cited lack of knowledge and skills about visual problems as the major reason. Four teachers (11%) said that most visual problems were subtle and not easily identifiable while four teachers (11%) argued that the visual cues presented with other ailments making it difficult to distinguish them as unique. Foster and Gilbert (2001) posited that teachers are usually unaware of children's visual problems because they mistake them for other similar ailments.

Teachers' lack of knowledge and skills about visual problems was greatly attributed to lack of training in the area of visual impairments. In all the twelve schools involved in the study, none had organized special education training for their teachers. In- training courses in special education are necessary in equipping teachers with the necessary knowledge and skills of identifying and supporting learners with visual problems and other special needs. However, most schools do not give priority to special needs and other times, the trainings are hampered by prohibitive costs (KIE, 2010). In this study, only one teacher (3%) said that he had attended a seminar on teaching learners with visual impairment while 35(97%) said they had not attended workshops on teaching of learners with visual impairment. Attendance of special education seminars equips teachers with necessary knowledge and skills for identifying and supporting learners with visual problems and visual impairments. Lerner (2006) postulated that teachers who lack special education knowledge held unhelpful preconceptions about people with disabilities and discriminated them. In this study, fourteen teachers (38%) reported a stigmatizing trend of labeling children using the visual signs they observed in them which had a negative effect on the self-esteem of the affected children.

Another challenge identified was uninvolved parents of children with visual problems. Regretfully, no parent had reported any visual problem experienced by their child to the teachers. Three teachers (8%) had made effort to reach out to the parents regarding their children visual concern but the parents never responded. Teachers who focus only on classroom practices fails to harness parents' potential to contribute in supporting children with visual problems (Swamson, 2006). Parents sometimes deny or do not inform the school about their child's disability/ problem. This creates problems of a sensitive nature for teachers and schools. Parent participation is needed in the child's identification, support arrangements and interventions. The family of a child probably knows more about the child's abilities, deficits, style of learning and personal qualities than anyone else (Thomson, 2005). Teachers need to encourage parent

participation energetically and also listen positively to parents views for the benefit of the child with the visual problems.

Teachers suggested the need for visits to schools by collaborators like teachers trained in special education and other health professionals to help in screening children at high risk. However, trained special education teachers and ancillary support staff are insufficient to cater for all the special needs of children in schools (MoE, 2009).

Teachers complained of big class sizes which compromised individualized attention to learners needs. It is obvious that if a teacher is required to provide teaching to a large group of learners, it is going to create greater demands in the teacher's ability to notice any special problem the child could be experiencing. The respondents also cited lack of school visual screening services and programs. In this study, none of the participating schools had ever practiced school visual screening for learners. These findings were similar to those by Smeeth (2000) which related unidentified visual problems to lack of visual screening.

Conclusion

In this study, teachers experienced various challenges in identifying children with visual problems. It is evident that lack of the necessary special education knowledge and skills was the major impediment. Furthermore, none of the schools had embraced school visual screening for the learners and hence, screening for visual problems was inaccessible.

Recommendations

Based on the findings of this study, the following recommendations were made aimed at enhancing early identification and support of children with visual problems.

Every school child should have a routine eye examination through school visual screening programs which can be advanced by the Ministry of Education (MoE). Comprehensive eye and visual examinations should be made mandatory for all children entering school and, regularly throughout their school years. This will ensure healthy eyes, early identification of those with visual problems for appropriate interventions and consequently, prevention of visual impairments.

Collaboration and coordinated efforts between the teachers, parents and children with signs of visual problems should be enhanced. At the same time, parents and guardians ought to pay close attention to their children so as to notice any visual problems early enough. This way, teachers and parents will work together in addressing the visual problems. Simultaneously, teachers should make an effort to promote cooperation and openness between school children and their parents. This can be enhanced through school meetings and individual child clinics when teachers, parents and the children meet to discuss all issues revolving around the child.

There should be continuous in- servicing training for teachers in public primary schools. This can be done through special education seminars and workshops which can be organized by the schools or the Ministry of Education. In-servicing courses equip teachers with up- to- date knowledge and skills on early identification and support of children with special needs as well as motivate them to become more vigilant

to children's special needs. Conversely, the teachers should enroll themselves for special education programmes and desist from wholly relying on free and sponsored government initiatives which are sometimes delayed.

The teachers ought to be more observant and proactive in noticing unusual visual characteristics in children. When these children are identified, the teachers should come up with the relevant special education interventions, follow up to ensure that they receive the necessary visual assessments through Educational Assessment and Resource Centres (EARCs) and support them in accessing specialized medical check-ups, operations or treatment.

The Kenyan government through KICD (Kenya Institute of Curriculum Development) should ensure that all EARCs have all the resources, facilities and equipments needed for assessing children with all categories of special needs. Concurrently, the Teachers Service Commission (TSC) should post trained special education personnel to be in charge of EARCs for effective assessment, identification and placement of children with visual problems and other special needs.

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