## Teachers' Preparedness in Identification of Cerebral Palsy Among Learners In Special Schools in Nyahururu Sub-County, Laikipia County, Kenya

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#### Abstract

Existing education and training needs to promote a well range of discrimination against different forms of cerebral palsy treatments. The purpose of the study was to establish the level of teachers' preparedness in handling learners with cerebral palsy in Nyahururu Sub-county. The objective of the study was to establish teachers' ability to identify forms of cerebral palsy. The study was based on the Theory of Normalization as postulated by Wolf Wolfensberger. The study analysed four special schools and three special units in public institutions. The sub-county had 18 teachers in special school and six teachers in special units totalling to 24 teachers. The 24 teachers formed the sample of the study. The study was conducted in Nyahururu Sub-county of Laikipia County. It adopted a mixed method of research design of collecting information. Piloting was done in two normal public primary schools to establish the instrument's reliability and validity. Data was collected by interview from the respondents. Purposeful sampling was employed to select the representative sample. The researchers obtained a permit from the National Council of Science and Technology (NCST). Finally, the data collected from the respondents was analyzed using Statistical Package for Social Sciences (SPSS) version 22. The study findings indicate that teachers lack effective skills in handling learners with cerebral palsy in both special schools and special units. The study recommends that pupils with cerebral palsy should be handled by teachers specialised on that category of disability and, therefore, the Ministry of Education Science and Technology (MOEST) should deploy teachers who are trained in handling learners with cerebral palsy in special schools and special units. The study adds that such a provision would go a long way in improving the lives of those learners living with cerebral palsy who are in learning institutions.

#### Key words

Identification, Cerebral palsy, Special schools, Special units, Teacher preparedness

## I. Introduction

#### A. Background to the Study

Learners with cerebral palsy are expected to benefit from comprehensive long term service from empowered teachers so as to be more active, productive as well as independent which will later improve their social life. The absence of these important services given by competent professionals could severely limit their independence and carrier opportunities after school. (Kirk et al., 1997). Physical disability is classified in to two; orthopaedic and neurological. Cerebral palsy is a neurological disorder that has an abnormality of motor function and postural tone that is acquired at an early age or before birth. Signs and symptoms of cerebral palsy usually show in the first year of life. (Miller et. al, 2013)

Breed (1982) expressed fear that, despite high prevalence of children with cerebral palsy and their forms little is done to draw attention to the government on the level of teacher preparedness to handle various forms of cerebral palsy. Cerebral palsy, exist not only in one form but three or mixed form. These forms should have unique treatment and training to be able to address their issue. There are a few teachers trained on physical disability including cerebral palsy. Most teachers who handle learners with cerebral palsy schools are taught in general methodology and had not specialized on this category of children. Barch (2004) asserted that teachers trained in general methods face a lot of challenges. This becomes the main reason why it is inexpressible to give a sample picture of daily activities of a non-specialised teacher of cerebral palsy. There is specialised number of experienced activities required to be done by them and their training competence is limited. They feel frustrated and their effort not fruitful and always complain of understaffing. Nelly (2011) added that physical therapies are quit helpful, in training learners with Ataxic cerebral palsy to learn better ways in mobility. They undergo this by training learners how to walk and use their wheel chair. Kirk et al (1997) added that a teacher in this case needs to be tactical, adaptive and innovative to exercise both physical and mental capacity of a learner to enable the child walk. A teacher trained in general methodology may not achieve this, since it requires a lot of technical professional preparedness

A research done by Nelly (2011) estimated that special education teachers are about 5% of teachers' population. Only 8% of this percentage special needs education teacher population had specialized on physically handicapped including cerebral palsy, despite high prevalence of 3.6 per 1000 learners in Kenya. This leaves a gap by increasing number of cerebral palsy cases unattended by the specific teacher leaving trial and error for the non-specialized teachers. (Goddard and Emerson 1997) Going by the study of Nelly (2011), there are around 250,000 teachers population in Kenya, only 5% of total population are trained on special needs education, making a total of 12,500 teachers in Kenya. Only 8% of these special needs teachers have specialised in handling physically handicapped including cerebral palsy which represents 1000 of the total teacher population, the individuals with cerebral palsy may be 3.6 of every 1000 of total population of 40 million people in Kenya which is around 108,000 cerebral palsy children cases in Kenya. The recommended teacher pupil ratio according to Ministry of Education (2009) should be 1:10. This should be farther reduced to 1:5 bearing in mind the level of severity of cerebral palsy learners in class. This leaves a big fraction of learners who need specialised learning strategies from these teachers unattended. Goldstein and Ban (2007) opine that more teachers prefer to train as mental handicapped teachers (MH), hearing impairment (HI) Emotional and behavioural difficult (EBD) visually impaired (VI) a few in physically handicapped (PH) and none of the teachers graduate with cerebral palsy (CP) as area of specialisation in Kenya, as a result a few teachers have proper training from college on this field of specialization.

The study sought to investigate the level of teacher preparedness in handling students with cerebral palsy in Nyahururu subcounty, Laikipia County and since most teachers are taught in general methodology, the study will reveal on their training needs especially those who handle Learners with cerebral palsy.

#### **B.** Purpose of the Study

The purpose of the study was to identify the level of teacher preparedness in handling learners with cerebral palsy in Nyahururu sub-county Laikipia County in Kenya.

#### C. Objective of the Study

To determine teachers' preparedness in identifying cerebral palsy among learners' in special schools in Nyahururu sub-county, Laikipia county.

## **D. Theoretical Framework**

The study was guided by work of Wolf Wolfensberger (1980), Theory of Normalization. It involves the acceptance of people with physical disabilities, offering them the some specialised treatments to meet the standard of other citizens. The theory stipulated the awareness of normal rhythms of life. These normal rhythms were designed as normal activities of a whole day, a week a month, a year and also a lifecycle. The theory recognises the dignity of risk rather than emphasis of protection of people with physical disabilities.

According to Wolf Wolfensberger (1980), learners with physical disabilities should not be seen as sick, ill, sub-human or unformed but people who require significant support in certain areas of their life.

The theory of normalisation was founded by the researcher relevant to the learners with cerebral palsy who require some competent teacher handling systems. This was to enable them perform most of their day to day activities, perform certain functions that are recognisable by many and therefore reduce the effect of their disabilities in their life. Finally life seems to be normal to them.

## II. Study Methodology

#### A. Research Design

The study employs mixed method of research design; qualitative and quantitative research design but inclined more on qualitative methods. The design was chosen because it enabled the researcher to ask questions which allowed the respondents to express themselves and give their personal views. It was meant to use structured interviews to generate data.

Sample Size and Sampling Procedures

Kombo and Orodho (2008) defined sampling as a procedure a researcher uses to gather information from people, places or things to study. To determine the sample size from the given population of four schools and three special units in public institutions, the researcher employed a purposeful sampling to all teachers in these schools and units. All teachers were sampled in this research. This was because the schools were easy to reach; and the researcher could access them easily and they were fewer in the Sub-county.

Each school ensured gender proportion representation in the sample.

#### **B. Instrument for Data Collection**

An interview schedule was used to collect data in the study. Moore (1983) observes that interview schedule give detailed answer to complex problem and they are the most effective in survey. The researcher developed interview questions for teachers. The instruments comprised both open ended and closed items. The interview questions sought to solicit information about teacher profession qualification, position held in the school, teaching experiences and type of learners they handle. Part two will have 20 items which will measure the teachers' preparedness in handling cerebral palsy learners. The interviews with the teachers were to collect data on teacher preparedness both outside and inside classroom and teacher's ability to identify various forms cerebral palsy. Having considered the type of data needed and the respondents in question the research found interview appropriate to the study at hand.

#### **C. Data Collection Procedures**

Before embarking on the study, the researcher obtained a research permit from the National Council of Science and Technology (NCST). Having the permit to carry out the study the researcher embarked on the logistics of the study. Upon getting to each school, the researcher gave a copy of the permit as advised by the National Council of Science and Technology as proof to anyone in the school who had doubts of their dealing.

#### **D. Data Analysis Procedure and Presentation**

Gay (1992) asserts that organization of cases in similar form facilitate comparison between them and paved way for coding. This stage involved selection of data in which important data was separated from unimportant one. Similar factors were grouped together and complex details were simplified. There was interconnecting of the themes identified in the coding and the database to understand the categories that relate to this central theme. This formed the study data base. The reduced data was organized thematically for easy retrieval during the analysis and also to enhance the location of specific information during analysis.

#### E. Data Analysis, Results and Findings

This chapter contains data presentation analysis and discussion from interview and observation schedules from 24 respondents on teachers' preparedness in handling learners with cerebral palsy. The return rate of the respondents who were interviewed was 100%. Under presentations and findings, the data was presented inform of frequency tables, percentage, figures and plates followed by interpretation and discussion of the findings.

#### F. Gender of the Respondents

The study sought to find out the gender representation of the respondents. The results were as follow.



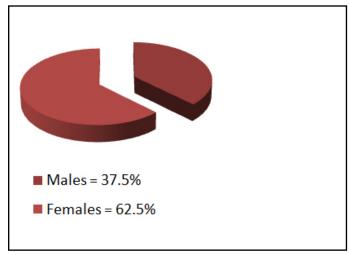


Figure 1: A pie chart on gender of the respondents

A total of 24 study participants were interviewed. There were 9 males and 15 female respondents representing 37.5% and 62.5% respectively. This shows that female respondents are more and gender representation was not well balanced.

## G. Age of the Respondents

The age bracket of the respondents was sought out and the results were as follows.

Table1: Ages of the respondents

Age	Frequency	Percentage
36-45 years	4	16.7%
46-50 years	13	54.2%
50 years and over	7	29.2%
Total	N=24	100%

Table 1 show that those who were aged between 36-45 years were 4 in number representing 16.7%. The largest population in age was between 36-50 years with a frequency of 13 with 52.2%. The smallest group was aged between 50 years and over, representing 29.2% of the total population.

#### **H. Academic Qualifications of the Respondents**

Respondents' academic qualification was sought out and the results were as follow.

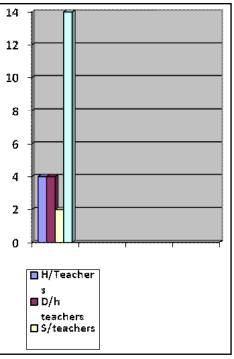
Academic qualifications	Frequency	Percentage
Diplomas	8	33.3%
Bachelors	13	54.2%
Masters	3	12.5%
Total	N=24	100%

The respondents who had diplomas were 8 (33.3%), those who had bachelors degree were 13 (54.2%) and those who had masters

degree were 3 (12.5%) of the total respondents interviewed

#### I. Position held in School

Respondents were interviewed on their position held in the current school. The results were as follow. Figure 2 shows a bar graph on position held in the schools.



The results show that head teachers and their deputies had equal ties of 4 representing (16.7%) each. Senior teachers were 2 or (8.3%) and finally class teachers were the largest with 14 which was (58.3%).

#### J. Category of the Current School

The study sought to find out respondents category of the school taught. The results were as follow

Table 3:	Category	of the	current	school	taught
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Category of schools	Frequency	Percentage
Public special schools	18	75%
Public special units	6	25%
Total	N=24	100%

Category of the school currents teaching was also considered with most teachers 18, (75%) teaching in special school, and 6, (25%) of the respondents, teaching in special units.

#### K. Teachers' awareness of different forms of cerebral palsy

Respondents were asked a true or false general question that sought to find out whether majority of teachers handling cerebral palsy learners were aware of different forms of cerebral palsy.

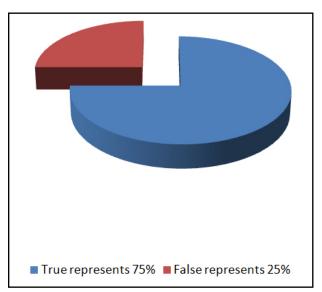


Fig. 3: A pie chart showing the percentage of teachers' awareness of different forms of cerebral palsy

The table above show that 18 of them, (75%), responded that there are different forms (true option) while 6 of them (25%) supported that cerebral palsy is just a disability of its kind (False option). This is an indication that majority of teachers are not aware of different forms of cerebral palsy

Respondents were asked to state whether it was easy to identify cerebral palsy forms from other orthopaedic complications. The results were depicted in Table 4 as follow

Table 4: Abilities of teachers to distinguish cerebral palsy from other orthopaedic complications

Response	Frequency	Percentage
Not easy	16	66.7%
Easy	6	25%
Very easy	2	8.3%
Total	24	100%

The table above shows that out of the 24 teachers teaching cerebral palsy learners 16 of them (67.7%) supported not easy, 6 of them (25%) supported it was easy, 2 of them (8.3%) supported very easy. This was an indication that there was a gap in assessment and distinguishing cerebral palsy disability from other orthopaedic complications

# L. Teachers' ability to name various forms of cerebral palsy:

Respondents were asked an open ended question to state forms of cerebral palsy they know. The report were summarised by the researcher in Figure 4 as follows.

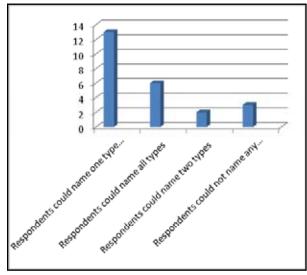


Fig. 4: A bar graph of teachers' ability to name various forms of cerebral palsy.

Figure 4 shows that 24 teachers' respondents were given a choice to name various forms of cerebral palsy they know. The highest number 13 out of 24 could only name one type (spastic), 6 out of 24 could name all forms, 2 out of 24 respondents could name two type and 3 out of 24 could not name any type of cerebral palsy. This was an indication that most teachers are only aware of the most obvious form of cerebral palsy which is spastic.

#### III. Summary

The study found that significant number of teachers could not distinguish cerebral palsy forms with other orthopaedics complications. Majority of them assumed anyone who requires wheelchair is a cerebral palsy learner failing to differentiate that, in orthopaedic one may be in a wheel chair because of accidents in lower limbs and cerebral palsy is a neurological disorder that affects the brain and the spinal cord, therefore, may affect the lower limbs. It was also evidenced that identification of cerebral palsy learners, poses a great problem with majority of teachers could not identify the three forms of cerebral palsy. It was also evidenced that those who were aware, had only spastic type of cerebral palsy in mind. The other two types of cerebral palsy i.e. ataxia and dyskinetic types were rarely adversely mentioned, meaning that little was evidenced from their ability to recognise them.

## IV. Conclusions of the Study

The study concludes that that majority of teachers could not differentiate various forms of cerebral palsy.

Secondly, majority of those who were aware had only spastic type of cerebral palsy in mind, failing to acknowledge other forms of cerebral palsy.

Thirdly, majority of teachers could not distinguish forms cerebral palsy from other orthopaedic complications and, therefore, could be of minimal assistance in ameliorating the lives of those learners living with cerebral palsy.

## V. Recommendations

The Ministry of Education Science and Technology (MOEST) through its semi-autonomous the Teacher Service Commission (TSC) should recognise upgrading teachers specialising on other areas like nursing, occupational or physiotherapy apart from educational only. This will ensure that there is bridging of the

gap left by those other professionals in cerebral palsy special units and schools. This upgrading followed by deployment would take care of the lives of learners in schools where there are cerebral palsy.

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