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EXPLORING THERAPY-RELATED CONSTRAINTS IN THE DELIVERY OF SPEECH AND LANGUAGE THERAPY SERVICES TO CHILDREN WITH CEREBRAL PALSY IN KIBERA SLUMS, NAIROBI CITY COUNTY, KENYA

Mutuiri Caroline Mwende[1i],
Tom Abuom[2]
[1]Master's Student,
Department of Early Childhood
and Special Needs Education,
Kenya
[2]Dr., Lecturer,
Department of Early Childhood
and Special Needs Education,
Kenyatta University,
Kenya

Abstract:
This study sought to establish therapy-related constraints in delivering Speech and Language Therapy (SLT) services to children with CP in Kibera slums. The study was guided by the four-level model of the healthcare system and adopted a descriptive survey research design. The target population included caregivers of children with CP, speech therapists (in training), occupational therapists, and other healthcare providers offering speech services, a total of 51 participants. Purposive sampling was used to select study participants, and the entire study population served as the sample size. Data was collected through questionnaires for caregivers and interviews with speech therapists (in training), occupational therapists, and other healthcare providers offering speech services. The study ensured validity through professional reviews and a pilot study conducted at a similar institution within the Lang'ata constituency in Nairobi County. Reliability was determined using Cronbach's Alpha to assess the consistency of research instruments. Qualitative data from interviews were analyzed thematically, while quantitative data from the questionnaires were analyzed using descriptive statistics, including frequency counts, percentages, and tables utilizing SPSS. The study revealed that a significant percentage of caregivers were discontented with the way the therapist treated their children with cerebral palsy, which not only resulted to inconsistent therapy attendance, but also poor cooperation with the speech therapists. In addition, inadequacy of available speech therapists, low quality of services provided, limited speech therapy

[i] Correspondence: email: carolinemwende759@yahoo.com, abuom.tom@ku.ac.ke

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resources and monetary constraints were cited as obstacles to seeking speech therapy services despite some care centres offering subsidized or free services. The study concluded that addressing these therapy-related constraints is essential to providing effective care and delivery of speech and language therapy services to children with CP. The study recommended that the government should prioritize the recruitment of speech and language therapists in underserved areas, particularly in slum communities and collaborate with NGOs to conduct disability awareness campaigns in Kibra in order to combat stigmatization and ensure that community members are well-informed about the available services for children with CP.

Keywords: cerebral palsy, constraints, speech and language therapist, speech therapy services

1. Introduction

Cerebral palsy (CP) is a broad term that covers on-progressive movement disorders that result from damage to the fetal or child brain (Patel *et al.*, 2020). There are four main types: spastic, athetoid, ataxic and mixed CP. Spastic CP affects 70 per cent of patients with CP; hence it is the most common type. It is characterized by slow and imprecise oral movement; hence, speech is often incomprehensible and very fast (Ferrari, 2010). 10-20% of CP patients are in the athetoid category and are characterized by difficulty in controlling their breathing and vocal cords. Poor head control is also common in this category, and this affects oropharyngeal muscles, causing dysphagia and difficulty in speaking. Early intervention in speech and language disorders helps improve communication and increase independence in day-to-day common activities as significant improvements may be attained when early interventions are done (Allen & Duncan-Smith, 2014). The treatment involves speech and language for communication, and in so doing life, the child and family improve (Leitao & Fletcher, 2014). Children with CP repeatedly experience little or no participation in curricular, extra-curricular, and public life and have a quality of life that is lower than their peers who are growing typically (Dickinson *et al.*, 2013).

From a global point of view, approximately 2-2.5 of 1000 live births have CP. United Kingdom (UK) reports that approximately 30,000 children have CP. According to Gladstone (2010), three in one hundred children in Kenya have CP. However, one of the key challenges in the management of communication problems among children with CP is the lack of speech therapists, which has been recorded in several African countries and is a matter of concern (Wylie *et al.*, 2012). The provision of SLT in East Africa, which has a projected population of 141.8 million (WHO & World Bank, 2011), is usually done in urban areas and practised in private hospitals and clinics. SLT in rural areas is not easily accessible due to barriers such as inaccessibility, lack of information, caregiver ignorance, or lack of funds to go for SLT (MRam, 2014).

Regarding CP, regardless of rising attention on human civil liberties and fairness for individuals with incapacities globally (World Bank & World Health Organization 2011), SLT in developing countries is not prioritized (Wylie *et al.,* 2013). Being able to express oneself is critical to human interactions and is vital to self-dependence (International Communication Project, 2014). A varied array of conditions can influence the capability of a person to connect. Deficits in the ability to converse have considerable effect on general inclusion in family, social, education as well as significant community roles. This leads to a lack of education for children with CP, poor social interactions and little or no employment opportunities (Law *et al.,* 2013).

According to Stone-MacDonald & Butera (2012), the connection between language and culture is elaborate and indivisible. He describes culture as the values, practices, beliefs, and viewpoints of a group of people and that in the study of communication disorders, we cannot ignore language and culture. Giving birth to a child with CP triggers guilt feelings, remorse, pain, and fear in families (Stone-MacDonald & Butera, 2012). Moreover, the lack of educated individuals complicates the efforts to avail written materials to help disseminate information about communication disorders, especially in CP. Since different cultures have different beliefs about communication disorders, it is essential to determine from the specific community how much they feel SLT would benefit them. In the upcountry parts of Kenya, the social structure is hierarchical.

Women are naturally the primary caregivers in the family unit (Vadivelan *et al.,* 2020). Thus, the thoughts and beliefs of both men and women need to be considered before implementing community programs to ensure success. It is consequently evident that the condition of life of these parents is adversely altered because of the demands that come with having a child with CP (Yilmaz *et al.,* 2013). This can also be devastating, resulting in regret and pain as the truth of gone chances and visions become evident (Huang *et al.,* 2010). In addition to all the struggles, both mental and physical, parents must go through, they deal with the opposing viewpoints of people close to them (Lynch, 2017). These encounters have been expressed by immediate family members affected by disabilities in both developed and developing nations as well as Asia and Africa (Dambi & Jelsma, 2014; Geere *et al.,* 2013).

Challenges experienced by therapists of kids with CP include obliviousness about the disorder, the interventions and the effectiveness of treatment. Corlett (2014) proposes that the therapist's level of training is among the reasons for the lack of observance of therapy recommendations, even as doing therapy and not appreciating the importance of therapy in reducing the impact of a disorder is also crucial. In several instances, a few therapists do not understand their job in the treatment process and the importance of attending therapy sessions. Lack of adequate expertise about the different communication challenges and the implication of non-compliance to treatment is something else that some therapists lack (Alm-Roijer *et al.,* 2014). Thus, training therapists on the initial involvement of SLT is crucial in ensuring consistent therapy attendance as well as a positive involvement in the intervention process.

In Kibera slums, approximately 38% of children with disabilities have CP, and despite the high number, these children have not been well attended to (Onyango, & Tostensen, 2015). There are current efforts by Non-Governmental Organizations (NGOs) to establish care centres where children living with disabilities, as well as their families, are offered support services. Even though there are not many care centres, most of the few that are available focus on occupational therapy (OT), physiotherapy, SLT, psychosocial support and economic empowerment for caregivers. Some care centres offer These services for free or at subsidized costs.

The care centres do extensive disability campaigns as well as inform the community about the availability of particular services through door-to-door campaigns. SLT services are being offered by speech therapists (in training), occupational therapists and other healthcare professionals. Unfortunately, delivery of SLT services to children with CP is being faced with several challenges as compared to other categories of disability. Despite many clients in Kibra, there has been a paucity of research addressing potential constraints in delivering Speech and Language Therapy (SLT) to children with Cerebral Palsy (CP). Consequently, this research project was undertaken to fill this knowledge gap.

The study therefore sought to establish therapy-related constraints in delivering SLT services to children with CP in Kibera Slums, Nairobi City County.

2. Literature Review

2.1 Theoretical Review

The study was guided by the four-level model of the healthcare system developed by Ferlie and Shortell (2016) will be applied. The model gives four points in the well-being arrangement. The points are individual clients, the team offering health services, the company, and the governmental and monetary setting. This model considers a thorough way of acknowledging essential levels for effective service providence. Healthcare systems comprise several connected elements, and the plan is complex. The complexity results from the systems performing jointly and how each level interacts with the other at different stages of providing quality care. This kind of system interaction suggests that it is crucial to appreciate the role of each level to understand the different underlying forces that affect an organisation's operations. Karsh *et al.* (2014) explain that each level of service delivery provides background for another dependent level within the organization.

The application of this model to the study gave insights into how the client, the team providing the service, the health care system, and the organization, as well as the financial aspect, interact to ensure possible constraints in the delivery of SLT services to children with CP are addressed appropriately. Furthermore, the model recommends team/collaboration between the four levels for quality healthcare service delivery; hence, for people with CP to fully benefit from healthcare, specifically speech therapy service,

constraints to service delivery in each of the four levels must be adequately identified and addressed.

2.2 Empirical Studies and Knowledge Gaps

Enhanced education level among therapists on the condition of the disease enhances their decision-making efficiency on health needs. The speech and language therapist's failure to honour clients' appointments may be due to insufficient experience with treatment dynamics (Bultman & Svarstad, 2015). Morris and Stein (2015) researched changes enabling more individuals to access SLT in Haringey, North London. The findings showed that caregivers' perception of the therapists impacted their decision to attend appointments. Furthermore, the perception of therapists as having limited knowledge about speech and language therapy was also a significant factor influencing caregivers attending appointments. Inadequacy of the therapist's knowledge of how to offer SLT may hinder engagement in service provision and determine how well the caregiver perceives the intervention's success.

Glogowska and Campbell (2016) also observed how some therapists lacked sufficient know-how on SLT services and the restlessness in the sessions, hence being unable to dispense effective services. Conducting capacity-building workshops and giving speech therapists the needed assistance can help resolve the issue. A previous study by Miller *et al.* (2014) revealed that most unmet requests for the delivery of SLT services are related mainly to inadequate knowledge of available services, management of the disorder, and how the condition progresses. Training therapists is thus critical in reducing stress and employing the information learnt for earlier diagnosis and child's disorder treatment.

On some occasions, the resources critical to ensuring that therapists can effectively deliver on their mandate are lacking or inadequate. The inadequacy of resources is mostly in terms of lack of funds to support speech therapist work by providing physical clinics, equipment, or facilitation to ensure that patients are effectively accessed and provided with care interventions (Staley *et al.*, 2021). Therapists also need to enhance their capacities continuously. According to Alm-Roijer *et al*. (2014), therapists need to continuously build on their knowledge to enhance their understanding of the importance of the therapy process and the benefits of being consistent in attending sessions. Availability of inadequate resources, especially monies, has been a significant hindrance in ensuring that therapists repeatedly gain access to capacity-building chances, especially in informal villages in Kenya, which limits their efficiency in delivering treatment (Ndirangu & Midigo, 2019). The current study, therefore, will find out how therapy-related constraints affect the delivery of SLT services to children with CP in Kibra Slums, Nairobi City County, Kenya.

2.3 Conceptual Framework

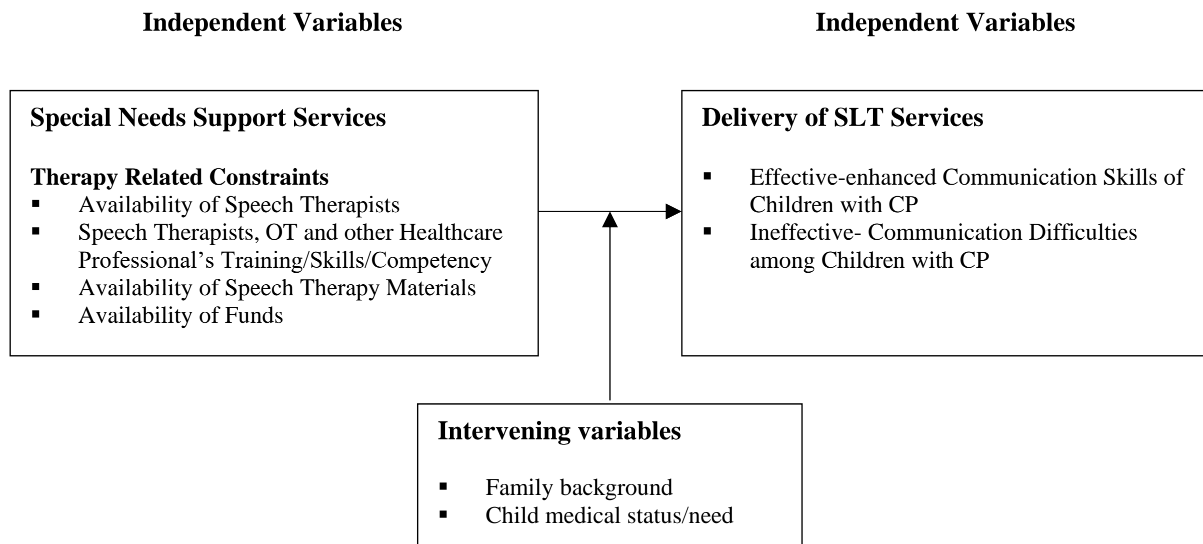

Figure 1: Conceptual Framework

3. Methodology

3.1 Study Locale

The study was conducted in Kibera slums, located within Nairobi City County, Kenya, to investigate potential constraints in delivering Speech and Language Therapy (SLT) services to children with Cerebral Palsy (CP). The research specifically centred on care centres operating within Kibera slums. The choice of Kibera slums as the study location was motivated by the significant number of children with CP residing in this area and the notable challenges associated with providing effective SLT services to these children. Therefore, the decision to focus on this specific locality was crucial in ensuring that the substantial population of children with CP and their unique needs received adequate attention and support.

3.2 Research Design and Target Population

A descriptive survey research design was employed, utilizing qualitative and quantitative measures. This research method was chosen because it allowed the researcher to define and document the procedures and data collection across a broad area cost-effectively. The phenomenon was described in terms of attitudes, beliefs, and attributes. The study involved specific groups of participants, including caregivers of children with CP in care centres located in Kibra slums, therapists (including occupational therapists, speech therapists in training, and other professionals involved in speech therapy for children with CP). The sampling was carried out among the population of care centres that provided speech and language therapy (SLT) services to children with CP in Kibera Slums. Additionally, the study encompassed children with CP who resided within Kibra slums and their caregivers. At the time of the study, six care centres in Kibera Slums offered SLT services to children with CP. The total number of

caregivers targeted was 30, and the number of therapists targeted was 12. Consequently, the total target population for this research comprised 51 participants.

3.3 Sampling Techniques and Sample Size

A purposive sampling technique was used to select participants with specific and relevant information for the study. The use of purposive sampling proved effective for this study, as it ensured that the selected sample provided specific insights into the constraints in providing SLT to children with CP in Kibera Slums. Purposive sampling also played a critical role in ensuring that the study achieved its desired outcomes. The entire study population (n) was utilized because of the small number of the target population. The study targeted 51 respondents, as shown in Table 1.

Table 1: Sample Size

Participants	**Frequency**
Caregivers	30
Speech therapist and Occupational therapist)	6
Other healthcare professionals	15
Total	**51**

3.4 Research Instruments

Data was collected through questionnaires for caregivers and interviews with speech therapists (in training), occupational therapists, and other healthcare providers offering speech services. The initial section of the questionnaires concentrated on collecting respondent information, while the second and third sections covered items related to therapy-related constraints, community/family-related constraints, and patient-related constraints. The interview schedule facilitated in-depth probing during the data collection process.

3.5 Pilot Study

A pilot study was conducted at the Edmund Rice Center, which had a special unit providing Speech and Language Therapy (SLT) to children, including those with Cerebral Palsy (CP). The participants in the pilot study included caregivers of children with CP, both qualified and trainee speech therapists, occupational therapists, and other healthcare professionals providing speech therapy services. Caregivers completed the questionnaires and conducted interviews with the therapists and other healthcare professionals delivering speech therapy services. The pilot study served to identify and categorize any unclear or ambiguous items that required modification.

3.5 Data Collection Procedures, Analysis and Presentation

This began once an approval letter was obtained from the university. Initially, the three research assistants provided feedback forms to the caregivers, which took one week after the assistants were trained.

Upon approval, questionnaires were administered to the participants with the assistance of three trained research assistants. The data collection process took one week, and the completed questionnaires were collected one week later. To maintain anonymity, caregivers were not required to include their names on the forms. Secondly, the speech therapists, occupational therapists, and other healthcare professionals providing speech therapy services were interviewed during the same week the questionnaires were distributed. The findings were reported using codes.

3.6 Data Analysis

The collected data was categorized, encrypted, organized, and summarized by the set objectives. The data was then segregated and totalled for each of the variables. The data was organized, summarized, and interpreted using descriptive statistics, which included percentages, frequency counts, tables, and pie charts. For qualitative data, it was used to describe the variables in the research paper. Qualitative data was obtained from one-on-one interviews and questionnaires collected from the respondents, which were analyzed thematically. The quantitative data derived from the Likert scale was analyzed as interval data, with a focus on the measures of central tendencies. The measures used to analyze the Likert scale included the mean and standard deviation.

4. Results and Discussions

4.1 Bio-data of the Respondents

The respondents' bio-data were analyzed descriptively using frequency and percentage, as presented in Table 2.

Results in Table 2 show that the majority (75%) of the participants in this study were female, and a quarter (25%) of the participants were male. More than half (58.8%) of the respondents were female, and slightly less than half (41.2%) were male. Three-quarters (75%) of the participating caregivers in this study had attended school up to the primary level of education. In comparison, a quarter (25%) of the caregivers who participated in the study had completed education up to the secondary level. 25 % is a significantly low percentage, considering that Kibra is densely populated. Almost half (47.1%) of the respondents had a diploma level of education.

Table 2: Bio-data of the Respondents

	Frequency	Percentage
Gender of Caregivers		
Male	6	25
Female	18	75
Total	**24**	**100**
Therapists and other Healthcare Professionals by Gender		
Male	7	41.2
Female	10	58.8
Total	**17**	**100**
Level of Education of the Caregivers		
Primary	18	75
Secondary	6	25
Tertiary	0	0.0
University	0	0.0
Total	**24**	**100**
Level of Education of the Therapists and Other Healthcare Professionals		
Diploma	8	47.1
University	4	23.5
Post-graduate	0	0.0
Others	5	29.4
Total	**17**	**100**
Distribution of Therapists by Years of Employment		
Below 1 year	5	29.4
1-5 years	10	58.8
Above 5 years	2	11.8
Any other	0	0.0
Total	**17**	**100**
Regularity of Speech and Language Sessions		
Several times a week	0	0.0
Weekly	2	8.3
Several times a month	3	12.5
Monthly	19	79.2
Any other time	0	0.0
Total	**24**	**100**

Although almost a quarter (23.5%) of the respondents had attended university and attained a university degree, this percentage is deficient for such an area, which has a very high number of children with CP who need speech therapy services. None (0.0%) of the respondents had attained a postgraduate degree. Slightly more than half (58.8%) of the therapists and the healthcare professionals who participated in the study have been working for 1-5 years. More than a quarter (29.4) have only worked for less than 1 year since they are fresh graduates or have just finished the training; barely an eighth (11.8%) have worked for more than 5 years. Over three-quarters (79.2%) of the caregivers attended therapy sessions once a month. Just under a quarter (12.5%) of the caregivers received therapy multiple times a month, and there were very few 2 (8.3%) caregivers

who were seen every week. None (0.0%) of the caregivers had a chance to receive therapy several times a week.

4.2 Therapy-Related Constraints in Delivering Speech Therapy to Children with CP

The key aim of this study was to explore therapy-related constraints in the delivery of SLT services to children with CP in Kibera Slums, Nairobi City County. Six items were used in the questionnaires, while the interview guide comprised one question that was rated based on a 4-point Likert scale. The responses to the questionnaires are presented in Table 3.

Table 3: Therapy-Related Constraints in Delivering Speech Therapy

Response rate	**Never**	**Rarely**	**Sometimes**	**Always**
Frequency	**F (%)**	**F (%)**	**F (%)**	**F (%)**
Every time you seek speech and language therapy services for the child (ren) with CP, I am adequately served.	11(45.8)	4(16.7)	9(37.5)	0(0.0)
The care centre I attend has enough therapists.	24(100)	0(0.0)	0(0.0)	0(0.0)
I have adequate resources (financial and time) to take the child to therapy sessions.	2(8.3)	18(75)	4(16.7)	0(0.0)
The therapists that attend to me are knowledgeable and highly competent.	0(0.0)	2(8.3)	16(66.7)	6(25)
The therapists at the care centre are well-resourced to deliver quality services.	4(16.7)	18(75)	2(8.3)	0(0.0)
The overall quality of therapy care services is great.	14(58.3)	0(0.0)	10(41.7)	0(0.0)
Total		**24**		**100**

From Table 3 findings, almost half of the caregivers are never adequately served when they seek speech and language therapy services for their children with cerebral palsy. Slightly over a third of the caregivers feel they are sometimes served adequately. In contrast, none of the caregivers are always adequately served regarding speech and language therapy for their child with cerebral palsy. This could imply the willingness of the caregiver to be consistent in the therapy program and consequently affects the delivery of speech therapy services to children with CP. The results on caregivers' views on therapy service correspond with those of Morris and Stein (2015), whose findings showed a close relationship between caregivers' attitudes and their willingness to attend therapy.

All the caregivers confirmed that there are never enough therapists to offer speech and language therapy to their children and that the few that are available are sometimes knowledgeable about speech therapy for children with cerebral palsy. The effect of these findings on the delivery of speech therapy could be limited specialization, which means that children with CP do not get tailor-made services to meet their specific needs (Corlett, 2014). Further, none of the caregivers admitted to being attended to by a highly competent speech and language therapist. Thus, an implication on the quality of services offered to children with cerebral palsy with more than half of the caregivers indicating

that the quality of service was not always excellent. Research conducted by Corlett (2014) demonstrates that a lack of competent therapists can lead to compromised quality care that can directly affect the delivery of speech therapy and can delay intervention. The caregivers were allowed to write other therapy-related constraints on the questionnaire, and only three responses were written down in point form.

Interviews were conducted guided by one item, which sought to identify therapy-related constraints that the therapists encountered in the delivery of speech and language therapy services to children with cerebral palsy. The participants reported that the care centres did not employ qualified speech and language therapists. The therapists working in the care centres were either trained by a speech therapist, self-trained through online courses, or trained as an occupational therapists. There were few speech therapists offering speech and language therapy services to children with cerebral palsy who were still in training. Additionally, the ones who were practising speech and language therapy and still in training were there briefly. This caused high staff turnover in the care centre, hence challenging consistency in offering speech and language therapy services.

As recorded by the respondents, parents lost trust in attending speech and language therapy as the centres kept changing the people offering the services. It was noted that caregivers built trust easily and became emotionally attached to the therapist. The following are highlights of therapy-related constraints in the delivery of speech therapy:

"When the person offering speech and language therapy services in a particular care centre leaves, it's almost impossible to find a replacement. Qualified speech and language therapists are not willing to come and work in the slums due to the low salaries. The donors supporting the centres are mostly not keen on how they pay the therapists. This has a direct implication on the delivery of speech and language therapy overall and more so on children who have cerebral palsy."

Occupational therapist 1 said,

"…from my college training, we were trained on oral muscle exercises and how to strengthen those muscles. I know speech therapy is much more than just oral muscle exercises, but there is not much that is being done to equip occupational therapists who are already in the field. Some organizations have workshops and training on therapy techniques, but rarely will you find one that has CP and speech therapy as subjects for training. I have been learning online how to offer speech therapy to children with cerebral palsy, but there is a lack of adequate materials for the same."

The speech therapist trainee said,

"I attend an average of 10 clients daily, excluding children with cerebral palsy. Most of these children with CP need assistance with feeding and swallowing. Being present during their feeding times is crucial for proper support, but the challenge arises as I have other clients waiting for attention. While training specific caregivers on safe feeding practices is a viable option, the lack of proper sitting aids poses a significant obstacle to achieving optimal results."

One health professional said,

"…there are no materials to train speech therapy to these young ones with cerebral palsy. Our care centre has toys only, no formal assessment and no assistive devices available. We rely on donations from our 'wazungu', and in most cases, they bring materials that are not culturally appropriate."

A counsellor said,

"…most caregivers are not aware of where to get speech therapy…the therapists are not well equipped to handle children with CP.…therapy materials required for augmentative and alternative communication are costly…if a child can benefit from high technology devices for them to be able to communicate and the centre has no such assistive devices then delivering speech therapy services becomes very hard."

Healthcare professionals reported high numbers of children with cerebral palsy in the Kibra slums. They added that these numbers were unmanageable and the few people offering therapy services were overwhelmed. This led to the care-centred crafting of a way of booking for the sessions. Due to the high demand for speech therapy, most clients can only receive therapy sessions once a month or even once in two months. Insufficient therapy materials were cited as a limiting factor in the delivery of speech therapy to children with CP. The respondents confirmed that there were no age-appropriate as well as culturally acceptable speech therapy materials. Available materials were not tailored to fit the children in the slums as most were unfamiliar to them. On the same note, the areas where the care centres are located have a significant number of Muslims and the materials available did not consider their religious beliefs.

Lack of awareness and stigmatization were noted as other therapy-related constraints in the delivery of speech therapy to children with CP. The stigma surrounding disability, especially CP, inhibits caregivers from seeking speech therapy for their children with CP. This also influenced consistency once the caregivers got a chance to attend therapy. As confirmed by the respondents, other professionals were just volunteers. Some had worked under a speech therapist before, while others had taught themselves through online courses. The respondents agreed that although the therapists were trying their level best, insufficient skills in how to handle children with CP was a

major challenge. In addition, those doing volunteer work had no obligation to ensure equality when offering speech and language therapy services.

One respondent was keen to note that the donors must send experts from abroad to come and conduct assessment and treatment, but this is short-lived. Thus, not all children get a chance to be assessed, most of whom are those with CP. The speech therapists from abroad often had little or no knowledge of the culture of the Kibera community. As a result, the language used discouraged the caregivers, as well as other members of the team, from participating fully in the treatment and assessment of children with cerebral palsy. The occupational therapists admitted to having been trained in speech facilitation with no significant focus on the different categories of disabilities.

This study's findings have pointed out that there are limited speech therapy materials, especially in the slums where therapists depend on foreign aid. The therapy materials donated to the centres in the slums are sometimes not effective in the cultural context of the people living in the slums. Sometimes, they are written in a foreign language, and there is no interpreter to translate the message on the materials to the person offering speech and language therapy services or to the child interacting with the materials. Having materials that are not appropriate for this group of people affects the quality of assessment, and this is a constraint in the delivery of treatment of communication disorders to children with cerebral palsy.

The findings above concur with a study conducted by Morris and Stein (2015), which found that therapists with limited knowledge in the area of speech therapy may have an impact on the delivery of speech therapy. Therapists may not know the importance of involving the caregivers in the intervention, nor are they aware of the role of appropriate speech and language therapy materials in assessing and treating children with CP. Caregivers may not adhere to the booking since it is only once a month, as in the case of the study conducted in Kibra, and this has a direct impact on the improvement of speech for their child with cerebral palsy.

5. Conclusions

Based on the findings, it is logical to conclude that delivering speech and language therapy services to children with cerebral palsy encounters four primary constraints. To begin, caregivers of children with CP express dissatisfaction with the services they receive. Secondly, those providing speech services often lack sufficient training, particularly in speech therapy for CP. Thirdly, cultural factors, including family perspectives on CP, significantly influence caregivers' willingness to seek speech and language therapy services for their children with CP. Fourth, the severity of CP plays a critical role in how children with CP are approached about speech therapy.

6. Recommendations

1) The government should prioritize the recruitment of speech and language therapists in underserved areas, particularly in slum communities.
2) The Ministry of Health, in collaboration with NGOs, should conduct disability awareness campaigns in Kibra to combat stigmatization and ensure that community members are well-informed about the available services for children with CP.
3) Through the Ministry of Health, the government should establish early intervention centres in marginalized areas like Kibra and adopt a multidisciplinary approach to caring for children with CP.

Conflict of Interest Statement
The authors declare no conflicts of interest.

About the Author(s)
Mutuiri Caroline Mwende is a special needs education consultant in Nairobi County, Kenya. She works in several centers run by Non-Governmental Organisations (NGOs) and private schools with the inclusion and integration of learners with Down Syndrome, Autism, Learning Difficulties and Cerebral Palsy. She is passionate about helping learners with communication difficulties achieve their communication skills. She has great interest in conducting research on special needs in marginalized areas. She holds a Master's Degree in Speech and Language Pathology from Kenyatta University, Nairobi, Kenya.
Dr. Tom Abuom is a lecturer in the Department of Early Childhood & Special Needs Education (Speech and Language Pathology) at Kenyatta University, Nairobi, Kenya. His research interest is in the area of communication disorders in the geriatric population. Dr. Abuom holds a Doctor of Philosophy (Clinical Linguistics) from University of Groningen (Netherlands), MSc (Clinical Linguistics) from University of Potsdam (Germany), M.A (General Linguistics) from University of Groningen (Netherlands), and Bed (English Language, Linguistics and Literature) from St. Mary's University of Minessota.

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