

Systemic Review of the Prevalence of Speech and Language Disorders in Nigeria

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Abstract

There is a paucity of research on the prevalence of speech and language disorders in Nigeria. Results of the few studies that have investigated the prevalence of speech and language disorders in Nigeria reveal the prevalence of speech impairment to be 8-30% of individuals in Nigeria who present with communication deficits. Limitations in the prevalence studies that have been conducted in Nigeria are that 1) the studies were conducted on individuals who have been identified as having communication deficits or who have expressed concerns with their communication skills, 2) most of the prevalence studies in Nigeria provide reports on speech and hearing disorders with less information on language disorders, and 3) many of the evaluators were either audiologists, doctors or other professionals who were not trained to diagnose speech and language disorders. Prevalence studies that compare the number of individuals with speech and language disorders with the total population within an area are needed. The finding of the studies can provide information as to address the percentage of the population that may benefit from speech and language services.

Keywords:prevalence, speech, language, Nigeria

1. Introduction

Few studies have investigated the prevalence of speech and language disorders in Nigeria, the most populated country in Africa and the seventh most populated in the world (The World Bank, 2015). Prevalence is the “proportion or percentage of cases in a given population at a specified time” within a “normal rather than clinical population” (Law, Boyle, Harris, Harkness, & Nye, 2000, p. 166). A speech and language disorder refers to an impairment in a person’s articulation of speech sounds, fluency, voice, comprehension and use of spoken, written or other symbol systems (American Speech-Language-Hearing Association [ASHA], 1993).

2. Prevalence in Developed Countries

Several studies have investigated the prevalence of speech and language disorders in developed countries such as United States, Canada, United Kingdom and Australia (ASHA, 2015). Law et al. (2000) performed a systemic review of the literature related to screening for speech and language delays conducted in the United Kingdom. Their results revealed the prevalence of speech and language disorders to be 2-25% of children with a median prevalence of 5.95% (Law, et al., 2000). McLeod & Harrison’s (2009) study of Australian children showed that 16-22% of Australian five-year-old children would be identified with speech impairment on formal assessment tests. A study of Canadian children revealed a prevalence of language impairment to be 8.04% (Beitchman, Nair, Clegg, & Patel, 1986). The 2011 South African Census (Statistics South Africa, 2011) reported 6% of South Africans as having a speech and language disorder. In the United States, Tomblin, et al., (1997) reported the prevalence of speech and language disorders in children to be 7.4%. Similarly, McQuiston & Kloczko (2011) reported 5-8% and Pinborough-Zimmerman, et al., (2007) reported 6.3% of school-age children have speech and language delays or disorders that may be associated with subsequent learning, socioemotional, or behavioral problems. Results of prevalence studies in developed countries may vary as a result of methodological procedures, sources of information (e.g., direct face-to-face assessments, parental reports, teacher reports), and differences in the definition of speech and language impairment and severity (ASHA 2015; Law, et al., 2000; McKinnon, McLeod, & Reilly, 2007; McLeod & Harrison, 2009).

3. Prevalence in Nigeria

In the case of Nigeria, studies have investigated the individuals who have been identified as having speech and language difficulties to determine the specific communication disorders they exhibit. Somefun, Lesi, Danfulani & Olusanya (2006) conducted a study at Lagos University Teaching Hospital with children between ages six months and fifteen years with communication disorders in Nigeria. Findings revealed that out of their 184 participants, hearing impairment was documented in 65%, speech disorders in 30%, rhinolalia (a nasal quality in speech) in 2%, and stuttering in 2% of the children. Of those with hearing impairment, 70% were considered to have delayed speech and language skills and of those with speech disorders, 79% had specific language impairment (Somefun, et al., 2006).

Aremu, Afolabi, Alabi, & Elemunkan (2011) also investigated individuals with speech and language difficulties. They studied 146 children and adults who were referred for speech and language therapy at the University of Ilorin teaching hospital in North Central Nigeria. More than half (58%) of the patients had a diagnosis of deaf-mutism, defined as the inability to speak. Twenty-one percent were diagnosed as having delayed speech development, 4% slurred speech pathology, 13% impaired speech, 3% stammering/stuttering and 1% with aphasia. At the University of Nigeria Teaching Hospital in Enugu, Iloje & Izuora (1991) studied 965 children with neurological disorders over a three-year period (1985-87) and found 8.3% presented with speech impairments.

Other studies have looked into the prevalence of dysfluency and autism in Nigeria. Nwokah (1988) studied disfluent bilingual Igbo/English in Anambra State Nigeria and reported that 9.2% of Nigerians were individuals who stutter. Bakare, Ebigo, & Ubochi (2012) investigated the prevalence of autism spectrum disorder (a disorder that involves deficits in communication) among forty-four Nigerian children with intellectual disability. Results revealed 11% of the children studied were diagnosed with childhood autism.

4. Limitation of Prevalence Studies in Nigeria

Overall, results of the studies reveal the prevalence of speech impairment to be 8-30% of individuals in Nigeria who present with communication deficits. Most of the prevalence studies that have been conducted in Nigeria were conducted on individuals who have been identified as having communication deficits or who have expressed concerns communicating. Nigeria needs prevalence studies that compare the number of individuals with speech and language disorders with the total population within a specific area. There is insufficient information on the prevalence of speech and language disorders among children within the school system in Nigeria.

Most of the prevalence studies in Nigeria report on the percentage of individuals with speech and hearing disorders with less information on the percentage of individuals with language disorders. The few reports on prevalence of language disorders often grouped language disorders and speech disorders together, labeling them both as speech disorders. The studies also lacked information on the specific types of speech sound disorders, either articulation or phonological disorders, exhibited by the participants. They also included the causes of the speech sound disorders (e.g., hearing impairment) rather than the type of speech sound disorders.

In the studies, many of the evaluators were either audiologists, doctors or other professionals who were not trained to diagnose speech and language disorders. There is a national shortage of speech-language pathologists in Nigeria (Ayo-Aderele, 2013; Nwanze, 2013) so Nigerians report to medical professionals (e.g., pediatricians, otolaryngologists, psychiatrists) to treat and advise patients and caregivers regarding speech and language concerns. Audiologists should be involved in confirming or ruling out hearing loss, not in the diagnosis of speech and language disorders. The role of pediatricians, otolaryngologists and other medical professionals is to provide information as to medical conditions that impact a child's speech and language abilities, not to diagnose speech and language disorders. Teachers can be helpful in providing the educational and social performance of the child. Diagnosis of speech and language disorder should be determined by speech-language pathologist, not parents, teachers, doctors or audiologists, as is the case presently in Nigeria. Speech-language pathologists are the professionals who are trained in following specific diagnostic procedure needed for differential diagnosis that consider the impact of cultural, ethnic, regional, linguistic, dialectal differences and socioeconomic factors that may impact speech and language learning and use (Battle, 2002; Langdon & Cheng, 2002).

5. Conclusion

In most developed countries, speech and language disorders are treated by speech-language pathologists, however, many Nigerians are seeking assistance from other professionals regarding speech and language issues. One of the problems Nigeria faces is lack of awareness of the services speech-language pathologists provide. According to Prathanee, Dechongkit & Manochiopinig (2005), the reasons for the limited speech and language services in African countries are because of 1) lack of awareness of the magnitude of problems caused by speech and language disorders, 2) inadequate multidisciplinary hospitals that contain qualified speech pathologists and rehabilitation teams, 3) lack of progression, encouragement, instrument and referral system and 4) government not recognizing the magnitude of the problem. As a result, there is little understanding of the importance of speech-language pathologists, few available providers, and little motivation to enter into the speech and language profession. Additionally, individuals in Nigeria are often misdiagnosed and underdiagnosed as having speech and language disorders. Prevalence studies can provide information on the communication disorders and delays present in a population and address the percentage of the population that may benefit from speech and language services.

Nigeria's ministries, departments and agencies (MDAs) such as the Federal Ministry of Health and the Federal Ministry of Education should take part in providing programs, schools and clinics that can educate the community and provide services to individuals with speech and language disorders. Nigeria's MDAs should also collaborate with universities in Nigeria and abroad to provide facilities that can increase the number of well-trained speech-language pathologists who can appropriately diagnose and treat individuals with speech and/or language disorders.

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