

# Deaf in Nigeria: A Preliminary Survey of Isolated Deaf Communities

SAGE Open April-June 2018: I–II © The Author(s) 2018 DOI: 10.1177/2158244018786538 journals.sagepub.com/home/sgo



Emmanuel Ihechi Asonye<sup>1</sup>, Ezinne Emma-Asonye<sup>1</sup>, and Mary Edward<sup>2</sup>

#### **Abstract**

Deaf stigmatization in Nigeria begins from the families to the kindred and communities and is more intense in the early days of the deaf child. Using a multidisciplinary approach aimed at collecting different forms of data in Nigerian deaf communities, we focused on cultural practices, linguistic features, and the cause of hearing loss in some of the undocumented deaf communities. Findings from the ongoing research indicate that up to 75% of the deaf children and young adults within our study areas were not genetically born deaf. Different health complications, poverty, and ignorance contributed to childhood deafness. We also identified specific cultural traits of deaf students in Abuja and Imo—late start to school because of nonexistence of early intervention program. Finally, the signed language used by the students in Abuja and Imo had differences and similarities with American Sign Language (ASL) and Ghanaian Sign Language (GSL). The similarities between ASL, GSL, and the school signs are through the impact of ASL on the linguistic structures of most African signed languages and the differences is caused by geographical locations and specific cultural and educational information. Based on the data, we suggest that a more detailed approach to early childhood hearing screening and intervention programs is necessary to mitigate the impact of deafness in Nigeria. We recommend that a study of the school signs and culture of Nigerian deaf communities will provide accurate data for signed language documentation and future linguistic research, cultural and health interventions within deaf communities in Nigeria.

#### **Keywords**

Nigerian sign language, documentation, early intervention, deaf students, linguistics, language studies, humanities

#### Introduction

Deaf people appear to be the most vulnerable group in Nigeria and many other African countries (Jaiyeola & Adeyemo, 2018; Kiyaga & Moores, 2003). Deaf people in Africa prior to colonization had responsibilities such as being local chiefs or servants (Miles, 2004). The introduction of formal education to deaf groups in sub-Saharan Africa was mostly pioneered by Andrew Foster's missionary work in Africa (see Kiyaga & Moores, 2003). Formal education contributed to making many deaf people part of African workforce, contributing their quota for socioeconomic development and better livelihood for themselves and their communities. However, several deaf people still live in poverty and age-long marginalization has continued to shut them out of our larger community (Ajavon, 2006; Edward, 2015).

Deaf community refers to "a group of people who live in a particular location, share the common goals of its members . . . [and] may include persons who are not themselves deaf, but actively support the goals of the community and work with deaf people to achieve them." (Padden, 1989, p. 5).

Historically, most deaf communities emerged from deaf families located in the same geographical locations (such as Adamorobe in Ghana, see Nyst, 2007; Okyere & Addo, 1994) or through associations created in deaf institutions (such as the ones in this study). Deaf communities or deaf linguistic communities include all organized units or clusters of deaf (and hearing) persons who use sign language as the primary means of communication, interaction, and or instruction. One of the most important cultural values of every deaf community is their language. In most Nigerian communities, there is a clear demarcation between deaf and hearing communities. The deaf world is generally defined by the hearing

#### **Corresponding Author:**

Emmanuel Ihechi Asonye, 939 Buena Vista Dr. SE, Apt. F-206, Albuquerque, NM 87106, USA. Email: easonye@unm.edu

<sup>&</sup>lt;sup>1</sup>The University of New Mexico, Albuquerque, USA <sup>2</sup>The University of Brighton, United Kingdom

in terms of their pathological condition, that is, their hearing loss (Padden, 1989). The cultural attitudes toward deaf people vary from acceptance to rejection (Kiyaga & Moores, 2003).

In rural and isolated communities in Africa, families, governments, religious institutions, and the entire society have (ignorantly) contributed to deaf marginalization through negligence, lack of support, exclusion, and discrimination (see Ajavon, 2006; Edward, 2018; Kusters, 2012). There is a high level of marginalization of deaf children and adults, and their languages, as we found in Nigeria, and many signed languages are underdeveloped (Asonye, 2017). Data from our study show that stigmatization begins from the families to the kindred and communities and is more intense in the early days of the deaf child to early adulthood (fieldworks in Nigeria conducted between 2013 and 2017). Nweze (2013) states that deaf people are stigmatized and marginalized even by their caregivers and immediate family relations. One similarity shared by deaf students in Abuja and Imo is abandonment (and, sometimes, total rejection by their families). In some African cultures and societies, deaf people are regarded as sick people, unfortunate, cursed, and demon-possessed (Joshua Project<sup>1</sup>). Different scholars (both deaf and hearing) are of the view that stigmatization is the root cause of lack of development of deaf communities in Africa (Kiyaga & Moores, 2003; Kusters, 2012).

Treat (2016) reports that 23.7% of Nigerians have hearing impairment (total deafness, hearing loss, or other hearing-related impairment) in a country of more than 155 million people. Also, up to 84% of deaf population in Nigeria remain undereducated and economically underdeveloped (Eleweke, Agboola, & Guteng, 2015). This condition may continue if conscious efforts are not made (per our ongoing research), and this has the likelihood to negatively impact on the economy of the nation (as these uneducated and underdeveloped deaf population will continue the cycle of poverty within deaf communities).

Communication gap between deaf people, their hearing family members, and their immediate communities in Nigeria cannot be overemphasized. A high level of unconscious stigmatization of deaf persons in the country is caused by the communication gap between them and hearing people except few trained individuals (sign language interpreters/instructors and deaf educators). The schools for the Deaf in Abuja, Orlu, and Orodo<sup>2</sup> are separated from the wider society by their gated walls. Inside the world of these students is life, passion, zeal, and the desire to excel. However, they are trapped in their own world and their only source of communication is to their colleagues and teachers who sometimes understand them better than their families. A focus group discussion held with the students (as part of our data collection) revealed that there is less communication outside the schools. Unlike many other deaf communities in the West, where family members and

members of the hearing community get integrated into the deaf community by acquiring their language and culture, these deaf communities do not have much of the presence of their hearing family members or their extended relatives. Hearing family members make little or no efforts to learn the signed language to communicate with their deaf children.

Little or no record about the deaf communities and deaf individuals in Nigeria existed before 1957 when deaf education "started in a big way" (Adelogbe, 1974), through the efforts of Allison Izzet, S.A. Dawodu, and a few other Nigerians, who played a strong role in initiating deaf education. These initiatives followed by the efforts of Andrew Forster in 1960 led to the establishment of several schools for the education of deaf children in Nigeria and other African countries (Eleweke et al., 2015; Treat, 2016). American Sign Language (ASL) was introduced to the Nigerian Deaf Community by Andrew Forster, a Black American missionary, who established churches and deaf education centers in the southwestern and northern Nigeria in 1960s. ASL was first used at the Ibadan Mission School for the Deaf in 1974, while Andrew Foster went on to establish many other Deaf education centers (Adelogbe, 1974; Ajavon, 2006). Today, there are many schools for the Deaf, special education centers and deaf units established within regular schools, owned and run by the government and some others owned by private organizations and missionary bodies.

Much hope for a rapid development of deaf communities and deaf education was raised among deaf learners and deaf educators in 1976 when the federal government took over the responsibility of running the emerging Schools for the Deaf to provide basic education for the Nigerian deaf children (Eleweke, 2002; Treat, 2016). Four decades after this, the situation remains discouraging and the development of deaf communities and sign language(s) in Nigeria remains gloomy. Deaf education in Nigeria is still far below standard in comparison with deaf education in developed nations (Abiodun-Ekus & Edwards, n.d.; Eleweke, 2002). Deaf individuals still struggle under the weight of nagging stigmatization, with little or no access to basic health care and other life entitlements (Nweze, 2013). Furthermore, deaf communities and the Nigerian Sign Language (NSL) have not been given legislative recognition and research attention (Treat, 2016).

In Nigeria, the state of deaf education has hardly improved over the years, which has resulted in the underdevelopment of the sign languages in use. Some of the problems militating against the proper education of Deaf and Hard of Hearing children in Nigeria and fueling the embers of stigmatization against them include negative attitudes of many Nigerians toward people with special needs, inadequate government support, lack of equipment, shortage of personnel, late identification of deafness, high levels of illiteracy, and poverty

(Ajavon, 2006; Eleweke, 2002). Most people we have interviewed in the course of our study know little or nothing about the functionality of the Nigerian Sign Language (NSL) and think less of it as a human language, while many deaf signers and sign language instructors have a very poor attitude toward NSL.

In this article, we present part of an ongoing study carried out in the deaf communities in Imo and Abuja, the Capital Territory.<sup>3</sup>

# Methodology and Data

Data from deaf communities under study were collected during community service and free medical outreaches organized and hosted by Save the Deaf and Endangered Languages Initiative (S-DELI). S-DELI is a community-based nongovernmental organization committed to the total development of Deaf children and adults in Nigeria. Some of the outreaches have been co-funded by First Love Assembly, Nigeria, and Tree of Life Foundation, the United States. We incorporated different methods of data analyses per the different data collected.

Linguistic data were processed in line with the grammatical structure of the signs used in schools for the Deaf, which we referred to as School Signs. The project also elicited data for name signs and demographic data from the population represented—gender, age, case history, and so on. (These were elicited from the deaf signers who took part in the research work and not all deaf people in the selected communities.) We used the Swadesh word list, video retelling, and other linguistic tools for the language data. Linguistic data were gathered from deaf institutions in Abuja and Imo (each state has three Schools for the Deaf and an adults' deaf association recognized at the state level).<sup>4</sup>

The rest of the data were taken through interviews (one-on-one), focus group discussions (with deaf students, teachers of Schools for the Deaf, health professionals etc.) seminars and sensitization fora, medical outreaches, talent hunt events, meetings and discussions with parents of deaf children, and so on. The information gathered from these sources were based on topics with our project area, including language, diagnosis and interventions, cultural practices, knowledge on deafness, poverty, stigmatization, and so on. Data collection continues in all the communities through a multiple survey method including interviews, questionnaires, video recordings, and so on.

#### Study Areas

Currently, our project is involved in studying deaf population and signed language varieties used in Abuja (the Capital Territory), Lagos in the Southwest and Imo in the Southeast. Therefore, issues discussed in this article will represent our experience with deaf communities in Abuja and Imo. Abuja. Federal Capital Territory Abuja

- Located in the center of Nigeria, within the Federal Capital Territory;
- has a population of 776,298;
- became Nigeria's capital on December 12, 1991; and
- has three schools for the Deaf at Kuje.

#### Imo state

- Created as a state—February 3, 1976;
- has a population of 3,934,899 (data from 2006 census), but currently estimated over 4.8 million people;
- located at the Southeastern Nigeria.

For more information, see https://en.wikipedia.org/wiki/ List\_of\_capitals\_of\_states\_of\_Nigeria

The Deaf community in Abuja is made up of three schools: Special School for the Deaf, Kuje; Junior Secondary School Pasali (inclusive); and Government Secondary School Kuje. The schools in Abuja are located at Kuje, a few kilometers away from the Capital City. The three schools share the same environment demarcated with walls. Deaf students graduate from the special (primary) school after 6 years to the inclusive junior secondary school and to the inclusive senior secondary school, all of which are at the same location. All the primary and junior secondary students live in the same dormitory with some of their Deaf teachers living around in the quarters. As a result, there is an ample practice of deaf mentoring, although not defined. The primary school has 14 Deaf teachers (as at the time of this study), while the junior secondary has only six teachers that use sign language, who teach their own subjects and interpret for other nonsigning teachers, giving each of the six signing teachers at least 6 hr of teaching every day.

There are three Schools that make up the Deaf community in Imo State Nigeria; Imo State Special Education Resource Center, Wetheral Road Owerri; Primary School for the Deaf and Mentally Challenged Orlu; and Secondary School for the Deaf, Ofekata Orodo. Secondary School for the Deaf, Ofekata Orodo, is located on a vast land with a gated wall. The road connecting the school from the main road is untarred and visitors are welcomed by broken notice board. The school houses the junior and senior secondary sections. Inside the school is a silent life. The students live on campus that had no electricity for several years. This situation made communication impossible at night and the students vulnerable to vandalizing and rape. Primary School for the Deaf and Mentally Challenged is located at Orlu, one of the major towns in Imo State, about 28 miles from Owerri, the Capital City. Special Education Resource Center is located along Wetheral Road in the Capital City, secluded with a heavy black gate that makes it easy for people to think that life does not exist there at all. It is intriguing to note that hundreds of

people living in Owerri, doing their business along Wetheral road do not know about this school.<sup>6</sup>

The Primary Schools for the Deaf in Orlu and Owerri both accommodate both deaf children and children with cognitive deficiencies and other disorders as part of the Federal Government's inclusive education scheme. While students (pupils) at Orlu live in the dormitories with some of their staff, those at Wetheral road are day students, probably because the school has no space for additional building other than the existing classrooms and offices. Deaf students from both schools graduate into the Secondary School for the Deaf, Ofekata Orodo, which is located between School for the Deaf in Orlu and School for the Deaf in Owerri. Deaf students at Orodo live in the dormitory all by themselves without the supervision of any teacher. These students have become either victims or perpetrators of bullying. The high rate of unchecked sexual activities has led to the spread of Sexually Transmitted Diseases (STDs). Our medical team tested the students for various medical conditions in 2015 and up to 71% of the 145 female students tested were diagnosed with STDs.

All the schools in the two Deaf communities (Abuja and Imo) are grossly overpopulated, especially the secondary schools. A class in the secondary school, Orodo, has an average of 50 students, while a class in Junior Secondary, Pasali, has up to 100 deaf and hearing students. More than 60% of the hearing teachers in these schools are neither trained deaf educators nor trained sign language users. This issue identified as one of the major setbacks of Deaf education in Nigeria is a general problem within Deaf schools in Nigeria (see Abang, 1995; Asonye, 2016).

The two Deaf communities (Abuja and Imo State) have their unique features that make them different from each other: linguistic features, cultural practices, and setting. They also share some common features like the use of School Signs.

#### **Results**

More than 100 students took part in focus group discussion, interviews, language data elicitation. We also interviewed some selected parents of some deaf students and some teachers in the Schools for the Deaf. The interviews with the teachers and students were recorded as notes with few others captured on the video camera. The interviews and focus group discussions discussed issues on cultural practices among the two deaf communities, linguistic behavior, hearing loss and early intervention, causes of hearing loss (ignorance and poverty), deaf education, and language documentation. The findings from the interviews are presented below.

### **Cultural Practices**

The Deaf communities in Abuja and Imo State share some common lifestyle and cultural practices. In both locations,

deaf children start school when they are at least 6 years old. Education for deaf Nigerians is generally delayed because of the nonexistence of Early Intervention Program. Deaf students in these two communities also stay longer in school than their hearing peers (because of the late entry). For instance, one deaf student in Abuja was 27 years old (as at 2016), same age as some of the oldest students in Orodo. However, at the same age, their hearing peers who started school early had graduated from the University.

#### Linguistic Behavior

The linguistic behavior of the two Deaf Communities presents interesting discoveries on signed language in use. Most of the deaf individuals in these communities had a late start to school resulting in poor or underdeveloped communication skill in signed and in written language.

The methodology data for the linguistic section of our documentation employed the mixed-methods approach by using both qualitative and quantitative data. We used the Swadesh word list and retelling of selected videos (same videos for Abuja and Imo) for the quantitative data and signed bio data (of selected students), focus group discussions, interviews, and so on for the qualitative data. The selected data were analyzed with ELAN annotation software and transcripts of Abuja and Imo data were compared to identify the specific linguistic features of the School Signs. The students who were involved in this study had been introduced to the School Signs for more than 7 years. School Signs used in Abuja and Imo are similar with a few distinguishable features. The points of difference include signs that are peculiar to the Nigerian cultures and these include local foods, place names, dresses, and so on.

The sign language used in different Deaf Communities in Nigeria currently is different from ASL used in America. The Deaf Communities in Abuja and Imo State have similar linguistic features, with few differences in mannerism and vocabulary. The students sign with the structure of the English language unlike the ASL used in America. Furthermore, we identified few of the students adding auxiliaries in their signing, making their language to have longer sentences. Mouthing is a conscious strategy employed by most of the students in both Communities. The sign language used in education and other formal and informal situations among educated deaf in Nigeria is supposedly the Nigerian Sign Language (NSL; Asonye, 2015). However, some scholars think that it should rather be called Nigerian— American Sign Language (N-ASL) or a dialect of ASL (Nyst, 2010), as it retains the structure of signed English. Meanwhile, most signed language instructors and deaf signers we talked to in Lagos, Abuja, and Imo believe they sign ASL. This discrepancy is not unique to Nigeria; it is similar to what happens in some other African countries such as Ghana, where

private and religious bodies use ASL materials to teach signed language classes (Edward, 2015a).

Just like most documented signed languages, the signed language used in these communities relies on the four articulatory parameters proposed by Stokoe (1960) and Liddell and Johnson (1989) for its phonological description. The handshape, location, movement, and the orientations of the signs are well defined. The most striking feature of the syntax of the sign language as recorded from the schools is the sentence structure, which is the structure of signed English as stated earlier. Syntactically, the sentences taken from the deaf students have long structures and an elaborate grammar.<sup>8</sup> The example below was taken from the students in Abuja and Imo states:

Target Sentence -> WHAT IS YOUR NAME? School Sign -> WHAT IS YOUR NAME? ASL/GSL -> YOUR/YOU NAME WHAT?

As an offshoot of ASL, the morphology of the signed language used in the schools (Abuja and Imo) can be compared with the morphology of ASL and GSL (see Valli, Lucas, Mulrooney, & Villanueva, 2011 [ASL]; Edward, 2014 [GSL]). In our interactions with the students, we found out that the difference between School Signs and GSL is mainly "dialectal." The two languages are similar in most respects and School Signs have retained more features of ASL than GSL. This brings to bear the impact of ASL in the linguistic structures of most African sign languages. Are African signed languages that were based on ASL dialects of the same language or they remain distinct languages? We argue that these different signed languages are distinct languages because the languages have evolved and have been nativized though traces of ASL remain. ASL also migrated from the Old French Sign Language and thus shares a lot in common with Old French Sign Language. We suggest that although there is an amount of mutual intelligibility between ASL-based African signed languages used especially in the Schools for the Deaf, these signed languages are different languages and they have their different peculiarities.

One other difference between the School Signs used in Abuja and Imo State is the mannerisms attached to it. The language of the Deaf is highly iconic as compared with spoken language and this is due to the availability of the modality (Taub, 2001). Deaf students in the Schools for the Deaf Kuje, Abuja, unlike their counterparts in Orodo Imo State, almost lay prostrate during greetings to adults. This mannerism that has become part of the linguistic features of their sign language is through the influence of the cultural practices of the people in Abuja and in much of Southwest of Nigeria.

In an interview with some of the students who worked with us, it was revealed that outside the schools, people try to communicate with them through gestural resources or written note. The students confessed that people, and sometimes members of their own family, communicate with them using "broken" signed language. To them, the "broken" signed language is not exactly what they use in school. Examples of the "broken" signed language given are touching the breast to indicate "woman," holding the beard to indicate "man," imitating a person with walking stick to represent an "old person."

In a similar research conducted in Adamorobe (Ghana) in 2014 (Edward, 2015b), the local sign language also uses the above-stated signs to refer to "man" and "woman." These peculiar signs can form the bedrock of a village sign language or home sign systems used in Abuja, which may be applicable to other Nigerian communities. However, we cannot affirm this claim at this time because the data are limited, and that is why we intend to carry out a documentation project of the indigenous Nigerian Sign Language. According to the students, they knew no regulated sign language before they were introduced to the signed language used in school. The gestural resources employed by the hearing people can be compared with "broken English" (or the Pidgin English that is used in Nigeria) and not a regulated sign language. Our proposed documentation project would help us to define the line of demarcation between gestures used by hearing people and the indigenous signs.

# Hearing Loss in Children

Studies have shown the prevalence of hearing loss in some African countries, indicating that in countries below the Sahara, more than 1.2 million children aged between 5 and 14 years suffer from moderate to severe hearing loss in both ears, up to 14% of children at school age in Nigeria have hearing loss, whereas in Kenya, Gambia, and Tanzania, 2.3 to 3.5 children in 1,000 suffer from severe to profound hearing loss. About 7.5% suffer from varying degrees of hearing loss in South Africa. About 4.1% of children under age 5 to 15 have hearing loss, and 9% of the same age group in Sierra Leone (adapted from McPherson & Swart, 1997).

Against this record, our ongoing studies seek to identify the causes of congenital hearing loss in children. Furthermore, we have a long-term goal to help develop and integrate such children in the society. Kamal (2013) observed that "[c]ongenital hearing impairment in infant and children has been linked with lifelong deficits in speech and language acquisition, poor performance, personalsocial lifelong maladjustments, and emotional difficulties" (p. 55). Unfortunately, the issue raised by Kamal (2013), we think it is applicable to many African countries including Nigeria. Our studies in the deaf communities in Imo, Abuja, Lagos, and Enugu show that more than 75% of the deaf students in these communities were not genetically born deaf, rather certain preventable health issues cause the congenital hearing loss in children from birth to age 5 (Asonye, 2016; Asonye & Emma-Asonye,

2018). This supports Eleweke's (2002) earlier observation of "preventable conditions" as the leading cause of hearing loss in Nigeria.

# Ignorance

Ignorance is one of the factors increasing the cause of congenital hearing loss in children within our study areas. We found out that an average mother with little or no formal education does not know what can expose her unborn or newly born baby to the dangers of hearing loss. For example, many of the parents did not know what to do when their infants are having high fever. Among the 75% deaf pupils/students in our study areas, who were not born deaf, we found out that a good number of them had a fever attack that led to convulsion, and consequently lost their hearing. We gathered these stories from the parents of the deaf students during the several sensitization forums we have had with them.

Cases of vaccine and antibiotics injection as a major cause of hearing loss in children (Eleweke, 2002) abound in the deaf communities covered in our study. According to our findings in the communities we studied, an ignorant or poor parent would prefer to patronize quack medicine dispensers and uncertified medical practitioners in most cases of ill health of their children. A father at Orodo<sup>12</sup> narrated to us the pathetic story how his son lost his hearing. According to him, the boy had a fever when he was due for vaccination. The mother unsure of what to do took him a clinic. The person at the clinic convinced her to allow the son to take the vaccine, which he was due for. The child lost consciousness after the vaccination and woke up after many hours later having lost his speech and hearing.

#### **Poverty**

Poverty is one of the social phenomena that have become major progressive issues in Nigeria over a long period of time (Olotu, Salami, & Akeremale, 2015). Children born to low income homes become the victims of this unhealthy lifestyles caused by poverty. These children in poor and isolated communities are usually born at roadside maternities and in the houses of self-made midwives, where there are no provisions for any organized medical services including screening equipment for hearing problems. While neurodevelopmental deficiencies and related health conditions such as autism and other syndrome are tagged "disease of the children of the rich," deafness in children is tagged "disease of children of the poor." Deafness in children is suspected to occur more among families of low income than those of higher income status (Asonye, 2016). Our contacts with the families of deaf children in our study areas support this view.

A lot of families and parents of low-income status get involved in self-medication at the expense of prescribed or certified medication for lack of money to pay for hospital bills. The concept of self-medication in this context is such that makes use of *anything* in the treatment of ailments and injuries. A parent from a poor background would apply petrol for instance, kerosene, engine oil, or any other related substance on the open wound of a child rather than consulting a licensed physician because of lack of money, or to satisfy certain belief that "these things also work". Many of us had similar experience while growing up. Some parents give their children kerosene to drink in an occasion of a swallowed poison because they cannot afford medical cost or rather because they believe that it works. In the same manner, a child from a poor family can receive an unaccounted quantity of locally prepared herbs for the cure of ailments in lieu of any prescribed medication. These were the case histories of some deaf children in the communities we studied.

# The Way Forward

#### Early Intervention

Early intervention is designed to allow early detection of hearing loss among babies and thereby provide care and treatment. New Born Hearing Screening (NBHS) is an early intervention practice designed for the detection of hearing loss in children to enable a child's caregivers and family members to take early steps toward maximizing the total development of the child irrespective of the diagnosed condition (Beginnings, n.d.). Studies have shown that infants with hearing loss who undergo early intervention program have higher chances of an excellent linguistic and cognitive development just as their hearing peers (Yoshinaga-Itano, Sedey, Coulter, & Mehl, 1998). Early intervention program is not in existence in our study areas and probably in the whole Nigeria. The infant screening record of the Federal Medical Center Owerri revealed that NBHS is not in the hospital's program.

Studies have shown that hearing loss is the number one congenital birth defect among newborns and is more than twice as prevalent as other conditions that are screened at birth such as sickle cell disease and others (see Kamal, 2013). The work of Yoshinaga-Itano et al. (1998; cited by Kamal, 2013) also shows that children with hearing loss, in comparison with their hearing peers, have low educational attainment and with poorer results, especially in reading. Vostanis, Hayes, Du Feu, and Warren (1997) provide an additional proof associating congenital hearing loss with increased behavioral problems, decreased psychosocial well-being, and poor adaptive skills.

With these challenging facts in mind, we strongly propose early intervention program, which comprises the three steps: (a) NBHS, which should be done at all the birthing facilities; (b) diagnostic evaluation, taking place at the clinics and hospitals; and (c) early intervention, which enrolls children with confirmed hearing loss and their parents into counseling and educational programs, which will equip the child to attain linguistic and communicative competence.

**Table 1.** Schools for the Deaf in Nigeria (by Excellence and Education Network).

	Name of school	Town/state
2	International Model School for the Deaf Demonstration Schools for Deaf Children I	Afikpo/Ebonyi Kaduna/Kaduna
3	Wesley School for the Deaf, Surulere	Lagos/Lagos
4	Ibadan Mission School for the Deaf	Ibadan/Oyo
5	Enugu Mission School for the Deaf	Enugu/Enugu
6	Kwara School for the Deaf	Ilorin/Kwara
7	Imo State School for the Deaf	Orodo/Imo
8	MSD Ifo Layout	Akpaba/Enugu
9	The Plateau School for the Deaf	Dapul/Plateau
10	Alderstown School for the Deaf Skinn Road	Warri/Delta
П	Center for Supportive Services for the Deaf Unilorin	Ilorin/Kwara
12	Kebbi School for the Deaf	Kuje/Kebbi
13	Abuja School for the Deaf	Kuje/FCT
14	National Association of the Deaf School for the Deaf	Abuja/FCT
15	Niger State School for the Deaf	Mina/Niger
16	Ibadan School for the Deaf	Ibadan/Oyo
17	Eruwa School for the Deaf	Eruwa
18	UMC Deaf Unit	Oke Ado/Ibadan
19	Deaf Unit Methodist Grammar School	Bodija/Oyo
20	ljokodo High School, Deaf Unit	Ibadan/Oyo
21	Ogbomosho Grammar	Ogbomosho/ Oyo

Note. MSD = Model School for the Deaf; FCT = Federal Capital Territory.

Currently, there is an ongoing proliferation of Daycare Centers and Preschool programs for hearing children in Nigeria both at public and private levels. However, there is hardly any such program for deaf children in most if not all parts of the country. The Nursery classes at School for the Deaf Kuje admit pupils from age 6 to 7 years, the age at which they should have started elementary school. We propose that the government's Public-Private Partnership in Education (PPP in Ed) scheme will be a success if individuals and private organizations establish learning centers for the deaf infants to enable them to have an early start in education. Furthermore, we propose that government should encourage private individuals to set up facilities for deaf education that focuses on early intervention. We believe that government should reduce taxes imposed on private institutions and review the registration procedure of such schools for possible cost reduction.

# Documenting Deaf Population and Signed Languages in Nigeria

We observed that the inaccurate representation of NSL in the media and literature is due to inadequate study and data. The misrepresentations of deaf communities in the country suggest that there is inadequate resource and research done on them by government, NGOs, and researchers (Oni, 1992). We believe the reason contributes to the stigmatization of the Deaf, that is, little is known about them by the hearing population. People conclude with a wave of hand that the population of deaf people and deaf communities in Nigeria is uncertain just because there is little or no evidence of a thorough study on the different deaf communities. An article published online by Joshua Project<sup>13</sup> in 2013 was of the view that there are several Schools for the Deaf in Nigeria, but it was difficult estimating the population of the Deaf communities. An article by Excellence and Education Network<sup>14</sup> published online a list of Schools for the Deaf in Nigeria, which we have shown in Table 1 below.

The data in Table 1 do not account for all the schools where deaf education takes place in Nigeria. They do not include schools such as School for the Deaf and Mentally Challenged Orlu, Special Education Resource Center Owerri, one of which we are studying. We believe that there are more schools than represented by the Excellence and Education Network, and we are currently documenting a more comprehensive list of Deaf school to be published soon on our website. <sup>15</sup> Proper documentation involves a nationwide research and collaboration with other deaf communities.

Signed languages used in Nigeria have received little or no attention from both researchers and the government. Linguistic documentation provides "a comprehensive record of the linguistic practices characteristic of a given speech (or language) community, which differs fundamentally from language description [which] aims at the record of a language as a system of abstract elements, constructions, and rules" (Himmelmann, 1998, p. 36). Documentation is a detailed and coherent representation of the linguistic practices. Research on the linguistics of NSL is very limited. 16 We have started documenting the signed language varieties used in the areas of our study, which has so far given us the privilege of knowing that signed language varieties used in Schools for the Deaf across the country have the structure of spoken English, uses ASL alphabets vocabulary, and hardly represent the culture and identity of Deaf in Nigeria (see "Linguistic Behavior" section of this article).

It is unfortunate that the linguistic status of Nigerian Sign Language has been misrepresented and misconstrued as a variety of ASL<sup>17</sup> in some literature (Nyst, 2015). This misrepresentation is attributed to the following: (a) lack of profound study on the Deaf people in Nigeria, (b) the fact that signed language linguistics is not yet a course of study in most, if not all institutions in the country, and (c) indigenous linguists not interested in the linguistic study of signed languages as compared with spoken languages. Asonye and Emma-Asonye (2013) suggested that the absence of local linguists in the study of Nigerian Sign Language is one of the major setbacks in the linguistic development of the language. Our documentation of deaf population and signed languages

in Nigeria is to contribute to the development of the Nigerian Deaf community and the Nigerian Sign Language (NSL).

Aside the School Signs, there are other indigenous signed language varieties that have been studied in Nigeria. These include Bura Sign Language (Blench & Warren, 2006) and Hausa Sign Language (Schmaling, 2002). These signed languages were brought to the limelight through the efforts of foreign scholars. We suggest that having the efforts of indigenous linguists and deaf signers in the documentation of the deaf population and the Nigerian Sign Languages is a necessary step to achieving success in the project.

# Deaf Talent and Capacity Development

In addition to collecting linguistic data and community engagement outreaches in our study areas, we also scout for talented and skillful deaf students. The intention is to contribute in developing their skills and talents, so they find employment after their education. Deaf capacity building has been part of our core agenda since 2013 when we began our intervention for the Deaf children in Nigeria. Deaf people have hardly been included in the government's capacity building and youth development agenda in Nigeria. With this knowledge, we made efforts toward achieving Deaf capacity building.

The two deaf communities in our study have talented and skillful deaf students. Fifteen students from Imo State stood out among others with unique dancing skills. These students were trained for 3 months and they performed at the first Deaf Talent Show in Nigeria, held in Owerri in 2014. In Kuje, Abuja, three students (Sarah, Nelson, and Sunday<sup>18</sup>) stood out in arts and crafts. Sarah draws and paints very well and intends to become a deaf artist (maybe the first pronounced deaf artist in the country). Nelson develops and draws building plans and builds the houses with cardboard paper. Nelson dreams of becoming a civil engineer or an architect in the future. Sunday designs and makes different types of shoes and slippers. He supports himself with proceeds from the sale of his shoes and dreams of setting up a shoe company. However, Sarah, Nelson, and Sunday and the 15 deaf students in Imo State are living in a society that has imposed disability, inability, and other related stigmatizations on them.

We are in contact with the schools and constantly monitor the progress of these students to ensure that their talents and skills are full developed. The goal is to ensure that these students and all the deaf students in our catchment areas become productive adults in the future.

#### Conclusion

In this article, we have presented aspects of the ongoing study toward the documentation of Nigerian deaf communities and the signed languages used in these communities. This study acknowledges the deplorable state of deaf education and the

disparities of the signed languages in Nigeria as reported by several authors cited in this study, and the interventions necessary for the development of the above two. Obaro 19 is of the view that deaf people in Nigeria have suffered untold rejection, relegation, and abuses of various form. This to him is contrary to what happens elsewhere in the world and against the specifications of the United Nations Convention on the rights of people with disabilities treaty to which Nigeria is signatory. Obaro's claim is that the deaf have been reduced to the status of a second-class citizen in Nigeria. Nweze (2013) laments the state of deaf people in Nigeria because the deaf in Nigeria have several reasons to be scared for their lives and future. The reasons given by Nweze include poor health care, lack of education, and jobs that has left the nearly 16.8 million deaf, representing about 10% of the population, to live in anguish, uncertainty for the future.

The various problems facing the development of the deaf communities and their sign language as captured by our ongoing research and in the literature available present the need to capture deaf people into national policies. Our study presents a preliminary account of an ongoing documentation of signed languages in Nigerian deaf schools in Abuja and Imo. This preliminary study focused on deaf students in the Schools for the deaf in Abuja and Imo, while there are several deaf people who are not captured in this recent study including uneducated deaf children in isolated villages within Abuja and Imo. From our interactions with the parents and caregivers of the deaf students in Abuja and Imo, we are of the view that, several deaf children in small communities are not educated, isolated from the public, and have no access to signed language.

We have referred to the signed language used in Schools for the Deaf as School Signs because it is taught in school, uses the structure of spoken English and the alphabets of ASL, hence does not represent the culture and identity of Deaf in Nigeria (see Wilcox & Wilcox, 2002). From our research, ASL and NSL (not the School Sign) are different sign languages and should be treated as such. Documenting NSL and making it available for Deaf education and other uses will contribute a lot to its growth (as the most available sign language documents used in schools for the Deaf are in ASL).

With an estimated population of more than 155 million people (Eleweke et al., 2015; Treat, 2016) and more than 500 spoken languages, Nigeria remains the most populated country in Africa. As a developing country, Nigeria's economic instability means about 61% of the citizens live in "absolute poverty" (BBC News, 2012). Meanwhile, deafness is associated with poverty, ignorance, and sickness as we stated earlier. If the population of the Deaf in the country is about 23.76%<sup>20</sup> of the entire population (Treat, 2016), we can infer that about 23.76% or less of the 61% poor Nigerian citizens are deaf. If the circle of poverty is not broken, more parents will engage in quack doctors, herbal medicines, and unsafe maternity care and these will result in the birth of more deaf children. We

propose that the distribution of the national resources must take low-income families into account and if possible offer free health care services to some of these people.

Early intervention is relevant for both language development and deaf education. When hearing impairment is detected early, preventive and correctional measures can be put in place to ensure that the impairment does not affect the child's development. Sensitization of parents with deaf children is necessary to avoid isolation and discrimination. We believe government can effect this change by adding ear screening as part of the newborn screening programs in Nigeria. This will allow deaf children to access early education and stay at par in school with hearing students of the same age.

Scouting and grooming skilled and talented deaf students is relevant for building and sustaining a career for them. The Deaf can contribute meaningfully to society, and with support, motivation, and the right training, they can achieve their dreams. In Abuja and Imo, there are several other skillful deaf students who are not covered in our program for lack of funds.

In our research, we identified an alarming degree of callousness in the attitude of some teachers, and abandonment of some deaf students by their parents and guardians. This situation has made some students drop out of school, few others have left their homes, and others have become street beggars. To curb this issue, we propose that government agencies in charge of disability education monitor deaf institutions and, if possible, conduct unannounced visits. This will ensure that teachers treat their students with care and attention. Furthermore, we recommend that parents who abandon their children should be made to face the law when caught. This will serve as a deterrent to other parents who intend to follow suit.

The scope of this broad multidisciplinary documentation project<sup>21</sup> demands enough funds to support and push across the agenda of documenting deaf cultures and sign languages, training, and equipping deaf students and ultimately give a voice to the Nigerian deaf community.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

# **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### **Notes**

- See https://joshuaproject.net/assets/media/profiles/text/ t19007 ni.pdf
- 2. The management of the above-mentioned schools has given their oral and written permission in support of our studies and their consent to mentioned on our publications.
- 3. This work does not intend to review deaf education in Nigeria, as much has been written on that already, but it aims at giving a first account of an ongoing documentation project of deaf people and signed language in Nigeria. The documentation project captures issues on (signed) language,

education, health, lifestyle, and several other aspects of deaf life. The goal of the documentation project is to gather information on all aspects of Deaf culture (lifestyle) in Nigeria. However, much emphasis is on their linguistic and communicative culture.

- 4. It is important to mention that Lagos State alone has about 43 deaf public schools/units, both special and inclusive, plus one large association for deaf adults with more than 1,000 memberships.
- Fortunately, our intervention installed solar security lights and electricity in the school in February 2016.
- 6. We got to know of this during our research.
- We identified the teaching method used in these schools as one major reason for mouthing as the some of the teachers encourages speaking in addition to signing.
- One deaf teacher interviewed in Abuja claimed that signing the structure of spoken English is to help the students in their English writing skills.
- These findings were made during our interactions with parents of the deaf children in the schools in Abuja and Imo.
- 10. As shocking as it is, some mothers we interviewed still practice the superstitious bizarre act of turning a child's head into a pit toilet when the child is convulsing, believing that the child would get better after inhaling the heavy stench of human excreta.
- Because of the sensitivity of these information, we shall not discuss them into detail. We will mention few cases that are relevant to this paper.
- 12. The father could not hold back his tears while narrating his story to us on November 24, 2013.
- See https://joshuaproject.net/assets/media/profiles/text/ t19007\_ni.pdf
- Link to the article: http://exced.ucoz.com/index/schools\_for\_ the\_deaf\_and\_hearing\_impaired\_in\_nigeria/0-174
- 15. See www.s-deli.org
- 16. There are many scholars (deaf and hearing) who have over the years promoted deaf education through their works (Adelogbe, 1974; Ajavon, 2003, 2006; Eleweke, 2002; Meretighan, 2007, etc.), but very little have been said on indigenous signed languages.
- See https://en.wikipedia.org/wiki/Varieties\_of\_American\_ Sign Language
- 18. Sarah and Sunday have graduated from the Junior Secondary School at Kuje. Nelson was not allowed to do sciences in the Senior Secondary School he first applied for because there were no interpreters for science subjects which he wanted. He is currently seeking to gain admission into the University.
- 19. Obaro made this comment on August 28, 2014 at 06:39 a.m. on *News24*. The topic of discussion was "The rights of the deaf should be protected." Again, Mr. David Anyaele, Executive Director, Center for Citizens with Disabilities (CCD), in Daily Post Staff (2014) lamented on Deaf exclusion at the nation's National Conference held in that year in which different tribes and cultures of Nigeria were represented.
- 20. Note that we could not ascertain this figure, nor any other figure claimed in literature in this study. Even members of Nigerian National Association of Deaf (NNAD) could not confirm any claimed figure in the meeting we had with her executive on January 24, 2018. This is why we are documenting Nigerian deaf population.
- 21. See www.s-deli.orgformoreinformation.

#### References

- Abang, P. A. (1995). The hearing impaired. In T. B. Abang (Ed.), Handbook of special education for developing countries (pp. 150-165). Jos, Nigeria: FAB Educational Books.
- Abiodun-Ekus, O., & Edwards, V. (n.d.). Education for all: The case of Nigerian deaf students. Retrieved from https://kipdf.com/education-for-all-the-case-of-nigerian-deaf-students\_5ab 422621723dd349c815c5c.html
- Adelogbe, R. A. (1974, September). Curricula and methods in education of the Deaf in Nigeria. Presented in United Nations Educational Scientific and Cultural Organization: Expert meeting on education of the Deaf. UNESCO Headquarters, Paris.
- Ajavon, P. A. (2003). The incorporation of Nigerian signs in deaf education in Nigeria: A pilot study (Vol. 881). Peter Lang Pub Incorporated.
- Ajavon, P. A. (2006). An overview of deaf education in Nigeria. Available from www.idcs.info
- Asonye, E. (2015). Nigerian sign language. Retrieved from https:// www.ethnologue.com/language/nsi/20
- Asonye, E. (2016). Sign language: Africa. In G. Gertz & P. Boudreault (Eds.), *The SAGE deaf studies encyclopedia*. Thousand Oaks, CA: Sage.
- Asonye, E. (2017, October 19). 2030 sustainable development goals: What does it mean to African deaf communities? [Blogpost]. Retrieved from https://www.britishcouncil.com. sn/en/programmes/language-development-conference-2017/blog/emmanuel-asonye
- Asonye, E., & Emma-Asonye, E. (2013). Redefining linguistics from the standpoint of sign language. *USEM, Journal of Languages, Linguistics, and Literature*, 4, 73-83.
- Asonye, E., & Emma-Asonye, E. (2018, January 4–7). *Collaborative* research on Nigerian sign language. Paper presented at the 92 Annual meeting of Linguistics Society of Nigeria, Utah.
- BBC News Online (2012, February 13). *Nigerians living in poverty rise to nearly 61%*. Retrieved January 2017 from https://www.bbc.com/news/world-africa-17015873.
- Beginnings. (n.d.). *Early diagnosis/intervention*. Retrieved from http://ncbegin.org/the-importance-of-early-diagnosisintervention/
- Blench, R., & Warren, A. (2006). An unreported African sign language for the deaf among the Bura in Northeast Nigeria. Unpublished conference handout. ResearchGate.
- Daily Post Staff. (2014, March 10). Director laments exclusion of deaf persons from national conference. *Daily Post*. Retrieved from http://dailypost.ng/2014/03/10/director-laments-exclusion-deaf-persons-national-conference/
- Edward, M. (2014, July 24). *The phonology and the morphology of the Ghanaian sign language*. Presented at the ATELIER International Conference, Abidjan, Cote d'Ivoire.
- Edward, M. (2015a, May). Signing out: Linguistic contact and possible endangerment of the Adamorobe sign language. Presented at the BAAL language in Africa SIG Annual Meeting on 22nd May 2015 at Aston University, Birmingham, UK.
- Edward, M. (2015b). We speak with our hands and voices: Iconicity in the Adamorobe sign language and the Akuapem Twi (ideophones) (Unpublished master's thesis, Department of Linguistics, Literary and Aesthetic studies, University of Bergen, Norway). Retrieved from https://bora.uib.no/handle/1956/9977
- Eleweke, J. (2002). A review of issues in deaf education under Nigeria's 6-3-3-4 education system. *Journal of Deaf Studies and Deaf Education*, 7, 74-82.

- Eleweke, J., Agboola, I., & Guteng, S. (2015). Reviewing the pioneering roles of Gallaudet university alumni in advancing deaf education and services in developing countries: Insights and challenges from Nigeria. *American Annals of the Deaf*, 160, 75-83. Retrieved from https://www.questia.com/read/1P3-3767020871/reviewing-the-pioneering-roles-of-gallaudet-university
- Himmelmann, N. (1998). Documentary and descriptive linguistics. Linguistics: An Interdisciplinary Journal of the Language Sciences, 36, 161-196.
- Jaiyeola, M. T., & Adeyemo, A. A. (2018). Quality of life of deaf and hard of hearing students in Ibadan metropolis, Nigeria. *PLoS ONE*, 13(1), e0190130.
- Joshua Project. (2013). *The deaf community of Nigeria: The Nigerian sign language community* (People and Language Detail Profile). Retrieved from https://joshuaproject.net/assets/media/profiles/text/t ni.pdf.19007
- Kamal, N. (2013). Newborn hearing screening: Opportunities and challenges. Egyptian Journal of Ear, Nose, Throat and Allied Sciences, 14, 55-58. doi:10/1016/j.ejenta.2013.01.002
- Kiyaga, N. B., & Moores, D. F. (2003). Deafness in Sub-Saharan Africa. *American Annals of the Deaf*, 148(1), 18-24.
- Kusters, A. (2012). "The Gong Gong Was Beaten"—Adamorobe: A "Deaf Village" in Ghana and its marriage prohibition for deaf partners. Sustainability, 4(10), 2765-2784.
- Liddel, S. K., & Johnson, R. E. (1989). American sign language: The phonological base. Sign Language Studies, 64, 195-277.
- McPherson, B., & Swart, S. M. (1997). Childhood hearing loss in Sub-Saharan Africa: A review and recommendations. *International Journal of Pediatric Otorhinolaryngology*, 40, 1-18. doi:10.1016/S0165-5876(97)01508-5
- Meretighan, A. (2007). Deafness in Nigeria: A worldwide forum for people with hearing loss. Available from www.saywhatclub.
- Miles, M. (2004). Locating deaf people, gesture and sign in African histories, 1450s-1950s. *Disability & Society*, 19, 531-545.
- Nweze, C. (2013, May 25). The deaf: Their painful, lonely world. *The Nation Magazine*. Retrieved from http://thenationonlineng.net/deaf-painful-lonely-world/
- Nyst, V. (2007). A descriptive analysis of Adamorobe Sign Language (Ghana) (Doctoral dissertation). University of Amsterdam, Faculty of Humanities.
- Nyst, V. (2010) Sign language varieties in West Africa. In D. Brentari (Ed.), Sign languages: Cambridge language survey (pp. 405-432). Cambridge, Cambridge University.
- Nyst, V. (2015). Sign language situation in Mali. Sign Language Studies, 15, 126-150.
- Obaro. (2014, August). The rights of the deaf should be protected. News. Retrieved from https://issuu.com/thenation/docs/april\_3\_\_2014
- Okyere A. D., & Addo, M. (1994). Deaf culture in Ghana. In Erting (Ed.), *The deaf way: Perspectives from the international conference on the deaf culture*. Washington, DC: Gallaudet University Press.
- Olotu, A., Salami, R., & Akeremale, I. (2015). Poverty and rate of unemployment in Nigeria. *International Journal of Management*, 2(1), 1-4.
- Oni, J. O. (1992). Etiology of deafness in developing countries: A case study of Nigeria. *Journal of Special Education and Rehabilitation*, 3, 46-52.

Padden, C. (1989). The deaf community and the culture of deaf people. In S. Wilcox (Ed.), American deaf culture: An anthology (pp. 1-16). Burtonsville, MD: Linstok Press.

- Schmaling, C. (2002). Maganar hannu: Language of the hands A descriptive analysis of Hausa sign language. In N. V. Smith (Ed.), *Africa: Journal of the International African Institute* (Vol. 72, pp. 177-178). Edinburgh University Press.
- Stokoe, W. C. (1960). Sign language structure: An outline of the visual communication systems of the American deaf. Buffalo, NY: Department of Anthropology and Linguistics, University of Buffalo.
- Taub, S. F. (2001). Language from the body: Iconicity and metaphor in American sign language. Cambridge, UK; New York: Cambridge University Press.
- Treat, S. (2016). Deaf education: Gallaudet university: How deaf education and special education is being advanced in Nigeria. Retrieved from https://prezi.com/ckdvqq0rv5cx/deaf-education/
- Valli, C., Lucas, C., Mulrooney, K. J., & Villanueva, M. (2011). Linguistics of American sign language: An introduction (5th ed.). Washington, DC: Gallaudet University Press.
- Vostanis, P., Hayes, M., Du Feu, M. D., & Warren, J. (1997). Detection of behavioural and emotional problems in deaf children and adolescents: Comparison of two rating scales. *Child: Care, Health and Development*, 23, 233-246.

- Wilcox, S., & Wilcox, P. P. (2002). *Learning to see: Teaching American Sign Language as a second language* (2nd ed.). Washington DC: Gallaudet university Press.
- Yoshinaga-Itano, C., Sedey, A. L., Coulter, D. K., & Mehl, A. L. (1998). Language of early- and later-identified children with hearing loss. *Pediatrics*, 102, 1161-1171.

#### **Author Biographies**

**Emmanuel Ihechi Asonye** is a postdoc research scholar with Linguistics Department, University of New Mexico, Founder, Save the Deaf and Endangered Languages Initiative, an NGO documenting Nigerian Sign Language and the Deaf population, and a pioneer indigenous researcher in Nigerian Sign Language linguistics.

**Ezinne Emma-Asonye** is a PhD student in Educational Linguistics, University of New Mexico, with special interest in Early Intervention Program and Special Education. Her research works include studying the linguistic behavior of children with speech and hearing disabilities in Africa.

Mary Edward holds a BA (English and Linguistics) from the University of Ghana and MA (Linguistics) from the University of Bergen, Norway, currently enrolled on a PhD (Linguistics) at the University of Brighton (UK). Her project investigates iconicity in two sign languages used in Ghana (Ghanaian Sign Language and Adamorobe Sign Language).