

ASSESSMENT OF THE AVAILABILITY AND UTILIZATION OF HEARING AIDS BY THE HEARING IMPAIRED: A CASE OF OYO TOWN

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ABSTRACT

This research evaluated and assessed the availability and utilization of hearing aids by the hearing impaired in Oyo town, Oyo State, Nigeria. A well structured questionnaire, personal observation and oral interview were used in the survey and the questionnaires were responded to by the hearing impaired across the three local government areas of Oyo town. Descriptive Statistical Method was adopted in evaluating the data obtained. It was however, discovered, that hearing aids were available in Oyo, but are drastically insufficient and they are not also produced locally in the country hence its scarcity and high cost.

INTRODUCTION

The organ of hearing is a sense organ that is inevitable to the total development of a man; it plays a significant role in the educational development, language acquisition, society norms, values and interaction among individuals (Renzulli, 1978). The organ of hearing may be defective and may malfunction thus making an individual defective of sound stimulus. The group of people who cannot use their sense of hearing effectively without the use of some amplification device are known as the hearing impaired. Hearing impairment may be classified as congenital (present at birth), adventitious (acquired later in life), pre-lingual (sustained before development of spoken language) or post-lingual (sustained after the development of spoken language). French (2004) reported that adventitious impairment is very common among elderly people and can seriously affect their quality of life, personal safety and ability to hear and can occur at birth, suddenly, or gradually over time. Depending on the cause, hearing loss can range from mild to severe and can be reversible, temporary, or permanent (WebMD, 2008). ASHA (2008) reported three types of hearing loss which are: conductive, sensorineural, and mixed.

However, regardless of the type of hearing loss, there are special corrective devices that help to improve one's hearing abilities, these are called **hearing aids**. According to Bentler et al (2000), hearing aids are electro-acoustic devices which typically fit in or behind the wearer's ear, and are designed to amplify and modulate sound for the wearer. Earlier devices known as ear trumpets or ear horns (Bentler et al., 2000; Ear Horn, 2007) were passive funnel-like amplification cones designed to gather sound energy and direct it into the ear canal. Similar devices include the bone anchored hearing aid, and cochlear implant, other types of hearing aids reported by NIH (2011) and Siekel (2007) include: Body Worn Aids, Behind the Ear Aids, Receiver in the Canal/Ear (CRT/RIC/RITE), Ear molds, in the Ear Aids, Invisible in Canal Hearing Aids, Extended Wear Hearing Aids, Open-fit Devices, Disposable Hearing Aids, Bone Anchored Hearing Aids, Eyeglass Aids, Spectacle Hearing Aids. The main aim of this research is to assess the availability and utilization of various hearing aids among individuals and group of individuals suffering from any form of hearing loss in Oyo town. To the best of the researchers' knowledge, this is the first study that would assess the availability and utilization of hearing aids among the hearing impaired in Nigeria, although a study by Yusuff et al., (2012) examined the availability of assistive technologies in Nigerian educational institutions.

Methodology

The survey adopted a survey research design for data collection, the population for this study comprises of people of different ages suffering from any form of hearing loss in Oyo town, comprising of three (3) local government areas: Afijio Local Government, Jobele; Oyo East Local Government and Atiba Local Government.

Research Instrument

The main instrument used for the study is questionnaire. However, personal observations and interview were also conducted in the assessment of the availability and utilization of hearing aids among the hearing impaired and the hard of hearing. A total of ninety –five (95) questionnaires were administered and retrieved in various areas of Oyo town, Oyo State, Nigeria using a random sampling technique. In order to ensure that information gathered were true representation of results, reluctant respondents were persuaded with extensive explanation of the study.

Data Classification and Analysis

Information presented on the questionnaire were meant to assess and carry out a survey of the availability of hearing aids and its utilization by the hearing impaired in Oyo town. Structured questionnaire was designed and administered by the researchers to collect primary data from people suffering from one form of hearing loss or the other. The data collected were analyzed using descriptive statistical method (frequency counts and percentages) to achieve the set objectives and statistical program was used in analyzing all the information sought from the respondents.

Results and Discussion

A higher percentage of the respondents are females 52% as to 48% male respondents. However, majority of the respondents (who are suffering from any form of hearing loss) in Oyo town are above age 40 years (49%) while 51% respondents are below 40 years of age. Table 1 below shows the results of the availability of hearing aids for the hearing impaired in Oyo town.

Table 1: Availability of Hearing Aids for the Hearing Impaired in Oyo Town.

Statement	S.A	A	D	S.D
I have been using hearing aid(s) before now	19 (20%)	13 (14%)	21 (22%)	47 (49%)
I have never seen a hearing aid before	15 (16%)	12 (13%)	34 (36%)	39 (41%)
The hearing aid was locally produced	25 (26%)	49 (52%)	11 (12%)	15 (16%)
The hearing aid was imported	30 (32%)	47 (49%)	7 (7%)	16 (17%)
The price is affordable and cost effective	10 (11%)	7 (7%)	22 (23%)	61 (64%)

It is quite obvious from the result above that hearing aids availability is very minimal, people suffering from hearing losses do not have access to hearing aids to improve their hearing losses, the few available ones were claimed to be imported from other countries and not made in Nigeria. Major causes of the availability were reported to be scarcity, cost-effectiveness, maintenance and technical-know-how. The following were suggestions made by respondents to improve the availability of hearing aids:

- Sensitization of the hearing impaired,
- Subsidizing the prize of hearing aids
- Hearing aids should be produced locally so as to make it available and lesser
- Government should open various centers for the deaf and the hearing impaired.

Table 2 below shows the data collected on the utilization of hearing aids.

Table 2: Responses of the respondents on the utilization of Hearing Aids

Statement	S.A	A	D	S.D
The use of hearing aid has really improved my hearing abilities	35 (37%)	30 (32%)	11 (12%)	19 (20%)
Hearing aids are sufficient for enough usage by the hearing impaired	33 (35%)	32 (34%)	19 (20%)	14 (15%)
Hearing aids don't spoil easily, they stay longer than 5 years	25 (26%)	49 (52%)	11 (12%)	13 (14%)

From the above results it can be deduced that hearing aids actually improve hearing abilities for those with partial hearing. They are sufficient for enough usage by the hearing impaired and are easy to maintain as they can last for longer years.

Major problems encountered in the utilization of hearing aids as reported by the respondents are in the areas of

- Maintenance
- Repair
- Technical-know- how and
- Non Availability.

Conclusions

Questionnaire, personal observations and interview were used to assess the availability and level of use of hearing aids among people with hearing impairment in Oyo town, Oyo State. To improve on their hearing disabilities however, the following conclusions are made from this survey:

- I. Hearing aids are available for the hearing impaired but are not sufficient
- II. Few hearing aids that are available were imported and not produced in the country hence, the high cost
- III. The utilization of hearing aids has positive impact in the hearing abilities of people that have access to hearing aids as it has improved their hearing abilities.

Recommendations

The following recommendations are made:

1. Government should send abroad to train those who will be producing hearing aids in Nigeria and subsidize the sale of these hearing aids;
2. Various sensitization programmes should be embarked upon;
3. People suffering from hearing losses should make use of corrective devices mainly hearing aids to improve their hearing abilities.

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