



Knowledge and Use of Hearing Aids Among Hearing Impaired Persons Visiting Ear Nose and Throat (ENT) Clinic at Tamale Teaching Hospital (TTH)

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Abstract

A hearing aid is a small electronic device that is worn in or behind the ear. It makes some sounds louder for a person with hearing loss to hear, communicate and participate more fully in daily activities. This study aimed to assess the knowledge and use of hearing aids among hearing impaired persons visiting ENT clinic at Tamale Teaching Hospital. A quantitative cross-sectional design was used and 52 hearing impaired persons were selected using a purposive sampling. Data was collected through a self-administered questionnaire and analyzed using descriptive statistics. The findings suggest a significant proportion of respondents (36.5%) reported being slightly knowledgeable about the benefits of using hearing aids, (28.8%) considered themselves moderately knowledgeable about the benefits of hearing aids while a small proportion (15.4%) of respondents claimed to be very knowledgeable about the benefits of hearing aids. Surprisingly, (19.3%) of respondents indicated that they had no knowledge at all about the benefits of hearing aids. However, there are challenges related to access, affordability (19.2%), and sustained use of hearing aids that need to be addressed. The deductions and inferences drawn from the results of the findings suggest that ENT Specialists, Audiologist in collaboration with management of TTH should develop and implement educational programs and awareness campaigns targeted at the hearing-impaired patients/clients visiting the clinic to improve their knowledge and understanding on the benefits of using hearing aids.

keywords: Ear, Nose and Throat, Hearing Aids, Hearing Impaired Persons, Tamale Teaching Hospital

INTRODUCTION

Around 466 million people in the world have disabling hearing loss. It is estimated that by the year 2050, over 900million people will have a disabling hearing loss (WHO, 2020). Without hearing rehabilitation, hearing loss can have detrimental effects on speech, language

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development in children and forgetfulness, depression, dementia and a high risk of cognitive decline in the elderly (Niyogi & Kumari, 2022). Providing individuals with hearing loss with hearing aids is the primary clinical intervention for their care (Schmucker et al., 2019). Wearing a tiny electronic device in or behind the ear, a hearing aid amplifies certain sounds, allowing a person with hearing loss to hear, communicate, and take part in daily activities to a greater extent (Pati et al., 2013). Hearing aids have been in existence since 1630s and have undergone several evolutions until now we have the modern ones, (Curran & Galster, 2013). Hearing aid use also improves quality of life reflected by improved standard of living and a positive sentiment about their life, making them have comfort and friendship (Chang et al., 2020). An estimated 401.4 million individuals worldwide are "in need" of hearing aids; the disease burden in this population could be reduced if each and every prevalent case "in need" utilized one. Despite this, 80% of individuals who could have benefited from a hearing aid do not employ one. Additionally, many recipients of hearing aids do not utilize them. According to McCormack and Fortnum (2013). According to , their investigation into the population of hearing-impaired individuals requiring aids revealed that Africa, including Ghana, has the highest proportion (90%) of hearing-impaired individuals who do not utilize aids. This includes individuals visiting the Komfo Anokye ENT clinic. There has actually been low, if not stagnancy in the adoption of hearing aids. According to Alamni (2016), the adoption rates of hearing aids have been relatively stable since 1980, rising at a pace that is comparable to the population's organic increase. The reported prevalence of hearing adoption and use in South Korea is 17.4% and 12.6% respectively, indicating that the prevalence of hearing aid use is relatively low (Cho et al., 2015). According to Wajeaha et al., (2021), several factors accounts for the rejection of hearing aids among young adults having moderate to severe hearing loss, prevalent among which is the hearing aid value. Other factors identified by Niyogi & Kumari,(2022) are financial problem, physical looks, perception and discomfort. The capacity to manage one's hearing aid is essential for successful outcomes and continuous use of the device. One reason older people don't keep using their aid is because they don't get enough information about them, both before and after the fitting. The provision of information and attention to the psychosocial aspects of care are critical in helping older people adjust and optimize the benefits of their hearing aids (McColgan et al., 2013; Saunders et al., 2018). Several studies have been done concerning hearing aid but no substantial literature is found on knowledge and use of hearing aid among hearing impaired persons visiting Ear, Nose and Throat clinic at TTH.

Statement of the Problem

People all around the globe continue to be affected by hearing impairment, which is a huge globally significant problem. The use of hearing aids is the major clinical intervention that is recommended for individuals who have experience hearing loss. However, hearing impaired patients wait for an average of 4-8years to see a doctor about their problem (Łuczaj et al., 2013). The measured prevalence of impairment in the elderly who are not using hearing aids amounts

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to 50.8% and the reported prevalence rate of hearing aid use in the United States among people with hearing impairment is 14.2%- 33.1% which is very low (He et al., 2018). Despite the scientific advancements, acceptance of hearing aids still remains poor in the elderly who have hearing impairment. Attitudinal issues play a significant role in their decision to use or not use (Singhal & Kapoor, 2019). The majority 80% of people who could have benefitted from a hearing aid do not use them. Furthermore, many people fitted with a hearing aid do not wear them (McCormack & Fortnum, 2013). Hearing aid use is associated with a lot of benefits including improvement in the quality of life of the individual reflected by an improved standard of living and a positive sentiment about their life. Chang et al., (2020) This calls for a higher magnitude of information and skill required to optimally manage hearing aids to be given to hearing aid users (Bennett et al., 2018). When the hearing-impaired persons who should use a hearing aid fail to use, there's always a high risk of cognitive decline, forgetfulness, depression, low productivity among others (Niyogi & Kumari, 2022). Studies have shown that several factors account for the low patronage of hearing aid among young adults with the prevalent one being the hearing aid value (Hafiz, et al 2021). Hearing aid non-usage can also stem from stigma, be it self or social, which necessitates that stigma be dealt with for and improvement in the rate of hearing aid uptake. Amlani, (2013) stated in their research that the long-standing purchase behavior in the hearing aid stem from lack of understanding about how consumers of amplification technology perceive, attribute and price information about the product. This calls for knowledge increment in the body of hearing aid users on the value of hearing aid. At the TTH Audiology clinic, according to hospital record keeping system, the total number of patients yearly with hearing aids is over 310, however, the few numbers that come for review do not wear the aid. Little is known about the reasons for this low turn up and low usage of hearing aids among these people, even though the benefits of using hearing aids have been well established. Therefore, this study was designed to assess the knowledge and usage of hearing aids among hearing impaired persons visiting ENT clinic at TTH.

METHODS

The research used a quantitative technique using a descriptive cross-sectional design. This design was adopted for the study to collect data from respondents at a defined time in order to gain insight into behaviour pattern. Descriptive survey provides the opportunity to select a sample from the population to be studied and make possible, generalization of the sample being studied using a questionnaire (Aday & Cornelius, 2006). It requires quantitative data to be collected. Additionally, the design's simplicity in data gathering methods and concentration on study objectives contributed to its selection.

Study Area

This study was conducted at ENT unit of Tamale Teaching Hospital (TTH) which is the third largest teaching/tertiary hospital in Ghana. Tamale Teaching Hospital is located in the city of Tamale, which is the capital of the Northern Region of Ghana. Tamale is a major urban centre in

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the country, known for its vibrant cultural heritage and growing population. The hospital serves as a tertiary healthcare facility, providing specialized medical services to the people of Tamale and surrounding areas.

The study area, Tamale Teaching Hospital, represents a critical healthcare setting for the study on the usage of hearing aids among hearing-impaired individuals. It provides a centralized location where patients seek medical attention and support related to their hearing difficulties. The diverse patient population attending the hospital offers an opportunity to gather comprehensive data on hearing aid usage, reflecting the experiences and challenges faced by individuals in Tamale and the surrounding communities

The hospital is geographically bounded to the north by Kukuio community, to the east a town call Dakokpaa, to the west is Dohamnyili and to the south Kalariga community. This hospital serves as the referral center for the people in and around the metropolitan area, the municipal and the four other regions in northern Ghana. The hospital has a bed capacity of 800. The hospital following clinical and non-clinical directorates. The clinical directorates include; "Anaesthesia and Intensive care unit (ICU), Child Health, Oral Health, Dental, Eye, Ear Nose and Throat (DEENT), Diagnostics, Medicine, Obstetrics, and Gynaecology, Oncology, Polyclinic, Accident and Emergency and Surgery. The non-clinical directorates include; domestic services, security, supply management and technical services."

The hospital has various surgical, diagnostics and rehabilitation centers. These includes; the Accident and Emergency Centre, Admission Wards, X-ray units, consulting rooms, Labour wards, various clinics and Lecture Halls for medical and other students in the health sciences. TTH is made up of staff unit of doctors, nurses, pharmacists, laboratory technicians, healthcare assistants, health extension workers, administrators, ward aids, internal revenue collectors, accountants, x-ray technicians, secretaries, security staff, and any other personnel whose services help in the smooth running of the hospital.

Study population

The study was conducted among patients with hearing impairment who are qualified to use hearing aid. They should all be attendees of ENT Clinic of the Tamale Teaching Hospital

Sampling procedure

The sampling technique was purposive, where patients who have hearing impairment and are qualified to use hearing aids in the clinic during the study period were used based on their willingness to participate and also their availability. The unit receive an average of hearing-impaired patients in a day for the 3 working days in a week. This brings the estimated monthly tally to 60 patients. A monthly total was adopted because the study is expected to last for about a month.

Using the Slovin's formula with a 95% confidence interval thus;

$$n = \frac{N}{1 + N(e)^2}$$

Where; n = sample size

N = the population size of the target group

e = the level of precision which is a constant (0.05)

Therefore; $N = 60$

$$\text{Therefore, } n = \frac{60}{1 + 100(0.05)^2} \quad n = \frac{60}{1 + 100(0.0025)}$$

$$n = \frac{60}{1.2375}$$

$n = 52$ patients

Based on the above, a sample size of 52 respondents were recruited to participate in the study.

Data collection instrument

Structured questionnaire was used to collect data from patients who serve as respondents for this study. It was developed based the specific objectives of the study. Section A collected information on socio-demographic characteristics of the respondents, section B-D focused on the specific objectives of the study. Section b assessed the knowledge of patients about the value of hearing aids, section c; factors that affect the use of hearing aids among the hearing impaired, and section d; knowledge on effects of non-usage of hearing aids on the hearing-impaired persons. Pretesting of data collection instrument was carried out to structure, modify and rectify the data collection instrument by clarifying grammar and language used to avoid bias and misinterpretation of the questions. Pretesting was done at Komfo Anokye Teaching Hospital using ten (10) respondents and the data obtained was analysed to determine if the findings can be used to answer the research questions or the specific objectives of the study.

Data collection procedure

To secure approval to carry out the study, permission was obtained from the management of the Teaching Hospital. The researcher met with the departmental research directors upon arriving at the study site to introduce herself. The potential participants were briefed on the study's objectives. The surveys were distributed to those who expressed their willingness to participate. Questions could be addressed by contacting the researcher. Three weeks were required for data collecting.

Ethical Consideration

The formal letter obtained from ENT School Kumasi was dispatched to the hospital administration for ethical certification, where the research was carried out. This action was taken in order to obtain consent prior to initiating the research. Potential participants were provided with both written and verbal descriptions of the research. Additionally, they were informed that their involvement is entirely voluntary. The participants were provided with clear and unambiguous information regarding their prerogative to disengage from the study at any time. Confidentiality of the participants was ensured through the implementation of coded questionnaires and transcriptions.

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Data processing and analysis

Data collected was managed in Microsoft excel, analysis of data started by crosschecking of questionnaire at the end of each day's work to make certain the correctness and completeness of the data collected. The analysis of the data was based on the research objectives. Data was analyzed by Statistical Package for Social Sciences (SPSS) version 26.0 and presented in frequency tables and percentages.

RESULTS AND DISCUSSION

The demographic characteristics of the respondents included; gender, age, occupational status, and educational level. In terms of gender, the respondents consisted of 17 males, accounting for 32.7% of the sample, and 35 females, making up 67.3% of the sample. Regarding age, there were 11 respondents (21.2%) in the 18-39 age range, while 41 respondents (78.8%) were aged 40 and above. In terms of occupational status, 13 respondents (25.0%) were employed as employees, 18 respondents (34.6%) were self-employed, and 21 respondents (40.4%) were retirees. When examining the educational level of the respondents, 12 respondents (23.1%) had no formal education, 8 respondents (15.4%) had basic education, 12 respondents (23.1%) had secondary education, and 20 respondents (38.5%) had tertiary education.

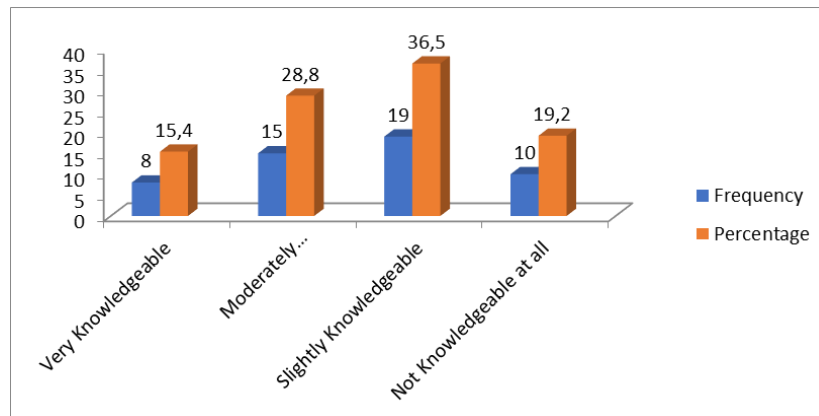


Figure 1: Knowledge about the benefits of hearing aids

Figure 1 above indicates the respondents' knowledge regarding the benefits of hearing aids. Here, the respondents were asked to rate their knowledge level on the benefits of hearing aids, to which 19(36.5%) out of the 52 respondents indicated that, they are slightly knowledgeable about the benefit of using hearing aids. Furthermore, 15(28.8%) stated that, they are moderately knowledgeable on the benefit of using hearing aid, 10(19.2%) also indicated that, they are not knowledgeable at all about the benefit of hearing aids and more so 8(15.4%) indicated that they were very knowledgeable about the benefit of hearing aids.

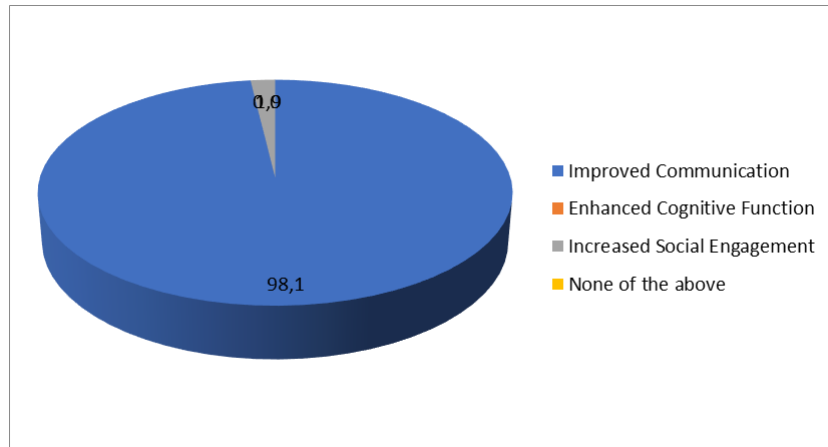


Figure 2: Potential benefit of using hearing aids

Figure 2 depicts the responses of the participants regarding the potential benefit of using hearing aids. Here, 51(98.1%) of the respondents indicated that, improved communication is a potential benefit of using hearing aids, 01(1.9%) stated that, increased social engagement is a potential benefit of using hearing aids. None of the participant stated that, enhanced cognitive function is a potential benefit of using hearing aid.

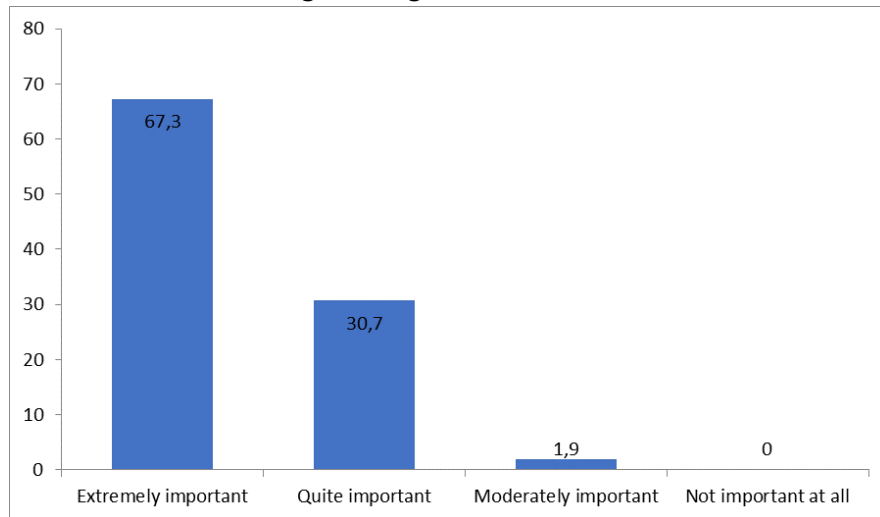


Figure 3: Importance of using hearing aids

The above figure indicates the response of the participants with regards to how important the use of hearing aids is for improving quality of life, to this 35(67.3%) stated that, it is extremely important. Others, that is, 16 (30.7%) stated that the use of hearing aid is quite important and 01(1.9%) stated that, the use of hearing aid is moderately important. None of the respondents stated that the use of hearing aid is not important at all.

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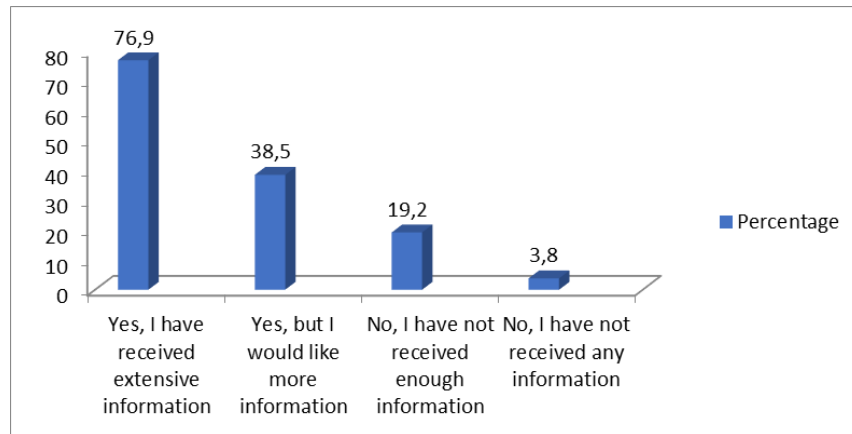


Figure 4: Information and education about the value of hearing aids

Figure 4 depicts the responds given by the respondents on whether they have received sufficient information and education about the value of hearing aids. Majority, that is, 40(76.9%) of the respondents stated that, yes, they have received extensive information and education about the value of hearing aids. Also 20(38.4%) indicated that, yes but they would like more information and education about the value of hearing aids. Furthermore, 10(19.2%) stated that, no, they have not received enough information and education about the value of hearing aids whiles 02(3.8%) stated that, no, they have not received any information and education about the value of hearing aids.

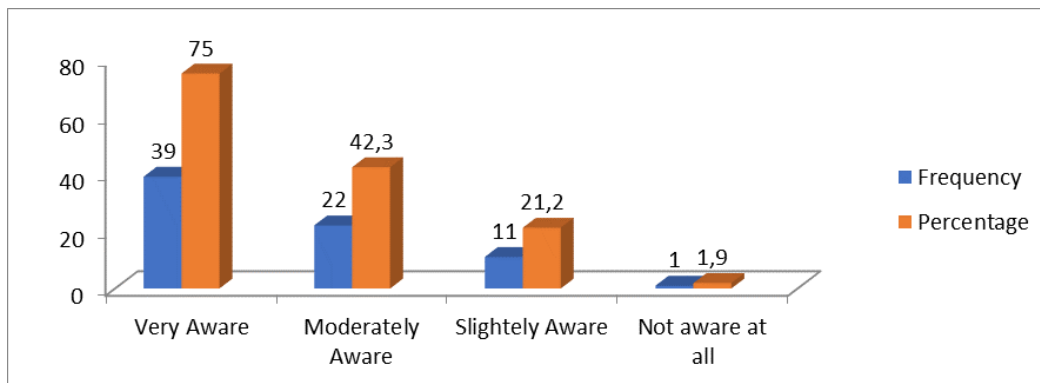


Figure 5: Awareness about the importance of using hearing aids

The figure 5 indicates the responses of the participants on their awareness rate about the importance of using hearing aids and 39(75%) stated that, they were very aware, 22(42.3%) also stated that, they were moderately aware, 11(21.2%) indicated that, they were slightly aware whereas 1(1.9%) stated that, they were not aware at all

Factors that affect the use of Hearing Aids among the hearing impaired

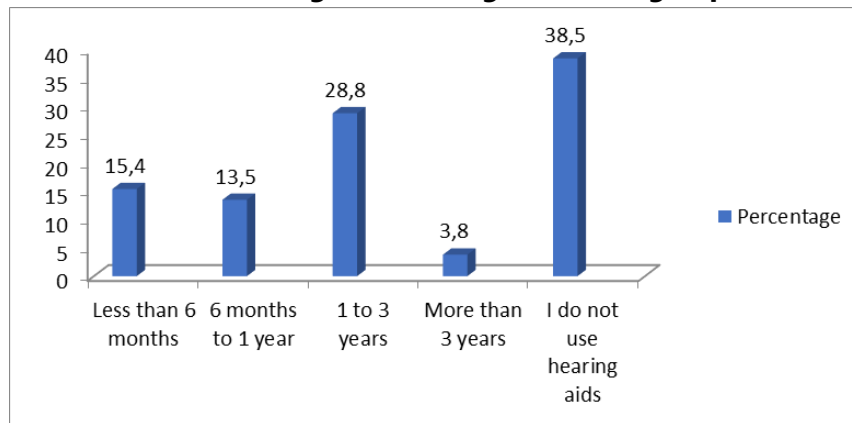


Figure 6: Duration of using hearing aids

Figure 6 shows the graphical presentation of the responses provided by the respondents with regards to the factors that affect the use of hearing aids among the hearing impaired. Here, the respondents were asked about their duration of using hearing aids, 20 representing 38.5% being the majority stated that, they do not use hearing aid. More so, 15(28.8%) stated that, it's been a year to 3 years of using hearing aid, 8(15.4%) stated that, they have used hearing aid for less than 6 months, 7(13.5%) indicated that, they have used hearing aid for 6 months to 1 year and lastly 02(3.8%) stated that, they have used hearing aid for more than 3 years.

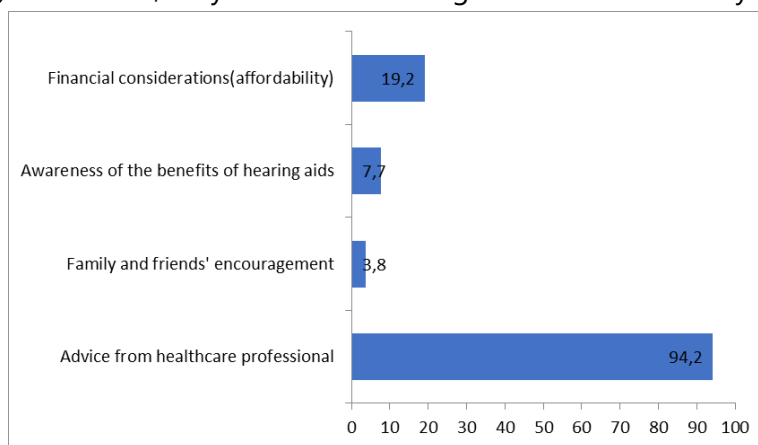


Figure 7: Factors influencing the decision to use hearing aids

The figure 7 depicts the responses of the participants on the factors that have influenced their decision to use hearing aids. Majority, 49(94.2%) indicated that, they had an advice from healthcare professionals, 10(19.2%) indicated that, they considered their finances (affordability), 04(7.7%) stated that, they were aware of the benefits of hearing aids and 02(3.8%) also stated that, they had encouragement from family and friends.

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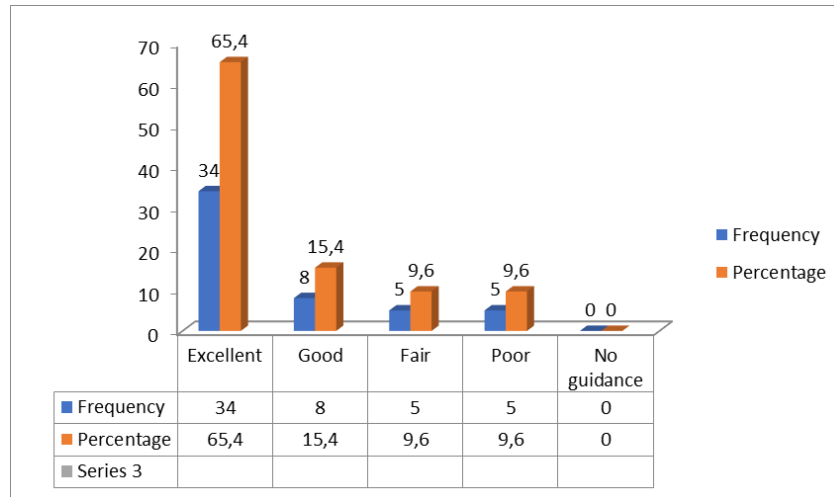


Figure 8: Support and guidance from healthcare professionals regarding the use of hearing aids

The figure 8 shows the graphical presentation of the responses obtained from the participants on how they will rate the overall support and guidance they have received from healthcare professionals regarding the use of hearing aids. According to the above data, 34 representing 65.4% stated that, the support and guidance from healthcare professionals regarding the use of hearing aid was excellent, 8(15.4%) also indicated that, they received good support and guidance from healthcare professionals regarding the use of hearing aid, 5(9.6%) indicated that, the support and guidance they received from healthcare professionals was fair and 5(9.6%) stated that, they received a poor guidance and support from healthcare professionals regarding the use of hearing aid. None of the respondent indicated that, they received no guidance from healthcare professionals regarding the use of hearing aid.

Knowledge on effects of non-usage of hearing aids on the hearing-impaired persons.

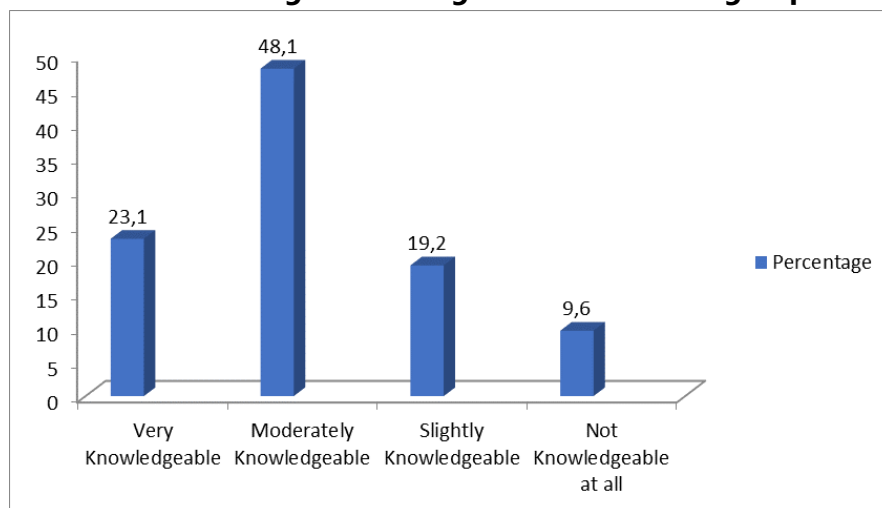


Figure 9: Knowledge about the effects of not using hearing aids

The figure above shows the respondents' response on the knowledge on the effects of not using hearing aid, to which, 25(48.1%) stated that, they are moderately knowledgeable, 12(23.1%) stated that, they are very knowledgeable about the effects of non-usage of hearing aid, 10(19.2%) also stated that, they are slightly knowledgeable about the effect of non-usage of hearing aid and lastly, 5(9.6%) indicated that, they have no knowledge on the effects of not using hearing aid.

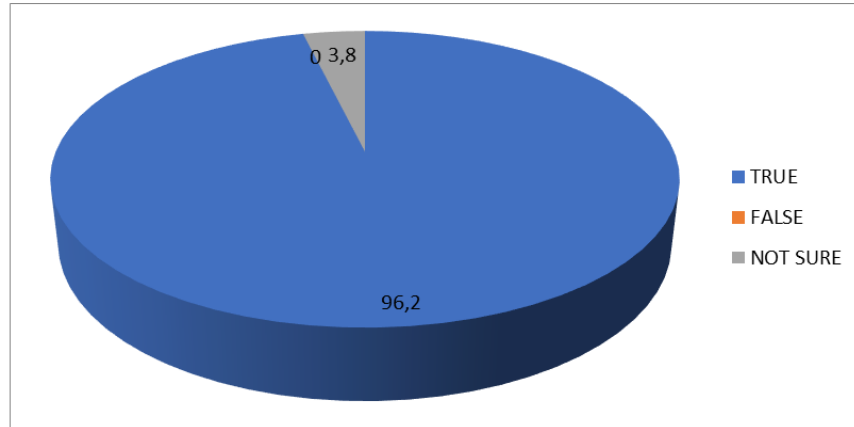


Figure 10: Untreated hearing loss

Figure 10 indicates the responses given by the respondents on whether it is true or false if untreated hearing loss can lead to communication difficulties and 50(96.2%) stated that, it is true while none of the respondents, that is 0(0%) stated that, it is false. Also, 2(3.8%) indicated that, they were not sure if untreated hearing loss can lead to communication difficulties.

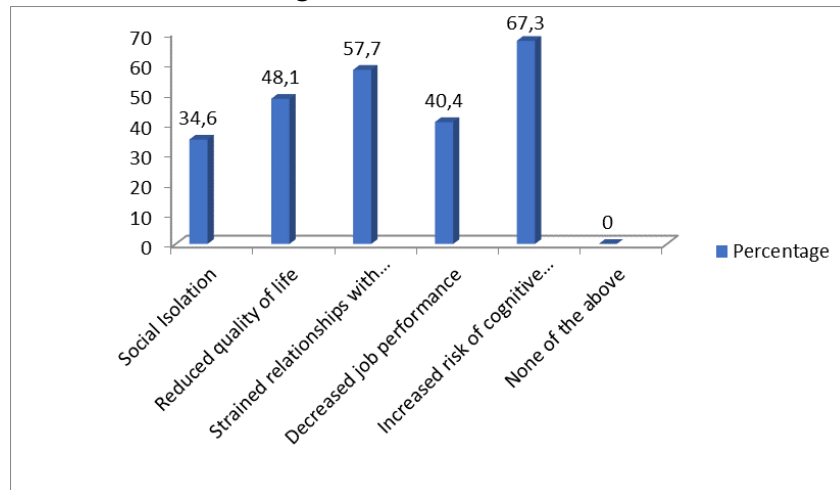


Figure 11: Potential consequences of not using hearing aids

The above figure represents the responds of the participants with regards to some potential consequences of not using hearing aids. To that, 35 representing 67.3% stated that, it increased risk of cognitive decline is a potential consequence of not using hearing aid, 30(57.7%) stated that, strained relationships with family and friends is a potential consequence of not using hearing aids. More so, 25(48.1%) indicated that, potential consequences of not using hearing aids is reduced quality of life, 21(40.4%) also stated that, decreased job performance is a potential consequences

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of not using hearing aids. Lastly, 18(34.6%) stated that social isolation is a potential consequence of not using hearing aids. Furthermore, 0(0%) of the respondents stated that, none of the above mentioned is a potential consequence of not using hearing aid.

knowledge of the hearing impaired about the value of hearing aids

Regarding the knowledge on the benefits of hearing aids, a significant proportion of respondents (36.5%) reported being slightly knowledgeable about the benefits of using hearing aids. The percentage of respondents who considered themselves moderately knowledgeable about the benefits of hearing aids was 28.8%. Only a small proportion (15.4%) of respondents claimed to be very knowledgeable about the benefits of hearing aids. Surprisingly, 19.2% of respondents indicated that they had no knowledge at all about the benefits of hearing aids. There is a variation in the level of knowledge among the respondents, with a significant number indicating only slight or no knowledge about the benefits of hearing aids. This suggests a need for improved education and awareness programs to enhance understanding of the advantages of using hearing aids. These findings are not the same as that of Jones et al. (2018) who only 37% of participants demonstrated a comprehensive understanding of hearing aid benefits, while 63% showed limited knowledge or misconceptions. Also, However, Hickson et al. (2020) respondents had limited knowledge about the specific features and benefits of modern hearing aids. Many participants expressed a desire for more information and education on the value and proper use of hearing aids.

With regards to potential benefit of using hearing aids, improved communication was recognized as the primary potential benefit of using hearing aids by nearly all respondents (98.1%). A very small percentage (1.9%) identified increased social engagement as a potential benefit. The respondents overwhelmingly recognized the positive impact of hearing aids on communication abilities. However, there seems to be limited awareness among the participants regarding other potential benefits, such as the impact on social engagement and cognitive function. In addition, Lee et al. (2019) found that hearing aid users demonstrated better cognitive function, including memory and attention, compared to non-users. Additionally, they reported lower levels of social isolation and depression. Regular hearing aid use contribute to maintaining cognitive abilities and promoting better psychosocial well-being in older adults with hearing loss.

In addition, Brennan-Jones et al. (2016) indicated that although participants recognized the potential benefits of hearing aids, they often underestimated the impact of untreated hearing loss on their daily lives. Lack of awareness regarding the negative consequences of untreated hearing loss was a common theme among the participants. However, Manchaiah et al. (2019) had findings that indicated participants had inadequate knowledge about the potential benefits of hearing aids, such as improved speech understanding, enhanced communication, and increased participation in social activities.

In addition, the majority of respondents (67.3%) regarded the use of hearing aids as extremely important for improving their quality of life. Nearly half of the respondents (48.1%) considered hearing aids to be quite important, while only a small proportion (1.9%) deemed them moderately important. The respondents generally recognized the significance of using hearing aids in improving their quality of life, with a majority emphasizing their high importance. This highlights the perceived value of hearing aids among the hearing-impaired population. These findings are similar to Johnson, (2017) where participants reported significant improvements in their quality of life, communication abilities, and overall satisfaction with hearing aids.

In a matter of whether respondents receive information and education about the value of hearing aids, a significant proportion of respondents (76.9%) reported receiving extensive information and education about the value of hearing aids. Additionally, 38.4% expressed the desire for more information and education on this topic. However, 19.2% of respondents indicated that they had not received enough information and education, and a small proportion (3.8%) reported receiving no information at all. While a majority of respondents reported receiving information and education about the value of hearing aids, there is still a considerable percentage that desires more information or has not received sufficient education. This highlights the need for ongoing efforts to provide comprehensive and accessible information about hearing aids.

This is in line with the intervention of Curran & Galster, (2013) who found the knowledge of participants significantly improved after the workshop, with an average increase of 42% in correctly identifying hearing aid benefits. Educational interventions can play a crucial role in enhancing awareness and understanding of the advantages of hearing aids among the hearing-impaired population.

In addition, Smith et al. (2018) found that information and education programs play a crucial role in increasing awareness and promoting a positive perception of hearing aids, potentially leading to higher adoption rates among individuals with hearing loss. Again, Chen et al., (2020) revealed that educational interventions that address individuals' specific concerns and provide practical information on hearing aid benefits can improve perception and increase the likelihood of hearing aid utilization. That notwithstanding, findings were in line with that of Lelic et al., (2022) where it was found that participants who had positive experiences with hearing aids and received comprehensive information were more aware of their importance.

On respondents' awareness about the importance of using hearing aids, majority of respondents (75%) reported being very aware of the importance of using hearing aids. A significant proportion (42.3%) considered themselves moderately aware, while a smaller percentage (21.2%) indicated slight awareness. Only a small fraction (1.9%) reported being unaware of the importance of using hearing aids. The results indicate a relatively high level of awareness among the respondents about the importance of using hearing aids, with the majority considering themselves either very aware or moderately aware. This suggests a positive perception and understanding of the significance of hearing aids among the participants. These

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findings are similar to Johnson, (2017) where it was revealed approximately 40% of participants were unaware of the potential consequences of untreated hearing loss and the benefits of using hearing aids. Among those aware, the majority recognized the importance of early intervention and hearing aid utilization. In addition Kochkin, (2010) also revealed that a significant proportion of participants had limited knowledge about hearing aids, their benefits, and how to properly use them. Many participants were unaware of the impact of untreated hearing loss on various aspects of their lives, such as communication, relationships, and overall well-being.

Factors that affect the use of hearing aids among the hearing-impaired population

In relation to the duration of using hearing aids, majority of respondents (38.5%) not use hearing aids. Among those who use hearing aids, the largest group (28.8%) reported using them for a duration of 1 to 3 years. A smaller proportion of respondents indicated using hearing aids for less than 6 months (15.4%), 6 months to 1 year (13.5%), and more than 3 years (3.8%). The findings suggest that there is a significant portion of the hearing-impaired population who are not currently using hearing aids. This may indicate a potential gap in access to or utilization of hearing aid services. Additionally, the distribution of durations suggests a need for further investigation into factors influencing the sustained use of hearing aids. This is in line with World Health Organization, 2013 where it was stipulated that in developing countries such as Ghana, fewer than one out of 40 people who need hearing aids have one. However, (WHO, 2017) report gives a bad prospect that there will be increasing hearing impairments and this would definitely necessitate the use of hearing aids. It is therefore expected that these factors be resolved for a considerably greater improvement in the use of hearing aid (Orji et al., 2020). However, findings differ from that of Factors influencing the decision to use hearing aids investigated. Majority of respondents (94.2%) reported that their decision to use hearing aids was influenced by advice from healthcare professionals. A significant percentage (19.2%) considered their financial situation and affordability when deciding to use hearing aids. The results highlight the importance of healthcare professionals in guiding the decision to use hearing aids. This suggests that healthcare professionals play a crucial role in promoting the use of hearing aids among the hearing-impaired population. However, financial considerations also emerge as a significant factor, indicating the need for affordable options and potential financial support for individuals seeking hearing aids. These findings were consistent with that of Again, Kochkin, (2010) who revealed that a significant proportion of participants had limited knowledge about hearing aids, their benefits, and how to properly use them. Many participants were unaware of the impact of untreated hearing loss on various aspects of their lives, such as communication, relationships, and overall well-being. In addition, Brennan-Jones et al., (2016) indicated that although participants recognized the potential benefits of hearing aids, they often underestimated the impact of untreated hearing loss on their daily lives. Lack of awareness regarding the negative consequences of untreated hearing loss was a common theme among the participants.

Concerning the support and guidance from healthcare professionals, majority of respondents (65.4%) rated the support and guidance received from healthcare professionals regarding the use of hearing aids as excellent. A considerable percent (15.4%) considered the support and guidance to be good, while a smaller percentage (9.6%) rated it as fair. A similar percentage (9.6%) reported receiving poor support and guidance from healthcare professionals. The findings indicate that the majority of respondents were satisfied with the support and guidance received from healthcare professionals regarding the use of hearing aids. However, a notable percentage reported fair or poor support, suggesting the need for consistent and improved guidance to ensure optimal utilization and effectiveness of hearing aids. These assertions are similar to Heier et al., (2020) who indicated that although most participants recognized the importance of hearing aids for improving communication, they had limited knowledge and expressed a desire for more information and education on the value and proper use of hearing aids.

Knowledge on the effects of non-usage of hearing aids among the hearing-impaired population.

Concerning the knowledge about the effects of not using hearing aids, the majority of respondents (48.1%) stated that they are moderately knowledgeable about the effects of not using hearing aids. A significant proportion (23.1%) indicated that they are very knowledgeable about these effects. A smaller percentage of respondents mentioned being slightly knowledgeable (19.2%), while a few respondents (9.6%) reported having no knowledge about the effects of non-usage of hearing aids. The findings indicate that a considerable portion of the respondents have at least some knowledge about the effects of not using hearing aids. However, there is room for further education and awareness to improve understanding among the hearing-impaired population. Awareness of the consequences of not using hearing aids. Almost all respondents (96.2%) recognized that untreated hearing loss can lead to communication difficulties. A small percentage (3.8%) indicated uncertainty regarding this statement. The results indicate a high level of awareness among respondents regarding the link between untreated hearing loss and communication difficulties. This suggests that the importance of addressing hearing loss is well understood within the surveyed population. But the findings of Pronk et al. (2011) disagree with these findings. They indicated that a significant proportion of participants had limited knowledge about the adverse effects of not using hearing aids. Many participants were unaware that untreated hearing loss could lead to social isolation, reduced quality of life, cognitive decline, and an increased risk of falls.

With respect to potential consequences of not using hearing aids, potential consequences identified by respondents include: increased risk of cognitive decline (67.3%), strained relationships with family and friends (57.7%), reduced quality of life (48.1%), decreased job performance (40.4%) and social isolation (34.6%). None of the respondents mentioned that none

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of the listed consequences were potential outcomes of not using hearing aids. The findings suggest that the respondents are aware of and recognize various potential consequences associated with not using hearing aids. This awareness highlights the importance of promoting the use of hearing aids to mitigate the negative effects of untreated hearing loss. These findings differ from that of Lammers et al., (2020) where it was revealed that participants often underestimated the negative impact of not using hearing aids. Many individuals were unaware of the potential consequences. In another study by Taylor et al., (2023) the study findings indicated that participants had limited knowledge about the potential effects of not using hearing aids. Many individuals were unaware that untreated hearing loss could lead to cognitive decline, increased risk of dementia

CONCLUSION

Overall, the analysis and interpretation of the demographic characteristics provide a comprehensive overview of the sample in terms of gender, age, occupational status, and educational level. These findings offer important context for understanding the perspectives and experiences of the respondents, which can subsequently inform further analysis and discussion in the study. The deductions and inferences drawn from the results suggest a need for continued education and awareness initiatives to address the varying levels of knowledge among the hearing-impaired population regarding the benefits and potential advantages of using hearing aids. Additionally, efforts should be made to ensure access to comprehensive information and support for those who have not received sufficient education about hearing aids.

The findings suggest that healthcare professionals have a significant influence on the decision to use hearing aids among the hearing-impaired population. However, there are challenges related to access, affordability, and sustained use of hearing aids that need to be addressed. ENT Specialist, Audiologist and management should focus on increasing awareness, assist in providing financial support from other relevant organizations, and enhancing the support and guidance provided by other healthcare professionals to promote the use of hearing aids and improve the quality of life for the hearing-impaired persons.

Finally, the results demonstrate a level of knowledge and awareness among the hearing-impaired persons regarding the effects and consequences of not using hearing aids. However, there is still room for improvement in terms of knowledge and understanding. ENT Specialist and Audiologist should continue to educate and provide information about the benefits of hearing aids, the potential consequences of non-usage, and the importance of addressing hearing loss. This can help individuals make informed decisions and take necessary steps to improve their hearing health and overall quality of life.

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