

Original Article

Effects Of Non-Existent Ear, Nose, And Throat Clinics On Residents Seeking Health Care At Adankwame Health Centre In Ashanti Region, Ghana

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ARTICLE INFO

Article History

Submit : Nov 21, 2024
 Revised : Dec 27, 2024
 Accepted : Dec 29, 2024

Keywords:

ENT,
 Residents,
 Awareness.


ABSTRACT

Background: Ear, Nose, and Throat (ENT) problems such as the common cold, Otitis Media, and Tonsillitis are standard worldwide and remain a global burden. Bringing ENT services closer to the community remains a key component of reducing the burden of ENT conditions across low and middle-income countries such as Ghana. Yet a shortage of special ENT clinics and specialists to manage these conditions remains. In light of this, the study aimed to assess the effects of non-existent ENT clinics on residents seeking health care at Adankwame Health Center in the Atwima Nwabiagya North District.

Methods: A descriptive cross-sectional survey design was used, using a quantitative approach. The population for the study included residents above 15 years who had visited Adankwame Health Center during the study period. With the convenience sampling technique, 100 respondents were selected for the study. Data was collected with a well-structured questionnaire after an ethical clearance had been sought from the Institutional Review Committee. The data collected was analyzed in frequency tables, pie charts, and graphs using Microsoft Excel 2020 data analysis software and the Statistical Package for Social Sciences (SPSS) 25.0

Results: The study concluded that general knowledge and awareness of the ENT clinic were high among residents who attended Adankwame Health Centre. Some physiological effects identified were hearing impairments, chronic ENT conditions, and delayed speech. Parental depression, probably due to children suffering from delayed speech and language, was the psychological effect identified in this study.


Conclusion: The financial burden was seen in all aspects, as respondents complained of the high cost of transportation when seeking ENT care from secondary and tertiary facilities outside the Adankwame community. The Health Directorate of Atwima Nwabiagya North District should prioritize extending the establishment of ENT clinics in rural areas.

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
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 **Cite this as**

: Opoku Agyemang, C., Opoku, O. A., Maamle Osrabo, R., Alhassan, U., Nyarko Mensah, O., & Opoku, A. (2024). Effects Of Non-Existent Ear, Nose, And Throat Clinics On Residents Seeking Health Care At Adankwame Health Centre In Ashanti Region, Ghana. Journal of Applied Nursing and Health, 6(2), 353–365. <https://doi.org/10.55018/janh.v6i2.245>



Introduction

Bringing ear and hearing care services closer to the community remains a key component of reducing the burden of ear and hearing conditions across low and middle-income countries such as Ghana. Yet, despite the majority of disabling hearing loss occurring in low- and middle-income countries, there remains a shortage of exceptional ear, nose, and throat clinics and trained health professionals to recognize, treat, and prevent hearing loss. In a 2013 report published by the World Health Organization (WHO), it was revealed that 64% of participating countries from the African region had less than one ENT surgical specialist and clinics available per million people (Mulwafu, 2020; Waterworth et al., 2022)

ENT care service utilization is the use of ENT care service by persons to prevent and cure ENT and associated organ problems, promote maintenance of ENT health, or obtain information about one's ENT health status and prognosis (Campbell et al., 2021; Schlegel et al., 2021). Several medical organizations in the world have recommended routine ENT screening. Recommended intervals between comprehensive examinations vary with age and risk factors. All individuals, particularly those with risk factors for ENT disease, should be re-examined periodically to prevent or minimize hearing loss by detecting and treating the disease early. Studies have indicated that up to 40% of legal hearing loss could have been prevented or ameliorated if individuals had received timely ENT screening and care (Nicholson, Rhoades, & Glade, 2022)(Ren, Hu, & Jiang, 2022)

Access to ENT services may be required across a range of medical specialties since most otorhinolaryngological diseases may be complications of other systemic diseases, such as thyroid disease neurological and

neurosurgical conditions, as well as HIV/AIDS. Access to and use of primary otorhinolaryngological care services are essential in preventing hearing impairment (Khoza-Shangase, 2022a, 2022b). A patient who does not have access to a particular health service due to non-availability, transportation cost, and distance may resort to traditional ways of managing the condition, which may end up with dire effects on the individual. If a client has no access to a health service and the nearest service demands a longer distance, then the patient must spend a lot of money on transportation for the service provision. These barriers and their associated adverse effects on individuals need to be identified, and the necessary action must be taken if quality otorhinolaryngological care services are to be provided. The World Health Organization estimates that by 2050, nearly 2.5 billion people are projected to have some degree of hearing loss, and at least 700 million will require hearing rehabilitation. Over 1 billion young adults are at risk of permanent, avoidable hearing loss due to unsafe listening practices. An annual additional investment of less than US\$ 1.40 per person is needed to scale up ear and hearing care services globally. Over 5% of the world's population, or 430 million people, require rehabilitation to address their 'disabling' hearing loss (432 million adults and 34 million children). It is also estimated that by 2050, over 700 million people, or one in every ten people, will have disabling hearing loss, where 'Disabling' hearing loss refers to hearing loss greater than 35 decibels (dB) in the better hearing ear. Nearly 80% of people with disabling hearing loss live in low- and middle-income countries. The prevalence of hearing loss increases with age, among those older than 60, over 25% are affected by disabling hearing loss. Most treatable deaf people do not have access to ENT care services and are

therefore exposed to the adverse health effects that come along (Fasunla et al. 2013). Thus, this study assesses the impact of non-existent ENT clinics on residents seeking health care at Adankwame Health Centre.

The most common problems warranting a visit to a doctor or a health care provider in developing countries are related to ear, nose, and throat. ENT problems are the most common problems for which home remedies to medical treatments are available, and most individuals manage their problems in the community without seeking help (Lubitz, Eid, & Niedeggen, 2020; Silas & Seward, 2023). In addition, due to the lack of specialized clinics in this field, these problems are treated by community practices, and the prevalence of these traditional practices increases ENT disease morbidity requiring surgical management. This reason also serves as a significant barrier to using ENT care services.

However, there are several physical, psychological, and socio-economical effects on the individual due to the existence and availability of special clinics and care services such as eye, ear, nose, and throat (Naidoo, 2021; Ukot, 2021). A study on the effects of non-existent ENT clinics on residents seeking health care at Adankwame Health Centre, as the community lacks an Ear, Nose, and Throat unit to manage such cases. In addition, the nearest referral facility with the unit is far away, as residents usually complain about transportation fares and the cost of care. This will help find lasting solutions to the increasing numbers of hearing impairments in Ghana, Africa, and the world at large, and it will also help prevent complications that may arise due to the use of traditional practices in managing ENT problems.

Methods

Study Design

The cross-sectional survey design used quantitative techniques to gather information from respondents. This was ideal for this research because it enables the researcher to collect data and make inferences about a population of interest without bias or manipulation. In addition, (Polit, Beck, & Owen, 2007) reveal that a descriptive study design is ideal for gaining more information about the characteristics of a phenomenon of interest as they naturally occur. However, a larger sample size is required to provide more accuracy; we would do our best to select a sample representing the population.

Study Area

The setting for this study was Adankwame Health Centre. It is located in Adankwame, a rural community in the Ashanti Region. The Adankwame Township is in the Atwima Nwabiagya North District (ANND), among other communities in the district. The district has a population of 155,025 as of 2021. Adankwame is a populated place (class P - Populated Place) in the Ashanti Region of Ghana, Africa. It is 228 meters above sea level, and its population is estimated at 25,000. It can be located at coordinates 6°46'0" N and 1°48'0" W. The Health facility provides general services that cut across all, except for an ENT clinic that would give emergent and exceptional services to patients who attend. It is headed by a Physician Assistant and supported by other staff. The health center catchment area extends beyond the boundaries of the district. The Outpatient Department receives an average of 10 patients daily, most suffering from upper respiratory tract infections. This setting was selected because of the non-existence of the ENT specialty clinic and the high cost of transportation to the nearest referral point.

Population and Sample

The target population comprises residents above 15 years of age seeking healthcare from the health center. The population used to make inferences from this study was 3,650 since the facility records 10 ENT cases daily. The study used a convenience sampling technique to select respondents. On this note, only patients who made themselves available during the data collection were considered. According to Vanderstoep and Johnson (2014), this is an accidental sampling; hence, priority was given to the nearest patient to serve as a respondent, and this process was repeated until the required sample size was obtained. In addition, this method has been proven more effective in short-duration research and is very moderate in cost.

A sample size of 100 respondents was selected from the target population (3,650). This sample size was chosen because of the convenience of time and funds (money).

Data Collection and Analysis

A questionnaire was used to collect data from respondents. The questionnaire was deemed the best instrument for the population being targeted. It was selected for this study because of its self-report, which guarantees confidentiality and is more likely to elicit more truthfulness in response. The questionnaire was made up of 17 open and closed-ended questions. The questionnaire was structured under four main headings: demographical information of respondents, awareness of ENT Clinics, non-existence of ENT clinics and its health effects, and management options for ENT conditions in the community. A pre-test of the instrument was carried out at a Community market with 10 respondents. This helped the researchers test their instrument and the guide to determine whether it was clear (Burns & Groves, 2013).

A questionnaire in English was used to collect the data. Two data collectors (BSc ENT Nurses) were involved without any research assistants. An introductory and ethical clearance letter from the ENT Nursing School, Kumasi, was sent to Atwima Nwabiagya North District Health Directorate and the Adankwame Health Center. Permission was obtained from the patients while data collectors explained it to the selected participants, and verbal informed consent was obtained from them. Informed consent was sought from respondents, and confidentiality was guaranteed regarding the information received. And we're assured that the information obtained will be used solely for academic purposes to maximize full participation. The autonomy of respondents was maintained. Respondents were made to understand the purpose of the study and their right to withdraw from the study without any consequences if they felt the need to do so. Participation in the survey was voluntary, and no respondents were coerced to participate in the study. Sincere apologies were rendered to respondents for any emotional traumatization and inconveniences caused, followed by re-assurances. The researchers administered a questionnaire to the respondents on the health effects of the non-existence of the ENT clinic. Those who agreed to participate in the study and were available were involved. The data collection process lasted for two weeks. The data collected was analyzed with frequency and percentages and presented in tables, pie charts, and graphs using Microsoft Excel 2020 and Statistical Package for Social Sciences (SPSS) 25.0.

Results

Introduction

Discussions on the data collected are represented in this chapter. This chapter,

therefore, covers the representation of the results and the discussions on the data collected. Data were represented with tables, bar charts, and pie charts. On the demographics, the majority of the respondents were female. At the same time, only a few were men (16%), and the majority of the age distribution fell between 20 and 40 (92%), while age groups 15-19 61-70 recorded 0%, Again, age groups 40-60 and 71+ recorded 4% each. The marital status saw most of them being single (60%),

36% married, and none were separated or divorced. However, 4% of them were widowed. Most respondents had attended school up to the Tertiary and Secondary levels, while only 12% and 4% had basic and no formal education. In addition, the majority (40%) of the respondents were schooling while 32% were civil servants. Unemployment and business formed 12% each in terms of occupation. The majority of them were Christians, and only a few were Muslims.

Are you aware of any special ENT clinic?

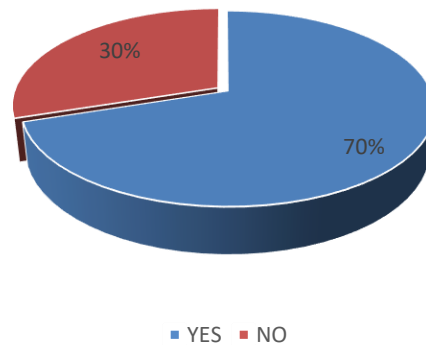


Figure 1 shows whether respondents were aware of the ENT specialty

Figure 1 indicates that 70% of the respondents were aware of the ENT specialty, and only 30% were unaware.

Have you ever had ENT problem?

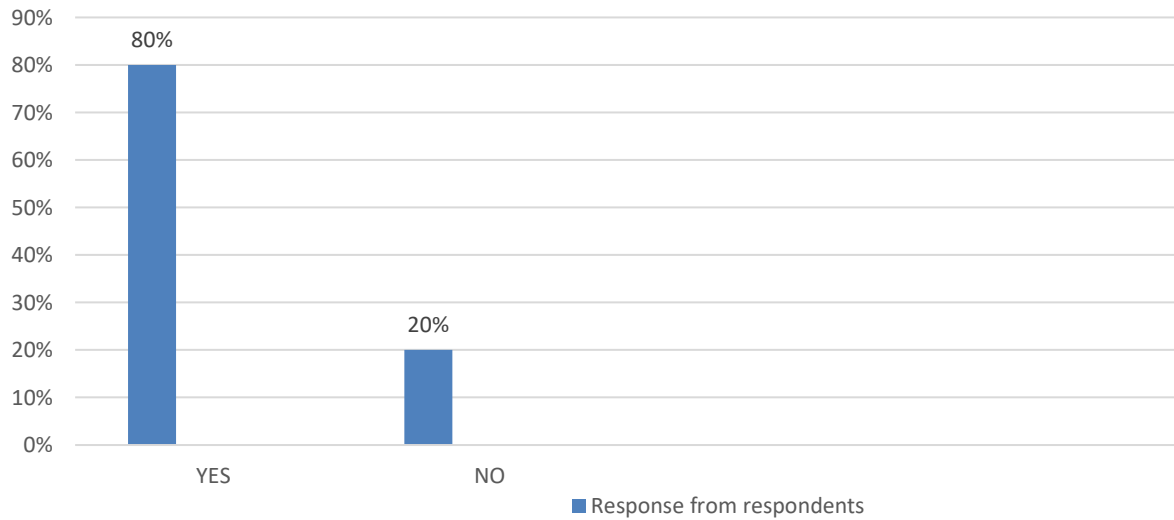


Figure 2 shows whether respondents have had ENT problems before

Figure 2 shows that most respondents have had ENT problems in their lifetime, while only 20% have not experienced any ENT issues.

Table 2: Type of ENT problems respondents have had

Type of ENT problem	Frequency	Percentage
Ear Discharge	5	6.3
Sore throat	35	43.8
Hearing impairment	4	5
Foreign body in ENT	2	2.5
Swelling in throat	3	3.8
Ear pain	7	8.8
Loss of sense of smell	9	11.3
Others (specify) Cold	15	18.8
Total	80	100

Table 2 depicts that, out of the 80 respondents who have had ENT problems, 35 (43.75%) suffered from sore throat, 15(18.75) had a common cold, 11.25% had loss of sense of smell, 8.75% had earache, 6.25% had ear discharge, 5% had hearing impairment while 3.75% and 2.5% had swelling in throat and foreign body in ENT respectively.

Table 3: Repositories where respondents sought medical care

Type of ENT problem	Frequency	Percentage
Adankwame Health Centre	21	26.25
Over-the-counter drugs	41	51.25
Leftover drugs from friends	4	5
Did not seek medical help	9	11.25
Herbal medications	5	6.25



Type of ENT problem	Frequency	Percentage
Total	80	100

Table 3 displays that, out of the majority of the respondents who had had ENT conditions before, only 21(26.25%) sought medical care from the available health center. Also, 41(51.25%) of them bought over-the-counter drugs and used while 11.25% of them did not seek medical care. Also, 6.25% and 5% used herbal and leftover medicines from relatives.

Table 4: Satisfaction respondents were sought at the Health Centre

Response	Frequency	Percentage
Very satisfied	19	90.5
Satisfied	0	0
Not satisfied	2	9.5
Total	21	100

Table 4 indicates that out of the 21 respondents seeking medical care from the health Centre in the community, 19(90.5%) were satisfied with the treatment given, and only 9.5% were unhappy.

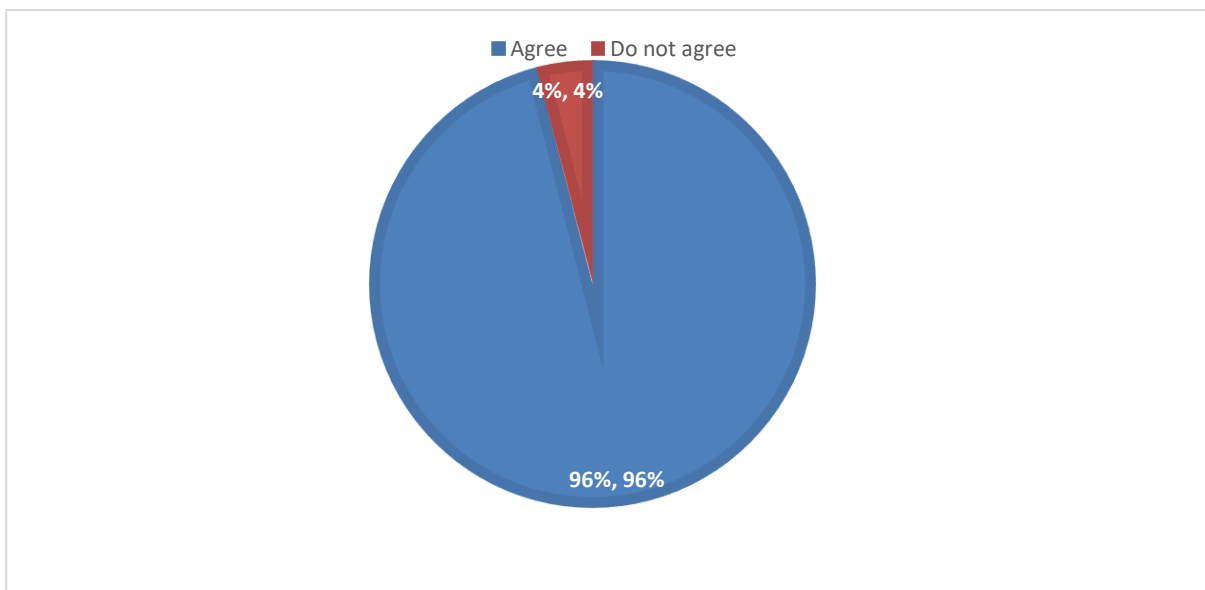


Figure 3 shows if respondents agree or do not agree that “non-existence of ENT clinic has adverse effects”

Figure 3 shows that most respondents agree that the non-existence of an ENT clinic has adverse effects on the individual, while only 4% did not agree.

Table 5: Patients' response to some of the adverse effects of the non-existent ENT clinic

Adverse effects	Frequency	Percentage
Hearing impairment	35	36.5
Delayed speech/language	15	15.6
Parental depression	6	6.3
Death	5	5.2
Chronic ENT conditions	21	21.9
Undetected systemic conditions related to ENT	14	14.6
Total	96	100

Table 5 shows that, out of the majority, 96% agree that the non-existence of an ENT clinic can be fatal, 36.46% believe that hearing impairment is one of the consequences, 21.88% for chronic ENT conditions, 15.6% for delayed speech, 14.58% for undetected systemic conditions related to ENT, 6.25% for parental depression as adverse effects.

Table 6: Some of the challenges patients face while seeking ENT care outside the community

Challenges	Frequency	Per cent
Long travel distance	20	20
High cost of transportation	39	39
High risk involved during transportation	11	11
High cost of treatment	12	12
Others (specify)	8	8
Total	100	100

Table 6 displays that 39% of the respondents think the high cost of transportation is the main challenge in seeking ENT special care outside the community. 20% believe she is the long travel distance, 11% for the high risk involved in traveling, 12% for the high cost of treatment, and 8% think it could be other challenges.

Table 7: Options for home management of ENT condition

Management Options	Frequency	Percentage
Drugs from the chemical Seller	59	59
Herbal Medications	29	29
No treatment	12	12
Total	100	100

Table 7 displays that about 59% of the respondents used OTC drugs to manage ENT cases at home. 29% used herbal medications, while 12% did not treat at all at home.

Table 8: The conditions patients managed at home

Conditions	Frequency	Per cent
Throat Infections	41	41
Nasal Discharge	25	25
Earache/discharge	14	14
Bleeding nose	16	16
Delayed speech/language	4	4
Total	100	100

Table 8 shows that 41% of the respondents managed throat infections at home, 25% managed nasal discharge, 16% managed bleeding nose, 14% managed earache and discharge, and 4% managed delayed speech/language, as shown in Table 8.

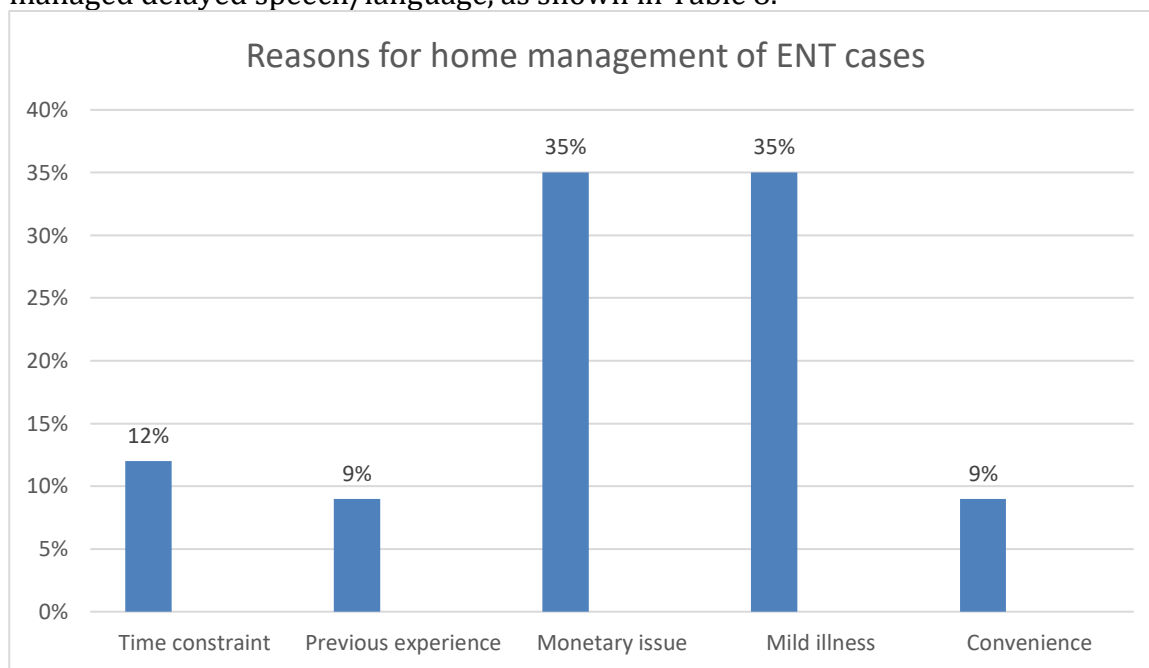


Figure 4 shows some reasons respondents managed ENT conditions at home.

Figure 4 shows that most (35%) of the respondents managed ENT conditions at home mainly because of monetary issues and because they thought the condition could be managed at home. 12% felt they would waste time if they should travel a long distance to seek ENT special care, while 9% thought of the experience and availability of specific options such as herbal and OTC.

Discussion

Awareness of residents in ENT clinics

Regarding participants' awareness of ENT specialty agrees with a study by Mulwafu et al. (2016), where they concluded that awareness and knowledge of available ENT care services is a concern because the inability to seek these services

may lead to certain avoidable or curable diseases to cause irreversible hearing loss or impairment. However, this contradicts a similar study conducted in Kenya where, despite the large number of ENT and other care facilities surrounding Nairobi, community members could not access the services because of the lack of



knowledge/awareness of the available resources. Another study on the same topic also suggests a similar trend, as 43.9% of the respondents involved were unaware of the availability of primary ENT care services in Trans-Nzoia Country.

Physiological Effects of non-existent ENT clinics on residents

The trend of ENT cases among respondents, as displayed in participants' responses on whether they have had ENT problems before, is not different from the literature available as the most common issues warranting a visit to a doctor or a health care provider in developing countries are related to ear, nose, and throat. This further agrees with the findings from a study by Lukama et al. (2022), where it was identified that diseases affecting the ear, nose, and throat constitute 20-50% of disorders treated at health facilities.

Also, regarding participants' responses to the type of ENT problem, the result agrees with the literature. It was discovered most of these conditions respondents suffered were throat-related (Pharyngotonsillitis), and the next in line was allergic rhinitis. Hence, their findings and that of this study in terms of ENT disorders coincide.

The findings on how satisfied respondents were for seeking care at the health center show that they were delighted out of the few who sought medical care from the available health center. If this were a true reflection of what goes on at the facility, why would residents choose to treat these conditions independently? The answer probably could be linked to the convenience and availability of these unauthorized management options. Respondents agree to the statement, **“Non-existence of ENT clinic has adverse effects”** in the results if respondents agree or do not agree that the effects of non-existent ENT clinics are an indication that the residents of Adankwame

are indeed feeling the adverse effects following the absence of ENT clinic. The non-availability of ENT care services has been a concern because the inability to seek ENT examinations had been high enough for certain avoidable or curable ENT diseases to cause irreversible hearing impairment or loss.

Hearing impairment is more prevalent, confirming the exact prevalence in sub-Saharan Africa than in other parts of the world. It is the most feared complication individuals wish not to experience, hence the numbers showing for themselves. More so, it is likely to become increasingly common over the coming decades as the population ages, given that hearing impairment is most prevalent in older age groups.

Socio-economic effects of non-existent ENT clinics

Regarding participants' responses on challenges faced while seeking ENT care outside the community, the high cost of transportation has been highlighted as the most common challenge faced by respondents while seeking ENT care outside the community, the findings cut across in most research done on the same topic. A study conducted in Uganda concluded that it is often more difficult for individuals in remote or rural regions to access specialist care than those in major urban centers, due to the high transport costs.

Furthermore, results in section (IV) showed that the prevalence of traditional practices had increased the disease morbidity requiring surgical management. This can be attributed to factors such as inaccessible ENT care services, cost of transportation, time constraints, and long distances to access these services. This indicates that people prefer home management of ENT conditions.

Practices used for management of ENT conditions by residents.

Regarding participants' responses on where they seek medical care, the majority of the respondents with ENT conditions preferred to treat these disorders on their own with OTC drugs, herbal medications, and leftover drugs from friends. This could be related to the convenience and the availability of these preparations in our setting. In a developing country like Ghana, where access to medical services, especially specialist clinics like ENT, is complex, and a shortage of medical personnel exists, the public may prefer the chemical shop's traditional medicines as their source of management for illnesses such as ENT disorders. This has been flourishing as a cheaper alternative for the treatment of common diseases ([Lim, Jeffree, Saupin, Giloi, & Lukman, 2022](#); [Lukman & Fahrizqi, 2022](#))

throat-related infections were the most common among the study group. In concurrence with the literature as a result of respondents' reasons for home management of ENT cases, the tendency for one to engage in these self-medical practices, such as home management of ENT conditions, can be associated with many factors such as non-existence of specialist care services like ENT clinics, time and money constraints, easy access of medicines at the pharmacies even without medical prescriptions. In general, ENT-related complaints are considered minor ailments, and the tendency to self-treat is higher, as concluded in the same study.

Conclusion

In conclusion, general knowledge and awareness of the ENT clinic were high among residents who attended Adankwame Health Centre. Some physiological effects identified were hearing impairments, chronic ENT conditions, and delayed speech. Parental depression, probably due

to children suffering from delayed speech and language, was then the psychological effect identified in this study. The financial burden was seen in all aspects, as respondents complained of the high cost of transportation when seeking ENT care from secondary and tertiary facilities outside the Adankwame community. Finally, respondents preferred Over-the-counter drugs and herbal medicine for managing ENT conditions at home. However, a few of them were not treated at all. Respondents' reasons for treating ENT conditions at home included but were not limited to monetary issues, mild illness, time constraints, convenience of OTC, and previous experience.

Based on the findings of this research, the following recommendations have been made to all stakeholders. As a policy maker, the health directorate of Atwima Nwabiagya North District should prioritize extending the establishment of ENT clinics in the neighboring towns, of which Adankwame should be key. Also, ENT nurses should routinely undertake health education in areas with no ENT clinics, such as Adankwame, on seeking hospital care rather than resort to harmful ways of managing ENT conditions at home. Moreover, the NHIA and other stakeholders, such as the government and the Ghana Medical Association should review and include most ENT medications in the policy. Furthermore, further research can be repeated on a larger scale in other places with a more representative sample.

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Authors Contributions

The authors collectively contributed to the research by designing the study, developing data collection tools, and coordinating the fieldwork process. Expertise in data analysis was utilized to ensure accurate interpretation of the

results, and collaborative efforts were made in drafting and revising the manuscript. Ethical clearance was secured, and the study was implemented with supervision to maintain quality and adherence to ethical standards. The authors extend their gratitude to the Institutional Review Committee, the staff and management of Adankwame Health Center, and all respondents who participated in the study, making this research possible.

Conflicts of Interest

The authors declare no conflict of interest in this study.

Acknowledgment

The authors extend their sincere gratitude to the Institutional Review Committee for granting ethical clearance and providing guidance throughout the study. Heartfelt thanks are also conveyed to the staff and management of Adankwame Health Center for their cooperation and support during the research process. Lastly, the authors deeply appreciate the residents who participated in this study, whose contributions were invaluable in achieving the research objectives.

References

- Campbell, S. C., Clark, P. E., Chang, S. S., Karam, J. A., Souter, L., & Uzzo, R. G. (2021). Renal mass and localized renal cancer: evaluation, management, and follow-up: AUA guideline: part I. *The Journal of Urology*, 206(2), 199–208.
- Khoza-Shangase, K. (2022a). Complexities and challenges in preventive audiology within the African context. *Complexities and Challenges in Preventive Audiology: An African Perspective*, 1–21.
- Khoza-Shangase, K. (2022b). Preventive audiology: Ramping up efforts towards an ear and hearing healthy nation. *Ed. K*

- Khoza-Shangase, Preventive Audiology: An African Perspective, AOSIS Books, Cape Town, 1–20.*
- Lim, M. C., Jeffree, M. S., Saupin, S. S., Giloi, N., & Lukman, K. A. (2022). Workplace violence in healthcare settings: the risk factors, implications, and collaborative preventive measures. *Annals of Medicine and Surgery, 78*, 103727.
- Lubitz, A. F., Eid, M., & Niedeggen, M. (2020). Psychosocial and cognitive performance correlates of subjective cognitive complaints in help-seeking versus non-help-seeking community-dwelling adults. *Journal of Geriatric Psychiatry and Neurology, 33*(2), 93–102.
- Lukman, S., & Fahrizqi, E. B. (2022). Motivasi Atlet Junior pada Club Judo Bandar Lampung. *Journal Of Physical Education, 3*(1), 9–12.
- Mulwafu, W. (2020). Integration of ear and hearing care into primary health care in Malawi with special reference to task-sharing.
- Naidoo, T. E. R. (2021). A South African perspective: audiologists' and otologists' orientation to, and use of evidence-based practice concerning benign paroxysmal positional vertigo.
- Nicholson, N., Rhoades, E. A., & Glade, R. E. (2022). Analysis of health disparities in the screening and diagnosis of hearing loss: early hearing detection and intervention hearing screening follow-up survey. *American Journal of Audiology, 31*(3), 764–788.
- Polit, D. F., Beck, C. T., & Owen, S. V. (2007). Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. *Research in Nursing & Health, 30*(4), 459–467.
- Ren, H., Hu, B., & Jiang, G. (2022). Advancements in prevention and intervention of sensorineural hearing loss. *Therapeutic Advances in Chronic Disease, 13*, 20406223221104988.
- Schlegel, P. N., Sigman, M., Collura, B., De Jonge, C. J., Eisenberg, M. L., Lamb, D. J., ... Sokol, R. Z. (2021). Diagnosis and treatment of infertility in men: AUA/ASRM guideline part I. *The Journal of Urology, 205*(1), 36–43.
- Silas, M. J., & Seward, D. X. (2023). Black women's help-seeking and self-care strategies: A phenomenological exploration. *Journal of Counseling & Development, 101*(2), 157–166.
- Ukot, I. (2021). *Essentials for Practice of Medicine in the Frontline: From Tropical Africa; Pleasantly Different Volume 2*. WestBow Press.
- Waterworth, C. J., Marella, M., O'Donovan, J., Bright, T., Dowell, R., & Bhutta, M. F. (2022). Barriers to access to ear and hearing care services in low-and middle-income countries: a scoping review. *Global Public Health, 17*(12), 3869–3893.