

**Original Article**

**Cultural and Socioeconomic Influences on Traditional Medicine Utilization for Treatment of Ear, Nose and Throat (ENT) Conditions**

Cecilia Opoku Agyemang<sup>1</sup>, Oscar Agyemang Opoku<sup>2</sup>, Anita Serwaa Ennin<sup>3</sup>, Gifty Mabakawo<sup>3</sup>, Olivia Nyarko Mensah<sup>1</sup>, Albert Opoku<sup>1</sup>

- <sup>1</sup> Komfo Anokye Teaching Hospital, Kumasi, Ghana
- <sup>2</sup> University of Cape Coast, Cape Coast, Ghana
- <sup>3</sup> Ear, Nose and Throat Nursing School, Kumasi, Ghana

**ARTICLE INFO**

**Article History**

Submit : Nov 21, 2024  
 Accepted : March 29, 2025  
 Published : March 30, 2025

**Correspondence**

Cecilia Opoku Agyemang,  
 Komfo Anokye Teaching  
 Hospital, Kumasi, Ghana.

**Email**

[oscarthesis@gmail.com](mailto:oscarthesis@gmail.com)

**Citation**

Opoku Agyemang, C., Opoku, O. A., Serwaa Ennin, A., Mabakawo, G., Nyarko Mensah, O., & Opoku, A. (2025). Cultural and Socioeconomic Influences on Traditional Medicine Utilization for Treatment of Ear, Nose and Throat (ENT) Conditions. *Journal of Applied Nursing and Health*, 7(1), 1-13.  
<https://doi.org/10.55018/janh.v7i1.246>

**ABSTRACT**

**Background:** Traditional medicine is increasing globally, especially in rural communities of developing countries where it is a preferred treatment option. Various factors, including cultural beliefs, cost, accessibility, and social relationships, influence its utilization. Understanding these factors is essential for developing effective healthcare strategies. This study aims to assess the factors contributing to using traditional medicine in treating Ear, Nose, and Throat (ENT) conditions among ENT patients in Kumasi.

**Methods:** A quantitative descriptive survey design was employed, using a structured questionnaire to collect data from 166 respondents selected through convenience sampling. The data were analyzed using the Statistical Package for Social Sciences (SPSS) to present descriptive statistics.

**Results:** The findings indicate that cultural beliefs significantly influence traditional medicine, with 84.9% of respondents associating it with religious and spiritual underpinnings. Other contributing factors included cost, spirituality, social relationships, and interactions with healthcare workers.

**Conclusion:** Cultural beliefs are crucial in shaping treatment choices for ENT conditions. Public awareness campaigns by the Ministry of Health and local health authorities are recommended to educate communities on the benefits and risks of traditional medicine while promoting evidence-based healthcare practices.

**Keywords:** Traditional medicine, ENT conditions, Cultural beliefs, Healthcare utilization.

**Implications for Practice**

- Healthcare Provider Training, Medical professionals should receive training on traditional medicine practices to enhance cultural competence, promote respectful patient engagement, and support safe integration of traditional and modern treatments.
- Culturally Sensitive and Holistic Care, Clinical practice should adopt a holistic approach that considers patients' cultural and spiritual beliefs, improving trust, communication, and adherence to treatment plans.
- Cross-System Collaboration, Strengthening collaboration between conventional healthcare providers and traditional healers can foster more comprehensive, accessible, and culturally acceptable healthcare services.



## Introduction

The use of traditional medicine by various cultural and ethnic groups worldwide has become increasingly common ([Khan et al., 2020](#); [Peng et al., 2023](#); [Sureshkumar et al., 2023](#)). Key factors driving this popularity include widespread availability, affordability, and extensive media and internet marketing efforts. Traditional medicine is "the total of knowledge, skills, and practices based on theories, beliefs, and experiences indigenous to different cultures, whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement, or treatment of physical and mental illnesses ([Al-Lawati et al., 2016](#)).

Traditional medicine, particularly herbal remedies, has a long historical foundation dating back to the Stone Age ([Bernstein et al., 2021](#); [Claire-Del Granado & Espinosa-Cuevas, 2021](#); [Zeng et al., 2022](#)). In the African context, traditional healing practices have existed much longer than some modern medical sciences. African conventional medicine consists of three levels of specialization: divination, spiritualism, and herbalism, which often overlap ([Oladayo et al., 2024](#); [Richardson et al., 2024](#); [Venkataraghavan et al., 2025](#)). Traditional healers utilize various methods, such as incantations, herbal preparations, minerals, and animal parts, based on the customs and beliefs of their communities.

However, the effectiveness and efficiency of traditional medicine remain subjects of scientific debate ([Li et al., 2023](#); [Liu et al., 2020](#); [Zou et al., 2023](#)). For example, most traditional medicines currently used in Ghana have not undergone rigorous research or regulation ([Kankam & Murray, 2024](#); [Yempabe et al., 2020](#); [Yimer et al., 2021](#)). Nevertheless, many individuals prefer traditional medicine over evidence-based healthcare services due to accessibility, lower costs, and sociocultural factors

In otolaryngology, diseases affecting the ear, nose, and throat (ENT) often have profound implications on patients' quality of

life, impacting their sensory functions, psychological well-being, and emotional stability ([Cereceda-Monteoliva et al., 2021](#); [Lavalle et al., 2024](#); [Mäkitie et al., 2022](#)). Ear infections in children, such as otitis media, can hinder language development and academic success. Unfortunately, in many developing countries, the number of trained ENT specialists is very low, and so are the available facilities for treating these conditions.

The growing resistance of microorganisms to antibiotics further complicates the treatment of ENT infections. Given the increasing antibiotic resistance, some studies suggest that medicinal plants may be viable alternatives ([Gheorghe et al., 2021](#); [Niculescu et al., 2021](#); [Niculescu & Grumezescu, 2021](#)). Several modern pharmaceuticals, such as quinine from the Cinchona plant and digitoxin from *Digitalis purpurea*, have been derived from traditional plant-based remedies.

The WHO estimates that over 80% of the world's population relies on herbal medicine as primary healthcare. In Africa, this figure rises to 90%. In Ghana, 65-70% of the rural population depends on herbal medicine to treat illnesses. Factors such as a lack of modern medical facilities, poor infrastructure, and high treatment costs drive people towards traditional medicine. The healer-to-patient ratio further highlights this disparity, with approximately 1:200 for traditional healers compared to 1:20,000 for medical doctors. Beyond economic and infrastructural factors, preferences for conventional medicine are also influenced by education levels and recommendations from family and friends.

Most existing studies focus on the effectiveness and composition of traditional medicine, yet research on the factors influencing its use in managing ENT conditions remains limited, particularly in Ghana. Many patients visiting ENT clinics have already used traditional medicine as first aid. Therefore, this study aims to explore the factors influencing the utilization of

conventional medicine in managing ENT conditions among ENT patients in Kumasi.

## Methods

### Study Design

This study employs a descriptive survey design using a quantitative approach to assess the factors influencing the utilization of traditional medicine in managing ENT conditions among ENT patients in Kumasi. This design provides a comprehensive overview of this population's prevalence and determinants of traditional medicine usage.

### Participants

The study focuses on the Ear, Nose, and Throat (ENT) Department in various hospitals in Kumasi. The population consisted of 285 individuals aged 18 and above dealing with ENT conditions within two weeks of the data collection period. Using Yamane's formula, a sample size of 166 was determined with a 5% margin of error. Convenience sampling was applied to reach accessible participants despite its potential bias. Inclusion criteria required participants to be individuals experiencing ENT conditions and willing to consent. Those not present or unwilling to consent were excluded.

### Instruments

A structured questionnaire adapted from prior studies (e.g., Suresh, 2018) is utilized for data collection. The questionnaire is divided into sections covering demographic characteristics, cultural beliefs, socio-economic factors, and healthcare attitudes toward traditional medicine for ENT treatment. Pretesting was conducted in a Polyclinic to ensure validity and reliability, with Cronbach's Alpha achieving a score of  $\geq 0.8$ .

### Data Collection

Data collection was conducted over a defined period at selected hospitals. Trained research assistants administered the questionnaires in both English and the local language, ensuring participants fully understood the questions. An introductory letter was obtained from KATH, and respondents meeting the inclusion criteria were informed and provided consent. Both written and oral consent were obtained, ensuring respondents' rights to withdraw, privacy, and confidentiality. Sensitive questions could be skipped, and for non-English speakers, consent was facilitated in Twi with the assistance of a witness. Participants who had challenges reading and writing were provided with translated consent forms, and both the respondent and the witness either signed or thumbprinted the form.

### Data Analysis

Quantitative data from the questionnaires were analyzed using the Statistical Package for the Social Sciences (SPSS) version 26. Descriptive statistics, such as frequencies and percentages, were used to summarize demographic characteristics and treatment preferences.

### Ethical Considerations

Ethical approval for the study was obtained from the relevant Institutional Review Board (IRB). Informed consent was obtained from all participants before data collection, ensuring they understood the study's purpose, procedures, and potential risks. Participants were assured of confidentiality and anonymity, with personal identifiers omitted from the data. Additionally, respondents were allowed to withdraw from the study at any stage without any consequences. To maintain ethical integrity, findings were shared with relevant stakeholders, including healthcare authorities and community representatives, to support evidence-

based policy development.

## Results

**Table 1.** Sociodemographic Characteristics of Respondents (n=166)

	Variables	Frequency	Percentage (%)
Age (years)	18-25	8	4.8
	26-30	17	10.2
	31-35	38	22.9
	36-40	41	24.7
	41-45	40	24.1
	Above 46	22	13.3
Religion	Islamic	35	21.1
	Christianity	117	70.5
	African Traditional Religion	14	8.4
Educational level	No formal education	54	32.5
	Primary education	60	36.1
	Secondary education	27	16.3
	Tertiary education	25	15.1
Gender	Male	49	29.5
	Female	117	70.5
Marital Status	Single	43	25.9
	Divorced	18	10.8
	Married	105	63.3
Previous or current disease condition	Ear	95	57.2
	Throat	30	18.1
	Nose	41	24.7

**Table 1** presents the sociodemographic characteristics of the respondents. The majority of respondents were between 36-40 years old (24.7%), followed by those aged 41-45 years (24.1%) and 31-35 years (22.9%). A smaller proportion were above 46 years old (13.3%), between 26-30 years (10.2%), and between 18-25 years (4.8%).

Regarding religion, most respondents were Christians (70.5%), while 21.1% were Muslims, and 8.4% followed African Traditional Religion. Regarding education, 36.1% had primary education, 32.5% had no formal education, 16.3% had secondary education, and 15.1% had tertiary education.

More than half of the respondents were female (70.5%), while 29.5% were male. Marital status data showed that 63.3% were married, 25.9% were single, and 10.8% were divorced.

Regarding health conditions, 57.2% of respondents had a previous or current ear condition, 24.7% had a nose-related condition, and 18.1% had a throat-related condition.

**Table 2.** Influence of Cultural Beliefs on Usage of Traditional Medicine in Treatment of ENT Conditions (n=166)

Variables	Frequency	Percentage (%)
I believe in using traditional medicine to treat ear, nose, and throat conditions.	Yes	66.9
	No	33.1
Traditional medicine is very effective in treating ear, nose and throat conditions.	Yes	74.1
	No	25.9
I use or have used traditional medicine when I suffered from the condition.	Yes	87.3
	No	12.7
I use traditional medicine to complement modern healthcare treatments.	Yes	65.1
	No	34.9
Traditional medicine is associated with religious and spiritual underpinnings.	Yes	84.9
	No	15.1
Traditional medicine treats the condition holistically.	Yes	53.0
	No	47.0
Traditional medicine has no toxic effects on the body.	Yes	78.9
	No	21.1
I am satisfied with the use of modern medicine as well	Yes	89.8
	No	10.2

**Table 2** presents the participants' responses regarding the influence of cultural beliefs on the use of traditional medicine for treating ENT conditions.

More than half of the respondents (66.9%) agreed with the statement, “I believe in the use of traditional medicine for treating ear, nose, or throat conditions,” while 33.1% disagreed. Most (74.1%) stated that traditional medicine effectively treats ENT conditions, whereas 25.9% disagreed.

When asked, “Have you used traditional medicine for treating your condition?” most respondents (87.3%) answered yes, while 12.7% said no. Additionally, 65.1% reported using traditional medicine to complement modern healthcare treatments, while 34.9% did not.

Regarding associating traditional medicine with religious and spiritual beliefs, 84.9% of respondents agreed, while 15.1% disagreed. More than half (53.0%) believed that conventional medicine provides holistic treatment for ENT conditions, whereas 47.0% did not.

Furthermore, 78.9% of respondents believed that “Traditional medicine has no toxic effects on the body,” while 21.1% disagreed. Lastly, a significant proportion (89.8%) expressed satisfaction with modern medicine, while only 10.2% were unsatisfied.

**Table 3.** Socio-Economic Factors Contributing to Utilization of Traditional Medicine in the Treatment of ENT Conditions (n=166)

Statement	Strongly Agree n (%)	Agree n (%)	Neutral n (%)	Disagree n (%)	Strongly Disagree n (%)
Traditional medicine is easily accessible and available.	61(36.8)	71(42.8)	18(10.8)	12(7.2)	4(2.4)
There are remote modern health facilities in my community to address my health needs	54(32.5)	73(44)	24(14.5)	7(4.2)	8(4.8)
I prefer traditional medicine to modern health care because it is cheap and affordable	21(12.7)	82(49.4)	31(18.7)	19(11.4)	13(7.8)
Financial constraint is a major hindrance for me to visit modern healthcare	37(22.3)	60(36.1)	26(15.7)	39(23.5)	4(2.4)
The National Health Insurance Scheme covers most of the treatment and drugs for ENT.	24(14.5)	15(9)	29(17.5)	74(44.6)	24(14.4)
I am satisfied with the social relationships traditional healers provide	19(11.4)	72(43.4)	75(45.2)	0(0)	0(0)

**Table 3** illustrates the socio-economic factors influencing the use of traditional medicine for treating ENT conditions.

More than half of the respondents (79.5%) agreed that traditional medicine is easily accessible and available, 10.8% were neutral, and 9.6% disagreed.

Regarding the availability of modern healthcare, 76.5% of respondents agreed with the statement, “There are remote modern health facilities in my community to address my health needs.” In comparison, 14.5% neither agreed nor disagreed, and 9.0% disagreed.

A significant number (62.1%) preferred traditional medicine over modern healthcare due to its affordability, 18.7% remained neutral, and 19.2% disagreed.

More than half of the respondents (58.4%) identified financial constraints as a significant barrier to seeking modern healthcare, while 25.9% disagreed and 15.7% were neutral.

When asked whether the National Health Insurance Scheme (NHIS) covers most ENT treatments and medications, a majority (59.0%) disagreed, 17.5% were neutral, and only 23.5% agreed.

Lastly, 54.8% of respondents expressed satisfaction with the social relationship provided by traditional healers, while 45.2% neither agreed nor disagreed, and none disagreed.

**Table 4.** Attitude of Health Workers as A Factor Contributing to Utilization of Traditional Medicine in the Treatment of ENT Conditions (n=166)

Statement	Strongly Agree n (%)	Agree n (%)	Neutral n (%)	Disagree n (%)	Strongly Disagree n (%)
Health workers speak against the use of traditional medicine	25(15.1)	50(30.1)	49(29.5)	33(19.9)	9(5.4)

Health workers show little concern for my condition	29(17.5)	43(25.9)	17(10.2)	60(36.1)	17(10.2)
Health workers do not involve me in the treatment of my disease	24(14.5)	44(26.5)	32(19.3)	40(24.1)	26(15.7)
I am likely to encounter a negative experience with health workers	18(10.8)	33(19.9)	47(28.3)	44(26.5)	24(14.5)
Health workers have adequate knowledge of traditional medicine	8(4.8)	43(25.9)	39(23.5)	60(36.1)	16(9.6)

**Table 4** shows the attitude of health workers as a factor contributing to utilizing traditional medicine in treating ENT conditions. Close to half of the respondents, 75 (45.2%), agreed that health workers speak against the use of conventional medicine, 49 (29.5%) neither agreed nor disagreed, and 42 (25.3%) disagreed. The majority, 77 (46.3%), disagreed with ‘health workers show little concern for my condition,’ 72 (43.4%) agreed, and 17 (10.2%) neither agreed nor disagreed. A significant number of the respondents, 68 (41.0%), agreed that health workers do not involve them in the treatment of their disease, 32 (19.3%) neither agreed nor disagreed, and 66 (39.8%) disagreed. Close to half of the participants, 68 (41.0%), disagreed that they are likely to encounter a negative experience with health workers, 51 (30.7%) agreed, and 47 (28.3%) neither agreed nor disagreed. Most of the respondents, 76 (45.7%), disagreed that health workers have adequate knowledge of traditional medicine, 51 (30.7%) agreed, and 39 (23.5%) neither agreed nor disagreed.

## Discussion

The findings of this study align with previous research on the use of traditional medicine in treating ENT conditions. Traditional medicine usage was more common among older and married individuals, consistent with a study in Ghana that found a higher prevalence among these groups (Peprah et al., 2019). Additionally, the integration of traditional and modern medicine was evident, as reported in a Nigerian study, where individuals used traditional treatments either solely or alongside modern healthcare (Ozioma & Chinwe, 2019).

Cultural beliefs played a significant role in treatment choices, as most respondents associated traditional medicine with religious and spiritual practices. This finding is consistent with studies highlighting the role of spiritualism, herbal remedies, and divination in traditional healing (Hernandez-Fuentes et al., 2025). Similarly, previous research indicates that cultural perspectives on disease significantly influence the preference for conventional medicine.

The holistic approach of traditional medicine was another key factor influencing its utilization. Previous studies have also reported that the appeal of conventional medicine lies in its ability to treat conditions holistically, addressing the body, mind, and spirit (Dave et al., 2020). Furthermore, perceptions of traditional medicine as having minimal toxic effects were consistent with findings that herbal treatments are viewed as more natural and less harmful than pharmaceutical drugs

Access and affordability were crucial determinants of traditional medicine use. Respondents perceived traditional medicine as more accessible and cost-effective, aligning with studies showing that remote communities rely on traditional healers due to limited modern healthcare facilities (Mal & Saikia, 2025; Sanga et al., 2024; Sharma et al., 2022). Additionally, financial constraints influenced healthcare choices, reinforcing findings that individuals turn to traditional medicine when they cannot afford modern medical services

Attitudes of healthcare professionals toward traditional medicine were mixed. Some respondents reported negative experiences, including discouragement from using

conventional medicine, as observed in studies where nurses advised patients against herbal treatments ([Hitl et al., 2021](#); [Ma et al., 2024](#); [Ruyvaran et al., 2022](#)). However, other research suggests that some healthcare workers acknowledge the potential benefits of traditional medicine and may support its use.

This study contributes to the growing knowledge of traditional medicine use in ENT care, particularly in an urban Ghanaian context. While previous studies have primarily focused on rural populations, this research highlights that urban communities rely on traditional medicine despite greater access to modern healthcare. The findings also suggest that the preference for conventional medicine is not solely due to accessibility but is deeply rooted in cultural beliefs, affordability, and dissatisfaction with modern healthcare experiences ([Al-Juhani et al., 2024](#); [Jara Silva et al., 2022](#); [Lex et al., 2023](#)). Moreover, the study sheds light on the evolving relationship between modern and traditional medicine, with many respondents using both approaches complementarily. This underscores the need for healthcare systems to acknowledge and integrate traditional healing practices where appropriate.

Several limitations should be considered. First, the study relied on self-reported data, which may be subject to recall and social desirability biases. Second, the study was conducted in a specific geographic location, limiting the generalizability of the findings to other regions with different healthcare systems and cultural beliefs. Third, while qualitative insights were drawn from existing literature, future research incorporating in-depth qualitative interviews could provide a more comprehensive understanding of patient perspectives.

The findings highlight the need for healthcare policymakers to recognize the continued reliance on traditional medicine and explore ways to integrate it with modern healthcare. Public health initiatives should focus on educating healthcare providers and patients about the safe and effective use of

traditional medicine. Additionally, training programs for healthcare professionals should include knowledge of traditional medicine to bridge the gap between conventional and alternative healing approaches. Furthermore, policies to improve the accessibility and affordability of modern healthcare services, particularly in underserved communities, could help address some barriers driving individuals toward traditional medicine. Future research should explore regulatory frameworks that ensure the safety and efficacy of traditional medicine while promoting collaboration between traditional and modern healthcare practitioners. The findings of this study align with previous research on the use of traditional medicine in treating ENT conditions. Traditional medicine usage was more common among older and married individuals, consistent with a study in Ghana that found a higher prevalence among these groups ([Peprah et al., 2019](#)). Additionally, the integration of traditional and modern medicine was evident, as reported in a Nigerian study, where individuals used traditional treatments either solely or alongside modern healthcare ([Ozioma & Chinwe, 2019](#)).

Cultural beliefs played a significant role in treatment choices, as most respondents associated traditional medicine with religious and spiritual practices. This finding is consistent with studies highlighting the role of spiritualism, herbal remedies, and divination in traditional healing ([Hernandez-Fuentes et al., 2025](#)). Similarly, previous research indicates that cultural perspectives on disease significantly influence the preference for conventional medicine.

The holistic approach of traditional medicine was another key factor influencing its utilization. Previous studies have also reported that the appeal of conventional medicine lies in its ability to treat conditions holistically, addressing the body, mind, and spirit ([Dave et al., 2020](#)). Furthermore, perceptions of traditional medicine as having minimal toxic effects were consistent with findings that herbal treatments are viewed as

more natural and less harmful than pharmaceutical drugs

Access and affordability were crucial determinants of traditional medicine use. Respondents perceived traditional medicine as more accessible and cost-effective, aligning with studies showing that remote communities rely on traditional healers due to limited modern healthcare facilities ([Mal & Saikia, 2025](#); [Sanga et al., 2024](#); [Sharma et al., 2022](#)). Additionally, financial constraints influenced healthcare choices, reinforcing findings that individuals turn to traditional medicine when they cannot afford modern medical services

Attitudes of healthcare professionals toward traditional medicine were mixed. Some respondents reported negative experiences, including discouragement from using conventional medicine, as observed in studies where nurses advised patients against herbal treatments ([Hitl et al., 2021](#); [Ma et al., 2024](#); [Ruyvaran et al., 2022](#)). However, other research suggests that some healthcare workers acknowledge the potential benefits of traditional medicine and may support its use.

This study contributes to the growing knowledge of traditional medicine use in ENT care, particularly in an urban Ghanaian context. While previous studies have primarily focused on rural populations, this research highlights that urban communities rely on traditional medicine despite greater access to modern healthcare. The findings also suggest that the preference for conventional medicine is not solely due to accessibility but is deeply rooted in cultural beliefs, affordability, and dissatisfaction with modern healthcare experiences ([Al-Juhani et al., 2024](#); [Jara Silva et al., 2022](#); [Lex et al., 2023](#)). Moreover, the study sheds light on the evolving relationship between modern and traditional medicine, with many respondents using both approaches complementarily. This underscores the need for healthcare systems to acknowledge and integrate traditional healing practices where appropriate.

Several limitations should be considered. First, the study relied on self-reported data,

which may be subject to recall and social desirability biases. Second, the study was conducted in a specific geographic location, limiting the generalizability of the findings to other regions with different healthcare systems and cultural beliefs. Third, while qualitative insights were drawn from existing literature, future research incorporating in-depth qualitative interviews could provide a more comprehensive understanding of patient perspectives.

The findings highlight the need for healthcare policymakers to recognize the continued reliance on traditional medicine and explore ways to integrate it with modern healthcare. Public health initiatives should focus on educating healthcare providers and patients about the safe and effective use of traditional medicine. Additionally, training programs for healthcare professionals should include knowledge of traditional medicine to bridge the gap between conventional and alternative healing approaches. Furthermore, policies to improve the accessibility and affordability of modern healthcare services, particularly in underserved communities, could help address some barriers driving individuals toward traditional medicine. Future research should explore regulatory frameworks that ensure the safety and efficacy of conventional medicine while promoting collaboration between traditional and modern healthcare practitioners.

The findings of this study underscore the importance of recognizing traditional medicine as a significant component of healthcare, particularly in communities where cultural beliefs and accessibility challenges influence treatment choices. Healthcare professionals should be equipped with knowledge about traditional medicine to engage patients in open, non-judgmental discussions, fostering trust and improving adherence to treatment plans. Integrating traditional healing practices with evidence-based modern medicine can enhance patient-centered care, ensuring that treatment approaches are both culturally acceptable and medically effective. Additionally,

policymakers should consider regulating traditional medicine practices to ensure safety and efficacy while promoting interdisciplinary collaboration between conventional healthcare providers and traditional healers.

### Relevance to Clinical Practice

The findings of this study are highly relevant to clinical practice as they emphasize the need for culturally sensitive, patient-centered care that acknowledges the widespread use of traditional medicine in ENT treatment. Healthcare providers should be trained to understand and respectfully engage with patients' beliefs and practices, fostering trust and open communication. Integrating traditional medicine knowledge into clinical practice can improve treatment adherence, patient satisfaction, and health outcomes, especially in communities where traditional healing is central to health-seeking behavior.

### Conclusion

This study highlights the persistent reliance on traditional medicine to treat ENT conditions, driven by cultural beliefs, affordability, accessibility, and dissatisfaction with aspects of modern healthcare. While conventional medicine is valued for its holistic approach and perceived safety, its integration with modern healthcare remains limited due to health professionals' skepticism and policy regulation gaps. The findings emphasize the need for greater collaboration between traditional and modern healthcare systems to ensure safe, effective, and culturally sensitive treatment options. Future research should explore strategies to bridge this gap, enhance healthcare accessibility, and educate patients and providers on the benefits and risks of combining traditional and modern medical approaches.

### Authors Contributions

All six authors made substantial contributions to this research. The study was conceptualized and designed by Author 1, with methodological input from Author 1 and Author 2. Data collection was conducted primarily by Author 2 and Author 3. Author 3 and Author 4 were responsible for data analysis and interpretation. The original draft of the manuscript was prepared by Author 1 and Author 5, while Author 5 and Author 6 contributed to critical revision and editing of the manuscript. Supervising and coordinating the research activities were led by Author 1 and Author 6. All authors read and approved the final version of the manuscript and agree to be accountable for all aspects of the work.

### Conflicts of Interest

The authors declare no conflict of interest.

### Acknowledgment

The authors would like to express their sincere gratitude to all the participants who participated in this study and generously shared their experiences. Special thanks go to the staff of the ENT clinics in Kumasi for their support and cooperation during data collection. The authors also acknowledge the contributions of colleagues and research assistants who provided valuable input throughout the research process.

### References

Al-Juhani, A., Imran, M., Aljaili, Z. K., Alzhrani, M. M., Alsalman, R. A., Ahmed, M., Ali, D. K., Fallatah, M. I., Yousuf, H. M., & Dajani, L. M. (2024). Beyond the Pump: A Narrative Study Exploring Heart Memory. *Cureus, 16*(4), e59385. <https://doi.org/10.7759/cureus.59385>



- Al-Lawati, T., Mehdi, I., Bahrani, B. Al, Al-Harsi, K., Rahbi, S. Al, & Varvaras, D. (2016). Does Alternative and Traditional WASAM (Local cauter) Therapy Facilitate an Early and More Extensive Locoregional Metastasis of Breast Cancer? *The Gulf Journal of Oncology*, 1(22), 37–42.
- Bernstein, N., Akram, M., Yaniv-Bachrach, Z., & Daniyal, M. (2021). Is it safe to consume traditional medicinal plants during pregnancy? *Phytotherapy Research: PTR*, 35(4), 1908–1924. <https://doi.org/10.1002/ptr.6935>
- Cereceda-Monteoliva, N., Rouhani, M. J., Maughan, E. F., Rotman, A., Orban, N., Al Yaghchi, C., & Sandhu, G. (2021). Sarcoidosis of the ear, nose and throat: A review of the literature. *Clinical Otolaryngology: Official Journal of ENT-UK; Official Journal of Netherlands Society for Oto-Rhino-Laryngology & Cervico-Facial Surgery*, 46(5), 935–940. <https://doi.org/10.1111/coa.13814>
- Claire-Del Granado, R., & Espinosa-Cuevas, M. (2021). Herbal Nephropathy. *Contributions to Nephrology*, 199, 143–154. <https://doi.org/10.1159/000517693>
- Dave, A., Parande, F., Park, E.-J., & Pezzuto, J. M. (2020). Phytochemicals and cancer chemoprevention. *Journal of Cancer Metastasis and Treatment*, 6, N-A.
- Gheorghe, D. C., Niculescu, A.-G., Bîrcă, A. C., & Grumezescu, A. M. (2021). Biomaterials for the Prevention of Oral Candidiasis Development. *Pharmaceutics*, 13(6). <https://doi.org/10.3390/pharmaceutics13060803>
- Hernandez-Fuentes, G. A., de D Gómez-Bueno, J., Pérez-Santos, V. M., Valle-Capitaine, I. J., Villaseñor-Gonzalez, P. M., Hernández-Zamorano, C. J., Silva-Vázquez, C. G., de la Cruz-Ruiz, M., Diaz-Martinez, J., & Garza-Veloz, I. (2025). Comparing Perspectives on Traditional and Complementary Medicine Use in Oncology: Insights from Healthcare Professionals and Oncology Patients in Western Mexico. *Current Oncology*, 32(2), 71.
- Hitl, M., Kladar, N., Gavarić, N., Srđeniović Čonić, B., & Božin, B. (2021). Garlic burn injuries- a systematic review of reported cases. *The American Journal of Emergency Medicine*, 44, 5–10. <https://doi.org/10.1016/j.ajem.2021.01.039>
- Jara Silva, C. E., Joseph, A. M., Khatib, M., Knafo, J., Karas, M., Krupa, K., Rivera, B., Macia, A., Madhu, B., McMillan, M., Burtch, J., Quinonez, J., Albert, T., & Khanna, D. (2022). Osteopathic Manipulative Treatment and the Management of Headaches: A Scoping Review. *Cureus*, 14(8), e27830. <https://doi.org/10.7759/cureus.27830>
- Kankam, K., & Murray, L. (2024). Rehabilitation of post-stroke aphasia in Ghana. *International Journal of Language & Communication Disorders*, 59(4), 1308–1321. <https://doi.org/10.1111/1460-6984.13000>
- Khan, A. U., Akram, M., Daniyal, M., Akhter, N., Riaz, M., Akhtar, N., Shariati, M. A., Anjum, F., Khan, S. G., Parveen, A., & Ahmad, S. (2020). Awareness and current knowledge of epilepsy. *Metabolic Brain Disease*, 35(1), 45–63. <https://doi.org/10.1007/s11011-019-00494-1>
- Lavalle, S., Caruso, S., Foti, R., Gagliano, C., Cocuzza, S., La Via, L., Parisi, F. M., Calvo-Henriquez, C., & Maniaci, A. (2024). Behçet's Disease, Pathogenesis, Clinical Features, and Treatment Approaches: A Comprehensive Review. *Medicina (Kaunas, Lithuania)*, 60(4). <https://doi.org/10.3390/medicina60040562>
- Lex, J. R., Di Michele, J., Koucheki, R., Pincus, D., Whyne, C., & Ravi, B. (2023). Artificial Intelligence for Hip Fracture Detection and Outcome Prediction: A Systematic Review and Meta-analysis.

- JAMA Network Open*, 6(3), e233391. <https://doi.org/10.1001/jamanetworkopen.2023.3391>
- Li, Z., Yin, S., Feng, J., Gao, X., Yang, Q., & Zhu, F. (2023). Acupuncture combined with Chinese herbal medicine in the treatment of perimenopausal insomnia: A systematic review and meta-analysis. *Medicine*, 102(45), e35942. <https://doi.org/10.1097/MD.00000000000035942>
- Liu, Y., Yang, S., Wang, K., Lu, J., Bao, X., Wang, R., Qiu, Y., Wang, T., & Yu, H. (2020). Cellular senescence and cancer: Focusing on traditional Chinese medicine and natural products. *Cell Proliferation*, 53(10), e12894. <https://doi.org/10.1111/cpr.12894>
- Ma, Y.-Q., Xing, C., Li, Q.-F., Xu, Z., Zhang, J.-S., & Wu, C.-Y. (2024). Evidence mapping of clinical studies on 23 commonly used Chinese patent medicines for treating insomnia. *Zhongguo Zhong yao za zhi = Zhongguo zhongyao zazhi = China journal of Chinese materia medica*, 49(14), 3952–3962. <https://doi.org/10.19540/j.cnki.cjcmm.20240410.501>
- Mäkitie, A. A., Alabi, R. O., Orell, H., Youssef, O., Almangush, A., Homma, A., Takes, R. P., López, F., de Bree, R., Rodrigo, J. P., & Ferlito, A. (2022). Managing Cachexia in Head and Neck Cancer: a Systematic Scoping Review. *Advances in Therapy*, 39(4), 1502–1523. <https://doi.org/10.1007/s12325-022-02074-9>
- Mal, P., & Saikia, N. (2025). Cultural persistence in health-seeking behaviour: a mixed-method study of traditional healing practices among Garo tribal women in Meghalaya, India. *Journal of Biosocial Science*, 1–20. <https://doi.org/10.1017/S0021932025000094>
- Niculescu, A.-G., Chircov, C., Bîrcă, A. C., & Grumezescu, A. M. (2021). Fabrication and Applications of Microfluidic Devices: A Review. *International Journal of Molecular Sciences*, 22(4). <https://doi.org/10.3390/ijms22042011>
- Niculescu, A.-G., & Grumezescu, A. M. (2021). Polymer-Based Nanosystems-A Versatile Delivery Approach. *Materials (Basel, Switzerland)*, 14(22). <https://doi.org/10.3390/ma14226812>
- Oladayo, A. M., Odukoya, O., Sule, V., Molobe, I., Busch, T., Akodu, B., Adeyemo, W. L., Gowans, L. J. J., Eshete, M., Alade, A., Awotoye, W., Adeyemo, A. A., Mossey, P. A., Prince, A. E. R., Murray, J. C., & Butali, A. (2024). Perceptions and beliefs of community gatekeepers about genomic risk information in African cleft research. *BMC Public Health*, 24(1), 507. <https://doi.org/10.1186/s12889-024-17987-z>
- Ozioma, E.-O. J., & Chinwe, O. A. N. (2019). Herbal medicines in African traditional medicine. In *Herbal medicine*. IntechOpen.
- Peng, H., Pan, L., Ran, S., Wang, M., Huang, S., Zhao, M., Cao, Z., Yao, Z., Xu, L., Yang, Q., & Lv, W. (2023). Prediction of MAFLD and NAFLD using different screening indexes: A cross-sectional study in U.S. adults. *Frontiers in Endocrinology*, 14, 1083032. <https://doi.org/10.3389/fendo.2023.1083032>
- Richardson, B. T., Jackson, J., Marable, G., Barker, J., Gardiner, H., Igarabuza, L., Leasy, M., Matthews, E., & Zisman-Ilani, Y. (2024). The Role of Black Churches in Promoting Mental Health for Communities of Socioeconomically Disadvantaged Black Americans. *Psychiatric Services (Washington, D.C.)*, 75(8), 740–747. <https://doi.org/10.1176/appi.ps.20230263>
- Ruyvaran, M., Zamani, A., Mohamadian, A., Zarshenas, M. M., Eftekhari, M. H., Pourahmad, S., Abarghoeei, E. F., Akbari, A., & Nimrouzi, M. (2022). Safflower (*Carthamus tinctorius* L.) oil

- could improve abdominal obesity, blood pressure, and insulin resistance in patients with metabolic syndrome: A randomized, double-blind, placebo-controlled clinical trial. *Journal of Ethnopharmacology*, 282, 114590. <https://doi.org/10.1016/j.jep.2021.114590>
- Sanga, E. S., Mbata, D. D., Msoka, E. F., Mchome, Z., Karia, F. P., Pollak, K. I., Robles, J. M., & Schroeder, K. (2024). The socio-cultural contexts shaping health-seeking behaviours among community members regarding childhood cancer in Tanzania: A qualitative study. *Pediatric Blood & Cancer*, 71(11), e31278. <https://doi.org/10.1002/pbc.31278>
- Sharma, P. K., Singh, A., & Sharma, N. K. (2022). A socio-ecological critique on India's local health traditions amidst rising incidence of global pandemics. *Journal of Herbal Medicine*, 34, 100578. <https://doi.org/10.1016/j.hermed.2022.100578>
- Sureshkumar, J., Jenipher, C., Sriramavaratharajan, V., Gurav, S. S., Gandhi, G. R., Ravichandran, K., & Ayyanar, M. (2023). Genus *Equisetum* L: Taxonomy, toxicology, phytochemistry and pharmacology. *Journal of Ethnopharmacology*, 314, 116630. <https://doi.org/10.1016/j.jep.2023.116630>
- Venkatraghavan, S., Pankow, J. S., Boerwinkle, E., Fornage, M., Selvin, E., & Ray, D. (2025). Epigenome-wide association study of incident type 2 diabetes in Black and White participants from the Atherosclerosis Risk in Communities Study. *Diabetologia*, 68(4), 815–834. <https://doi.org/10.1007/s00125-024-06352-9>
- Yempabe, T., Edusei, A., Donkor, P., Buunaaim, A., & Mock, C. (2020). Traditional bonesetters in northern Ghana: opportunities for engagement with the formal health sector. *The Pan African Medical Journal*, 37, 248. <https://doi.org/10.11604/pamj.2020.37.248.22420>
- Yimer, G., Ekuadzi, E., Fasinu, P., de Melo, A. C., & Pillai, G. C. (2021). Traditional medicines for COVID-19: Perspectives from clinical pharmacologists. *British Journal of Clinical Pharmacology*, 87(9), 3455–3458. <https://doi.org/10.1111/bcp.14981>
- Zeng, L.-H., Rana, S., Hussain, L., Asif, M., Mehmood, M. H., Imran, I., Younas, A., Mahdy, A., Al-Joufi, F. A., & Abed, S. N. (2022). Polycystic Ovary Syndrome: A Disorder of Reproductive Age, Its Pathogenesis, and a Discussion on the Emerging Role of Herbal Remedies. *Frontiers in Pharmacology*, 13, 874914. <https://doi.org/10.3389/fphar.2022.874914>
- Zou, T., Wang, J., Wu, X., Yang, K., Zhang, Q., Wang, C., Wang, X., & Zhao, C. (2023). A review of the research progress on *Pinellia ternata* (Thunb.) Breit.: Botany, traditional uses, phytochemistry, pharmacology, toxicity and quality control. *Heliyon*, 9(11), e22153. <https://doi.org/10.1016/j.heliyon.2023.e22153>