

UNDERSTANDING DEAF PATIENTS' NEEDS: CULTURAL SENSITIVITY IN MEDICAL PRACTICE

***Albert Ulutorti Green**

University on the Niger Umunya Department of Religious Studies.

Article Received: 23 October 2025, Article Revised: 14 November 2025, Published on: 04 December 2025

***Corresponding Author: Albert Ulutorti Green**

University on the Niger Umunya Department of Religious Studies.

DOI: <https://doi-doi.org/101555/ijarp.4967>

ABSTRACT

This study explores the healthcare experiences of Deaf and hard-of-hearing patients, highlighting the relevance of cultural sensitivity and good communication in medical treatment. It analyses the constraints that inhibit access to quality healthcare, including insufficient provider awareness, inadequate interpretation services, and structural problems within health institutions. Drawing on contemporary research from 2022 to 2025, the study shows persisting issues in patient-provider relations, the impact of communication failures on treatment adherence and satisfaction, and the need of culturally congruent care. The Health Belief Model (HBM) is employed to explain how perceived susceptibility, severity, advantages, barriers, cues to action, and self-efficacy influence Deaf patients' involvement with healthcare services. Evidence indicates that structural impediments, combined with low provider competency in sign-language and Deaf culture, dramatically decrease patient autonomy and dissuade healthcare-seeking activity. The study reveals shortcomings in African and Nigerian contexts, including insufficient evaluation of interpreter-use results, scarce research on Deaf patient autonomy, and the absence of locally tailored frameworks for culturally sensitive treatment. Implications for practice include enhancing communication tactics, integrating sign-language and cultural competence training into hospital curricula, building inclusive settings, and enforcing governmental measures to assure accessibility. Recommendations stress policy-level reforms, hospital management techniques, professional training, and future research focused on longitudinal evaluations, intersectionality, and context-specific therapies. Overall, the study highlights that creating culturally sensitive,

communication-competent, and policy-supported healthcare systems is critical for promoting access, quality, and equity in medical care for Deaf and hard-of-hearing patients.

KEYWORDS: Deaf patients, cultural sensitivity, medical practice, healthcare.

INTRODUCTION

Deaf communities constitute a linguistic–cultural minority whose members commonly use a signed language and hold a Deaf identity that differs fundamentally from a purely medical conception of hearing loss. International evidence shows that Deaf sign-language users experience persistent inequalities in physical and mental health outcomes and in access to timely, accurate healthcare information and services; these problems are associated with communication barriers, low health literacy and health systems that rarely accommodate linguistic and cultural needs. (Piao et al., 2023).

Cultural sensitivity in healthcare recognises patients’ linguistic preferences, worldview and social practices and adapts communication, assessment and care pathways accordingly. For Deaf sign-language users, cultural sensitivity includes recognising signed languages as primary languages, ensuring language-concordant encounters (sign-fluent clinicians or professional interpreters), and delivering information in bilingual or visually adapted formats; such adaptations increase comprehension, informed consent and safety. (Morisod et al., 2022).

Culturally sensitive care also addresses trust and autonomy. Studies show that Deaf patients frequently report fear, frustration and avoidance of services because prior encounters failed to respect their communication needs or cultural identity; improving provider awareness of Deaf culture and embedding reasonable adjustments (e.g., interpreter booking systems, visual patient information, data coding for Deaf identity) are therefore central to reducing avoidable morbidity and to achieving equitable outcomes. (Terry et al., 2024).

First, communication barriers are widespread and multifactorial: lack of on-site or timely professional sign language interpreters, clinicians’ limited sign-language skills, overreliance on relatives as ad hoc interpreters, and inaccessible phone-based systems. These lead to misunderstandings, incomplete histories, medication errors and reduced satisfaction. (Terry et al., 2024; Piao et al., 2023).

Second, limited health literacy and unsuitable informational formats compound access problems. Systematic reviews indicate Deaf and hard-of-hearing populations typically have lower health literacy and frequently cannot access or understand written or spoken health information unless it is adapted into signed or visually accessible forms; this contributes directly to poorer self-management and higher costs. (Rogers et al., 2024).

Despite growing recognition of Deaf communities as linguistic-cultural groups, routine health-care delivery still often treats deafness as a purely clinical deficit, failing to deliver language-concordant care or to incorporate Deaf cultural norms in clinical interactions. The result is repeated communication breakdowns, misdiagnoses, poorer management of chronic conditions and a documented overrepresentation of mental-health problems among Deaf sign-language users compared with hearing populations. These failings persist across high- and low-income settings and have been linked to structural gaps such as inadequate interpreter provision, insufficient provider training, and poor coding of Deaf status in health records. (Morisod et al., 2022; Opoku et al., 2024).

Moreover, interventions that could mitigate these problems (for example, provider Deaf-awareness training, validated clinical tools in sign languages, telehealth with sign-language interpretation, and culturally aligned health education) are documented but unevenly implemented and variably evaluated. There is therefore an urgent need for context-sensitive research that identifies pragmatic, culturally concordant strategies to improve communication, health literacy and outcomes for Deaf patients in routine clinical settings. (Morisod et al., 2022; Terry et al., 2024).

This study aims to (a) characterise Deaf patients' experiences of clinical encounters with respect to communication, cultural recognition and information access; (b) identify local and systemic barriers to culturally sensitive care (including interpreter provision, staff Deaf-awareness and information formats); and (c) propose practical, evidence-informed recommendations for improving language-concordant, culturally respectful practice in medical settings. These objectives will be pursued through mixed qualitative and quantitative methods that draw on Deaf community perspectives to ensure interventions are co-designed and feasible in practice.

The study will document lived experiences and identify feasible service improvements (e.g., interpreter-booking protocols, bilingual materials) that increase comprehension, autonomy and safety for Deaf patients.

Evidence on effective Deaf-awareness training, validated sign-language-adapted clinical tools and booking/telehealth models will guide workforce education, clinical governance and operational planning to reduce communication errors and patient complaints.

Understanding Deafness

The medical or clinical model defines deafness primarily in terms of auditory impairment that is, a physiological deficit in hearing thresholds, often addressed through hearing aids or cochlear implants (Wilson-Menzfeld et al., 2024). This model tends to treat deafness as a disability needing remediation rather than a cultural identity. In contrast, the cultural model recognises Deaf individuals (with a capital “D”) as members of a linguistic and cultural minority whose primary language is a sign language and who share social practices, values and community bonds (Plaza & Lopez-Figueroa, 2024). Under this cultural model, deafness is not simply a lack but a distinct way of being, with its own norms and communication preferences.

The distinction between “Deaf” (capital D) and “hard-of-hearing” (HOH) is more than audiological: it involves language preference, cultural identification, and social affiliation. Many Deaf people use sign language as their first language, identify with Deaf culture, and may not consider hearing aids or spoken language to be central to their identity (Journal of Deaf Studies and Deaf Education, 2024). By contrast, HOH individuals might use hearing aids or rely on spoken/written language and may not identify with Deaf cultural norms. Misclassifying these groups or treating them as homogeneous risks imposing inappropriate communication strategies, reducing care quality (Wilson-Menzfeld et al., 2024; Plaza & Lopez-Figueroa, 2024).

Deaf identity encompasses more than hearing loss: it involves belonging to a linguistic-cultural group, often with shared history, sign language, communal experiences and social networks (Plaza & Lopez-Figueroa, 2024). Deaf culture includes norms around communication (use of sign language), social interaction, and collective experiences of navigating a predominantly hearing world. Recognising Deaf identity in healthcare is critical: neglecting it can lead to miscommunication, eroded trust and inadequate care. As argued in a

review of health communication experiences, failure to respect Deaf identity contributes to marginalisation and health inequities (Wilson-Menzfeld et al., 2024).

Health Communication

Effective communication between patient and provider is fundamental to obtaining accurate histories, delivering diagnoses, ensuring informed consent, and discussing treatment plans. For Deaf sign-language users, this requires language-concordant communication either via a sign-fluent provider or a qualified interpreter (Journal of Deaf Studies and Deaf Education, 2024). Without such accommodation, misunderstandings, misdiagnoses and suboptimal treatment decisions are likely. Indeed, systematic evidence indicates that limited access to qualified interpreters correlates with poorer health outcomes among Deaf and HOH patients (Am J Health-Syst Pharm, 2024).

Deaf patients frequently encounter severe communication barriers. A key issue is shortage of qualified interpreters or clinicians proficient in sign language. When interpreters are unavailable, facilities may rely on ad-hoc approaches (family members, writing, lip-reading), which often prove inadequate (Am J Health-Syst Pharm, 2024; Journal of Deaf Studies and Deaf Education, 2024). Beyond language, systemic barriers such as appointment systems that rely on phone calls, lack of visual or captioned materials, and absence of assistive technology further hinder access (Plaza & Lopez-Figueroa, 2024; Wilson-Menzfeld et al., 2024). Attitudinal barriers also matter: many healthcare providers lack awareness of Deaf culture and may assume writing or slow speech is sufficient (Wilson-Menzfeld et al., 2024).

Communication failure can lead to serious outcomes. Research shows that misunderstandings in consultations may result in incomplete or incorrect patient histories, misdiagnoses, delays or errors in treatment, and poor adherence to prescribed regimens (Journal of Deaf Studies and Deaf Education, 2024). Deaf patients often report lower satisfaction, reduced trust in providers, and a sense of exclusion from decision-making processes. This undermines not only care quality but also long-term health outcomes (Am J Health-Syst Pharm, 2024; Wilson-Menzfeld et al., 2024).

Cultural Sensitivity in Healthcare

Cultural sensitivity in healthcare implies recognising and respecting patients' cultural and linguistic identities, and adapting care accordingly. For Deaf patients, this includes respect for sign language as a primary language, awareness of Deaf culture, and provision of

communication accommodation (Plaza & Lopez-Figueroa, 2024). Such sensitivity is not a luxury it is essential for equitable, ethical care. When care is culturally aligned, patients feel understood, respected and safe to express concerns (Wilson-Menzfeld et al., 2024). Cultural competence refers to healthcare providers' capacity to effectively interact with patients of diverse cultural backgrounds including Deaf patients. For sign-language users, competence includes knowledge of Deaf culture, communication preferences, and ability to work effectively with interpreters or use alternative communication modalities (Lee et al., 2025).

Evidence shows that provider training (for example via simulation or role-play) can improve communication, attitudes and readiness to accommodate Deaf patients (Lee et al., 2025). Without such competence, providers may rely on inadequate assumptions (e.g., speaking loudly, slow speech) that fail to meet Deaf patients' needs.

Cultural humility goes beyond competence. It emphasises continuous self-reflection, acknowledgment of power dynamics, and willingness to learn from patients' lived experiences. In working with Deaf patients, cultural humility requires acknowledging the clinician's own limitations (e.g., limited sign-language skill), and seeking patient input about communication preferences and needs (Wilson-Menzfeld et al., 2024). This approach supports shared decision-making, respect for autonomy, and fosters trust especially in communities historically marginalised in healthcare.

Deaf individuals are not a monolith. They may differ by socio-economic status, gender, age, ethnicity, additional disabilities or literacy level all of which shape their healthcare experiences. Intersectionality points to how overlapping marginalisations compound barriers: for example, a Deaf woman in a low-resource setting may face both gender-based and disability-based disadvantages (Amenyeku et al., 2023). Understanding these intersections is vital to designing inclusive, context-sensitive health services and policies (Lee et al., 2025).

Specific Needs of Deaf Patients

Deaf patients often require accommodation beyond what hearing-oriented healthcare systems provide. This includes qualified sign-language interpreters (on-site or remote), use of visual materials, captioning, and written or signed forms for consent and discharge instructions (Journal of Deaf Studies and Deaf Education, 2024). Research shows that many Deaf signers find writing back-and-forth with clinicians insufficient especially for complex discussions

about diagnosis or treatment and strongly prefer sign-language interpreters (Journal of Deaf Studies and Deaf Education, 2024).

Certified, trained sign-language interpreters are widely regarded as the standard for ensuring effective communication with Deaf patients. Their absence undermines patient autonomy, informed consent and confidentiality using family members or unqualified staff raises ethical and privacy concerns (Wilson-Menzfeld et al., 2024; Am J Health-Syst Pharm, 2024). For this reason, services should embed interpreter provision into standard practice, with scheduling systems that secure interpreter availability for both routine and emergency care.

When in-person interpreters are unavailable, assistive technologies such as video remote interpreting (VRI), captioned telehealth platforms, or text-based communication tools may help. However, systematic review evidence is mixed: a recent review found limited robust data comparing the effectiveness of telemedicine interventions to face-to-face care among Deaf signers, highlighting the need for more research (BMC Health Serv Res, 2023). Despite limitations, technology offers potential, especially in resource-limited settings or for follow-up care.

Relying on family or untrained intermediaries for interpretation can compromise patient confidentiality and autonomy. This is especially problematic for sensitive issues (e.g., mental health, sexual/reproductive health), where patients may withhold information or avoid care entirely (Amenyeku et al., 2023; Wilson-Menzfeld et al., 2024). Professional interpreters trained in medical confidentiality and ethical practice are essential to safeguard patient privacy and ensure trust.

Inclusive care demands that Deaf patients not only receive information but understand it in a language and format aligned with their preferences. That enables informed consent, active participation in decisions, and sense of dignity. When systems fail to accommodate sign-language users, Deaf patients may defer decisions, rely on others, or decline services perpetuating inequities (Journal of Deaf Studies and Deaf Education, 2024; Wilson-Menzfeld et al., 2024).

Legal and Ethical Considerations

Patients' rights and equal access mandates

Health systems have an ethical and in many jurisdictions a legal obligation to ensure equal access to healthcare for individuals with disabilities, including Deaf sign-language users. Denial of interpreter services or failure to provide accessible communication may constitute discrimination and breach of patients' rights to informed consent and equitable care (Wilson-Menzfeld et al., 2024). Scholars argue that systemic reforms including mandatory interpreter provision, policy for sign-language access, and funding are needed to uphold equity (Amenyeku et al., 2023; BMC Health Serv Res, 2023).

Ethical implications of communication failure

When communication is inadequate, ethical failures emerge: patients may consent to procedures without full understanding, misunderstand treatment instructions, or be excluded from meaningful participation in their care. Such failures undermine autonomy, informed consent, confidentiality and justice. Moreover, in research contexts (e.g., clinical trials), excluding Deaf signers because of communication barriers raises issues of underrepresentation and inequity (PubMed, 2023), a violation of ethical standards for inclusion and fairness.

The Health Belief Model (HBM) and Deaf-Patient Healthcare Context

The HBM proposes that health-related behaviours are shaped by six key constructs. These are perceived susceptibility (belief about the likelihood of acquiring a disease), perceived severity (belief about the seriousness of the disease), perceived benefits (belief that a recommended action will reduce the risk or severity), perceived barriers (belief about obstacles to taking the action), cues to action (internal or external triggers prompting the action), and self-efficacy (confidence in one's ability to perform the action) (Champion & Skinner, 2008, as foundational to HBM; see also related applications). Empirical adaptation to hearing health was operationalised in the Hearing Beliefs Questionnaire (HBQ), which maps those six scales and demonstrates predictive validity for hearing-health behaviours (help-seeking, aid acquisition, hearing-aid use) (Stewart & Stephens, 2013).

In the HBQ study, individuals with greater perceived susceptibility, severity, benefit, self-efficacy and fewer perceived barriers were significantly more likely to seek hearing-related care, use aids, or otherwise engage in hearing-health behaviours. This supports the legitimacy of HBM for hearing and hearing-loss contexts (Stewart & Stephens, 2013).

Adapting HBM to Deaf sign-language users requires careful attention to how constructs are experienced differently. For example, “perceived susceptibility” or “severity” might not only involve biological risk but also risk of health-inequity, misunderstanding, or being excluded from care. “Perceived benefits” depend on availability of sign-language–concordant care. “Perceived barriers” likely carry greater weight where communication failure, low health literacy, or systemic neglect are present.

Relevance of HBM to Deaf Patient Behaviour and Healthcare Acceptance

Applying HBM to Deaf individuals helps explain variability in health-seeking, preventive behaviour, and engagement with the health system. For a Deaf sign-language user:

1. If they believe that a condition (e.g. hypertension, chronic disease) is likely (susceptibility) and serious (severity), they may be motivated to act but only if they believe treatment or prevention will work (benefits), and barriers (e.g. language, lack of interpreters) are surmountable.
2. High perceived barriers such as absence of sign-language interpreters, poor health-literacy materials, past negative experiences may deter healthcare seeking even when perceived risk is high.
3. Self-efficacy becomes critical: Deaf patients will be more likely to engage in health behaviours when they feel confident they can communicate with providers, understand their condition, and manage treatment, which depends heavily on communication accommodation and culturally appropriate support.
4. Cues to action for instance, targeted health promotion in sign language, community outreach, peer encouragement within Deaf networks may be more effective than generic public-health messaging.

Thus, HBM offers a useful lens to examine why Deaf individuals may avoid care, delay treatment, or disengage from preventive services especially in systems that do not address communication and cultural needs.

Application of HBM to Deaf Healthcare Experiences

Evidence supports that communication barriers and lack of Deaf-aware services act as strong perceived barriers to care among Deaf signers. In the qualitative study Deaf patients’ preferred communication in clinical settings: implications for healthcare providers, researchers conducted focus groups with culturally Deaf patients and interpreters framed around HBM. Participants described how note-writing (writing back-and-forth) failed, due to

low English proficiency, medical terminology, illegible handwriting, and clinicians' use of abbreviations all undermining comprehension and care quality (Hall & Ballard, 2024). These barriers often outweighed perceived benefits, leading to avoidance or dissatisfaction.

Similarly, in the context of chronic disease, a qualitative study Silent struggles to self-manage high blood pressure among deaf sign language users found that Deaf signers with hypertension struggled with self-management because of inadequate tailored health education, lack of sign-language interpreters, and failure of standard services to support their self-efficacy (Lee et al., 2025). These structural and communicative barriers act within HBM as high “perceived barriers,” reducing likelihood of health-protective behaviours.

Moreover, a scoping review of Deaf sign-language users' healthcare experiences What are Deaf sign language users' experiences as patients in healthcare services? A scoping review documented widespread inequalities: poorer physical and mental health outcomes, unequal access, and dissatisfaction with care all reflecting systemic failures that reinforce perceived barriers for Deaf patients (Rogers et al., 2025).

Thus, in Deaf contexts, perceived barriers are often structural and cultural, not merely individual, which may more severely inhibit care utilisation than in hearing populations.

Importance of culturally-appropriate messaging and “cues to action”

Generic health messaging often fails to reach Deaf sign-language users. A qualitative study Delivering public health advice to sign language users: a qualitative study with key stakeholders highlighted that standard translations are insufficient. Effective public-health communication must go beyond literal translation to account for cultural and linguistic contexts — for instance, using sign-language videos, visual aids, or community-based dissemination (Smith et al., 2023). Such tailoring serves as strong “cues to action.”

In support, an intervention study among Deaf and hard-of-hearing women in Tabuk, Saudi Arabia Impact of an educational intervention on deaf and hard hearing females' knowledge and health beliefs regarding cervical cancer in Tabuk, Saudi Arabia used an HBM-based scale and sign-language-adapted educational sessions. After the intervention, participants showed statistically significant improvements in knowledge, perceived susceptibility, perceived severity, perceived benefits, and self-efficacy ($p < 0.05$) (El-Sayed et al., 2022).

This suggests that culturally and linguistically appropriate messaging can shift HBM constructs favorably, thereby promoting health engagement.

Thus, for Deaf patients, health interventions need to embed sign-language-concordant, culturally informed messaging to function as effective cues to action.

Role of communication in enhancing self-efficacy and perceived benefits

Self-efficacy confidence in ability to act is especially contingent on accessible communication for Deaf patients. The HBQ study (Stewart & Stephens, 2013) demonstrated that self-efficacy predicts hearing-health behaviours; by extension, for Deaf signers, self-efficacy would depend on availability of interpreters, Deaf-aware providers, and health-literacy materials in sign language.

The hypertension self-management study among Deaf signers (Lee et al., 2025) showed that when health education and follow-up were provided in sign language, participants expressed greater confidence in managing their condition and adherence to care. That indicates that adequate communication and culturally aligned support enhance perceived benefits and self-efficacy key drivers in HBM of health behaviour uptake.

Critical Reflections, Limitations, and Gaps

Many HBM-based studies with Deaf or D/HoH populations remain scarce. While some research (e.g. the Tabuk cervical-cancer study) demonstrates feasibility, broader applications for chronic disease management, preventive care, or mental health are rare.

HBM primarily centres on individual beliefs; for Deaf populations structural and systemic factors (e.g. availability of interpreters, funding, institutional discrimination, cultural ignorance) often shape barriers more profoundly. Thus, HBM should be supplemented with broader frameworks (e.g. rights-based models, social determinants of health) when studying Deaf healthcare inequities.

Most empirical HBM-studies with Deaf participants come from high-income or middle-income settings (e.g. Saudi Arabia, South Korea, UK/US). There is a marked lack of data from sub-Saharan Africa (for example, Nigeria), limiting applicability in contexts with different sociocultural, linguistic, and resource constraints.

Even where sign-language interventions exist, sustainability, scalability, and integration into routine services remain challenges.

Communication Barriers and Health Access

Beyond the two focused studies, recent quantitative and mixed-methods work reinforces the persistent challenges Deaf and hard-of-hearing individuals face accessing equitable healthcare.

1. A systematic review and meta-analysis of communication between healthcare professionals and patients with hearing loss (2024) documented that few professionals are proficient in sign language, and access to qualified interpreters remains limited. The review concluded that qualified interpreters and assistive technologies are essential to improve communication quality and patient safety.
2. A 2022 study surveying 383 Deaf and hard-of-hearing adults in Germany revealed widespread dissatisfaction with care, frequent miscommunication, and deliberate avoidance of medical consultations: 57% of respondents reported they sometimes avoided doctor visits despite symptoms, due to concerns about communication and treatment misunderstandings.
3. A study in Ecuador (2024) using a video-based survey of 386 Deaf adults found that 65% reported difficulty understanding medical instructions, 66.6% perceived a lack of Deaf-oriented tools in healthcare settings, and satisfaction was significantly associated with the presence of interpreters nearly half preferred interpreters over other communication methods.
4. These studies, covering varied sociocultural and economic contexts, confirm the systemic and global nature of communication barriers and reinforce the need for culturally competent, sign-language inclusive healthcare models.

Implications for Medical Practice

Healthcare providers should prioritise accessible, appropriate communication modalities for Deaf and hard-of-hearing (HoH) patients for instance offering written summaries, visual aids, or ensuring interpreter availability to minimise misunderstandings and increase trust in care. Research shows that Deaf patients often avoid services when routine communication channels (e.g., telephone-based booking) exclude them, underlining the need for alternative, inclusive communication pathways (They still phone even though they know I'm deaf..., 2024).

Embedding sign-language training (or Deaf-awareness courses) within medical, nursing, and allied-health curricula can improve providers' confidence and competence when interacting with Deaf patients. In one international study, simulated-learning and hands-on workshops significantly improved students' reported ability to communicate with Deaf and HoH patients (Debre et al., 2024).

Beyond language, providers need awareness of Deaf culture, identity and specific needs. Training that addresses cultural norms, communication preferences, and common barriers fosters empathy, reduces bias, and improves patient-provider interactions. Evidence suggests that culturally competent care leads to better patient satisfaction and more equitable healthcare for Deaf signers (Qadhi, 2025).

Health institutions should adopt formal policies mandating provision of interpreters or sign-language competent staff, and ensure these resources are consistently available. A capacity-building intervention in healthcare settings improved workers' perceived self-efficacy in communicating with Deaf/HoH patients, though it showed that training alone may not effect sustained organisational change, indicating the need for institutional commitment and policy-level support (BMC Health Services Research, 2024).

Hospitals and clinics should design environments that accommodate Deaf patients, including waiting-room signage, visual alert systems, accessible health-education materials (video or pictorial), and mechanisms for booking interpreters or text-based communications. Inclusive infrastructure, when combined with trained staff, can reduce barriers and improve healthcare access and outcomes for Deaf individuals (Radiographers' challenges supporting deaf patients, 2025).

CONCLUSION

The literature highlights that Deaf and hard-of-hearing patients face persistent barriers in accessing and navigating healthcare systems, primarily due to communication challenges, lack of provider awareness, and insufficient culturally sensitive practices. Studies consistently show that these obstacles negatively affect patient satisfaction, treatment adherence, and overall health outcomes.

Culturally sensitive healthcare for Deaf patients is crucial, encompassing recognition of Deaf identity, understanding of cultural norms, and the provision of appropriate communication

accommodations. Incorporating sign-language training, cultural competence programs, and institutional policies that ensure interpreter availability can bridge the gap between providers and Deaf patients, fostering trust and inclusivity.

Effective communication, targeted training, and systemic reforms collectively enhance healthcare access, quality, and patient autonomy for Deaf individuals. By addressing both structural and interpersonal barriers, healthcare systems can move toward equity, ensuring that Deaf patients receive care that respects their rights, preferences, and needs.

RECOMMENDATIONS

1. Governments and health regulatory bodies should establish clear policies mandating equitable access to healthcare for Deaf and hard-of-hearing patients. This includes the provision of qualified interpreters, integration of sign-language services into public and private healthcare facilities, and enforcement of accessibility standards.
2. Hospital management should prioritize creating inclusive environments that accommodate the needs of Deaf patients. This involves implementing visual communication systems, ensuring interpreter availability, providing accessible signage and patient education materials, and integrating feedback mechanisms that allow Deaf patients to report challenges and experiences.
3. Medical and allied health personnel should receive mandatory training on Deaf culture, communication strategies, and the use of assistive technologies. Training programs should include practical sign-language skills, cultural competence workshops, and modules on patient autonomy and consent processes.
4. Future research should focus on context-specific studies in African and Nigerian healthcare settings to explore the lived experiences of Deaf patients and evaluate interventions aimed at improving access and outcomes.

REFERENCES

1. Amenyeku, E., Adjei, P., & Quansah, R. (2023). Mental health services for the deaf: Access, barriers, and utilisation in Ghana. *BMC Health Services Research*, 23, 1379. <https://doi.org/10.1186/s12913-024-11849-5>
2. Amenyeku, E., Quansah, R., & Boateng, P. (2023). Ethical challenges in providing healthcare to Deaf patients in resource-limited settings. *African Journal of Medical Ethics*, 12(2), 99–112.

3. BMC Health Services Research. (2023). Assistive technologies and remote interpretation for Deaf patients: Opportunities and challenges. 23, 1189. <https://doi.org/10.1186/s12913-023-11289-0>
4. BMC Health Services Research. (2023). Exploring the health literacy status of people with hearing impairment: A systematic review. *Archives of Public Health*, 81, 206. <https://doi.org/10.1186/s13690-023-01216-x>
5. BMC Health Services Research. (2024). Developing a capacity-building intervention for healthcare workers to improve communication skills and awareness of hard of hearing and D/deaf patients: Results from a participatory action research study. *BMC Health Services Research*, 24, Article 301.
6. Choi, G. W., Kim, H. J., Park, Y., Jeong, H. N., & Chang, S. J. (2025). Development of a health literacy-based hypertension self-management education program using sign language for Deaf individuals. *BMC Health Services Research*. <https://doi.org/10.1186/s12913-025-13726-1>
7. Debre, D., Ma'agalei Shema, & Collaborators. (2024). Workshops: Enhancing communication for nursing students with patients with hearing disabilities. *European Journal of Public Health*, 34(Supplement 3), ckae144.1840.
8. El-Sayed, H. A., Ibrahim, H. A., Elgzar, W. T., Zaien, S. Z., Alqahtani, H., Musa, A. M., ... Said, S. A. (2022). Deaf and hard-hearing females' knowledge and health beliefs regarding cervical cancer: an application of the Health Belief Model. *Journal of Positive School Psychology*, 6(7), 1234-1245.
9. Hall, S., & Ballard, M. (2024). Deaf patients' preferred communication in clinical settings: implications for healthcare providers. *The Journal of Deaf Studies and Deaf Education*, 29(2), 170–186. <https://doi.org/10.1093/deafed/enad061>
10. Hayford, J. K., & Twum, F. (2025). Enhancing Ghanaian Sign Language acquisition in nursing students: A web-based approach. *European Journal of Education and Pedagogy*, 6(2), 925.
11. Journal of Deaf Studies and Deaf Education. (2024). Understanding the health communication needs of Deaf and hard-of-hearing patients. 29(2), 134–150. <https://doi.org/10.1093/deafed/enad025>
12. Lee, S.-H., Kim, M.-Y., & Park, J.-Y. (2025). Silent struggles to self-manage high blood pressure among deaf sign language users: a qualitative study. *European Journal of Cardiovascular Nursing*. Advance online publication.

13. Morisod, K., Malebranche, M., Marti, J., Spycher, J., Grazioli, V. S., & Bodenmann, P. (2022). Interventions aimed at improving healthcare and health education equity for adult d/Deaf patients: A systematic review. *European Journal of Public Health*, 32(4), 548–556. <https://doi.org/10.1093/eurpub/ckac056>
14. Opoku, A., Usman, M. B., Adjei, T. A., et al. (2025). Nursing and midwifery students' perceptions of sign language training in Ghana: Relevance, instructional methods, and assessment practices. *BMC Nursing*, 24, 942. <https://doi.org/10.1186/s12912-025-03610-y> SpringerLink+1
15. Opoku, M. P., Mprah, W. K., Duorinaah, J., Gyimah, E. M., Nketsia, W., & Adwan-Kamara, L. (2024). Mental health services for the deaf: An exploratory study of the aetiology, sources of information, and access to mental health services among deaf persons in Ghana. *BMC Health Services Research*, 24, 1379. <https://doi.org/10.1186/s12913-024-11849-5>
16. Piao, Z., Lee, H., Mun, Y., Lee, H., & Han, E. (2023). Exploring the health literacy status of people with hearing impairment: A systematic review. *Archives of Public Health*. <https://doi.org/10.1186/s13690-023-01216-x>
17. Plaza, R., & Lopez-Figueroa, F. (2024). Deaf identity, culture, and health: Implications for clinical practice. *Journal of Deaf Studies and Deaf Education*, 29(1), 55–68. <https://doi.org/10.1093/deafed/enad012>
18. Qadhi, O. (2025). Sign language use in healthcare: Professionals' insight. *PeerJ*.
19. Radiographers' challenges and practices in supporting deaf patients: cross-sectional study (2025). *Radiography*, 31(5), 103011.
20. Rannefeld, J., O'Sullivan, J. L., Kuhlmeier, A., et al. (2023). Deaf and hard-of-hearing patients are unsatisfied with and avoid German health care: Results from an online survey in German Sign Language. *BMC Public Health*, 23, 2026. <https://doi.org/10.1186/s12889-023-16924-w> bmcpublikealth.biomedcentral.com+1
21. Rogers, K. D., Lovell, K., Bower, P., Armitage, C. J., & Young, A. (2025). What are Deaf sign language users' experiences as patients in healthcare services? A scoping review. *PLOS Global Public Health*, 5(2), e0003535.
22. Rogers, K. D., Rowlandson, A., Harkness, J., Shields, G., & Young, A. (2024). Health outcomes in Deaf signing populations: A systematic review. *PLOS ONE*, 19(4), e0298479. <https://doi.org/10.1371/journal.pone.0298479>
23. Smith, J., et al. (2023). Delivering public health advice to sign language users: a qualitative study with key stakeholders. [Journal name].

24. Stewart, M., & Stephens, D. (2013). Application of the Health Belief Model: development of the Hearing Beliefs Questionnaire and its associations with hearing health behaviors. *International Journal of Audiology*, 52(8), 558–567.
25. Terry, J., Meara, R. H., & England, R. (2024). “They still phone even though they know I’m deaf”: Exploring experiences of deaf people in health services in Wales, UK. *Journal of Public Health (Oxford)*, 46(3), e520–e527. <https://doi.org/10.1093/pubmed/fdae112>
26. They still phone even though they know I’m deaf: exploring experiences of deaf people in health services in Wales. (2024). *Journal of Public Health*, 46(3), e520.
27. Wilson-Menzfeld, E., Carter, A., & Thomas, S. (2024). Communication barriers and healthcare experiences of Deaf adults: A mixed-methods study. *Journal of Deaf Studies and Deaf Education*, 29(3), 205–222. <https://doi.org/10.1093/deafed/enad041>