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Lived Experiences of Nurses in the Nursing Encounter with the Hearing Impaired at Choma General Hospital: A Hermeneutic Phenomenological Approach

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Abstract
Background: Hearing impairment can affect one or both ears and leads to difficulty in hearing conversational speech or loud sounds. Deaf individuals may not receive proper health care or information due to communication barriers between them and healthcare staff. The purpose is to understand the communication dynamics in these interactions and to examining how communication barriers impact nursing care delivery and nurse-patient relationships.
Methods: The study employed a hermeneutic phenomenological design. Purposive sampling with maximum variation was used to recruit eight nurses, ensuring data richness and reaching saturation. Data analysis was guided by Van Manen's four existential dimensions of lived experience, alongside Lazarus and Folkman's coping theory for interpretation.
Results: Based on the data collected, participants' lived experiences were categorized into five key areas of communication barriers: lack of sign language knowledge, lack of assistance and support, diagnostic challenges, lack of privacy and confidentiality, and difficulties in providing information, education, and communication. Findings reveal that nurses face substantial communication obstacles, primarily due to limited sign language proficiency and the absence of interpreter support, which significantly hinders their ability to deliver quality care
Conclusion: The study offers profound insights into the experiences and interpretations of communication challenges during nursing encounters of nurses with the hearing impaired, emphasizing the need for improved understanding to enhance care quality and patient outcomes.

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Keywords: Communication barriers, coping mechanisms, Deaf patients. Hermeneutic phenomenology, Lived experiences, Nurses

Introduction

Is there anyone who can help us communicate with the patient in cubicle? I mean the one who is deaf

The caption above is from a nurse at a health care facility who relates to a person who is deaf when accessing health care services and it sets the theme of the study which is individual constructions of the nursing encounter between the nurse and the hearing impaired.

The World Health Organisation estimates that 466 million people were living with hearing impairment in 2018 and this estimate is projected to rise to 630 million by 2030 and to over 900 million by 2050 (World Health Organization, 2018) [41]. However, it is estimated that there are around 200,000 deaf people in Zambia, which is around 2% of the total population (Samantha, 2019) [35].

These numbers show the importance of knowing how to communicate with the hearing impaired patients, not only in Zambia but worldwide.

Nurses, as key personnel in healthcare delivery, play a critical role in the provision and coordination of care for better patient outcomes as health care depends heavily on effective communication between the patient and health care provider to ensure that health care services are safe, timely, efficient and patient centered (Aiken *et al*., 2014) [2]. All healthcare professionals need to understand how to communication effectively with the deaf. Marquete *et al*. (2018) [13] highlighted the importance of nurses being able to communicate effectively with all patients to ensure the delivery of nursing care, emphasizing that deaf patients should not be overlooked. Given that nurses are tasked with providing patient-centered care, it is essential that communication training begins with nursing students and continues to all healthcare professionals (Leftridge, 2022) [23]. Nurses are often the first health care professional a deaf person will encounter when seeking health cares. Therefore, a nurse–patient communication relationship is necessary for a successful recovery and discharge (Gračanin, 2020) [15]. Nurses should show efficacy when providing care to deaf patients if there is going to be an improvement in their quality of care to bridge the health care disparities among the deaf communitys. Deaf clients do not trust health care professionals because of their lack of communication competency (Gračanin, 2020) [15]. Therefore nurses are expected to comprehend the principles of communication and apply this understanding to improve health outcomes. Nurses have a professional mandate to measure, monitor and report on the appropriateness and effectiveness of healthcare, informing improvements in healthcare quality (Australian Commission on Safety and Quality in Healthcare, 2014). They play a key role in the support, implementation and evaluation of health applications to improve patient safety (Cawthon *et al*., 2008) [8] and participate in the design and operation of facilities, equipment and work processes for safety. Responsibilities include consumer-centered care through systems and processes that support shared decision making, continuity of care, open disclosure, and sensitivity to the cultural needs and health literacy of patients (Australian Commission on Safety and Quality in Health Care (NSQHS Standards), 2012, 2014) [5].

Equitable access to health care is a major principle of national health systems globally (Levesque *et al*., 2013) [24]. However, persons with hearing impairment generally experience greater barriers in communication during a nursing encounter than the general population and these barriers can lead to negative health outcomes and widen health disparities between persons with hearing impairment and the general population (Moodley & Ross, 2015) [27]. This is in part due to health information and services often not available in an accessible format for the hearing impaired (Levesque *et al*., 2013) [24]. For this reason, nurses must be educated on how to communicate with the deaf (Andrews, Margaret M and Boyle, 2019) [3]. The World Health Organisation (WHO) agreed that individuals who are trained to communicate with the Deaf would impact the delivery of health care and reduce health disparities within the community resulting in positive outcomes (Schwarz *et al*., 2015) [36].

Theoretical Underpinnings

The current study made use of a two of theories to effectively explore the lived experiences of nurses during a nursing encounter with the deaf as follow:

Hermeneutic phenomenology

This study is grounded in hermeneutic phenomenology as an approach and a philosophy. Phenomenology was introduced by Edmund Husserl (Husserl, 1977) [17]. This approach was instrumental in conceptualizing the nurses' experiences, particularly in how they employed coping strategies and reacted to stressful situations when interacting with deaf individuals.. Acknowledging my own positionality as a nurse and researcher was not a source of bias but rather a valuable lens through which the data was approached. In this study, hermeneutic phenomenological approach was used to conceptualise the experiences of nurses during a nursing encounter with the deaf and their use of coping strategies, and as a guide to help develop an understanding of nurses reactions to significantly stressful situations. The study draw on Heidegger's concept of "Being and Time" and van Manen's four reflective thematic areas on lived experiences (Van Manen, 1997) [40], which provide a framework for understanding human experiences in a more comprehensive way. Referenced Van Manen's four reflective thematic areas for understanding lived experiences as: (i) lived space – Spatiality; (ii) lived body – Corporeality; (iii) lived time – Temporality; and (iv) lived human relation – Relationality.

Lazarus and Folkman theory of coping

Lazarus and Folkman (1984) [22] theory of coping was used to provide a deeper understanding of the various strategies that nurses use to manage and navigate the communication barriers encountered during nursing encounters with the deaf. By using this framework, the study seeks to explore how these coping strategies contribute to managing the internal and external demands that arise in the context of healthcare communication during a nursing encounter.

Materials and methods

Study setting

This study was conducted in Choma district, located in the Southern Province of Zambia. The research took place at Choma General Hospital, situated in the newly established provincial capital of the Southern Province. The hospital, is a second-level referral facility. It has all the main sub-specialty units, including Mental Health, Theatre, Maternity, Paediatrics, Ophthalmology, and an ART clinic. This site was purposively selected as the research setting for the study because it was a convenient location in terms of accessibility and had a sufficient study population. Additionally, the hospital included participants whose characteristics met the study's requirements.

Study design and participants

The study adopted qualitative approach alongside Hermeneutic Phenomenology.The purpose of this research design was to describe lived experiences of individuals, rather than imposing preconceived notions or theoretical frameworks (Simui, 2018) [37]. Interpretive phenomenology aims to both describe and interpret lived experiences. The target population for this research was nurses in practice working in various departments at Choma General Hospital. The study encompassed all nurses who had worked between 3 and 36 months in any department and had encountered deaf individuals during their care. For my study, Purposive

sampling using Maximum variation sampling was employed to recruit 8 nurse participants. Maximum variation sampling was used because it aims to capture a wide range of perspectives by including participants with varying characteristics or experiences. For instance, in this study, nurses with different levels of experience, specializations and working in different departments may have been selected to ensure diverse viewpoints were represented (Creswell, 2013) [9]. This sample size was determined based on the completeness of the data and the achievement of data saturation, where repetition or confirmation of previously collected data occurs.

Data generation and Analysis

Data analysis gives a study an opportunity to reduce data to its simplest form for easy interpretation. Qualitative data was derived from interviews. The qualitative data was analysed using interpretive phenomenological analysis. The data for this study were manually analyzed, with the process beginning during data collection and continuing throughout the various stages of the research project after fieldwork. During the interview process, it was noted that fewer new perspectives emerged, which supported the sample size for the research question under study (Eatough & Smith, 2017) [12].

In hermeneutic phenomenological research, interpretation is a fundamental process that leads to deeper understanding, as emphasized by Laverty (2003) [21]. To interpret the rich and complex narratives generated from participants' accounts of the lived experiences of nurses during nursing encounter with the deaf, I employed the phenomenological hermeneutic method. This method draws on the philosophical insights of Paul Ricoeur (1976) [33] and was further developed by Lindseth and Norberg (2004) [25] for practical use in research. The phenomenological-hermeneutic method involves a systematic and interpretive approach to analyzing text, aimed at uncovering the meaning embedded in participants' stories. It comprises three interrelated and dialectical steps: naïve reading, structural (thematic) analysis, and comprehensive understanding. Each step is designed to build upon the previous one, moving the researcher from a surface-level grasp of the text toward a deeper, more nuanced interpretation. These stages of analysis are outlined below:

Step one Naïve Reading: According to Lindseth and Norberg (2004) [25], the naïve reading process involves engaging with the interview text in a reflective manner to familiarize oneself with it and develop an initial understanding or overall impression of the text as a whole. In order to formulate a naïve understanding of how participants experienced the nursing encounter, I repeatedly read the interview transcripts alongside my reflection notes recorded in the research journal (Lindseth and Norberg, 2004) [25]. Through this process of immersion in the text, a preliminary understanding began to emerge. Reflexivity was employed to ensure that any influence exerted by the researcher was identified and managed. For example, a researcher journal was maintained to document and reflect upon thoughts during the naïve reading and throughout the research process, thus monitoring and mitigating the influence of presuppositions.

Step two Structural (Thematic) Analysis: Step two, the explanation stage, served as the bridge between surface-level understanding and deeper comprehension. It applied the principle of distanciation, a process that separated the text from its original temporal context, allowing the text to take on meanings beyond the intentions of the original authors interpreted in this case as the study participants who provided the content during interviews (Ricoeur, 1976) [33].

At this stage, data was divided into small meaning units and condensed by attaching a descriptor, or code (label) (Karlsson *et al*., 2012) [19]. As described by (Adu, 2019) [1], anchor codes are labels that represent the key questions being addressed. Since no specialized software was used for data analysis in this study, anchor codes were manually developed to help organize and group data in Microsoft Word during the analysis process. I identified meaning units in form of sentences, short phrases, concepts, or paragraphs from the text read. In alignment with the concept of the hermeneutic circle, these meaning units were considered in relation to the broader naïve understanding. Reflecting on the meaning units in this context (part) alongside the overall understanding (whole) allowed for a more enriched and expanded interpretation (Geanellos, 2000) [14]. The themes and subthemes were then assembled from the condensed units. The themes and subthemes were further examined to see whether they validated the original naïve understanding. At this stage, condensed meaning units were tallied and brought together and grouped into subthemes.

Step three Comprehensive Understanding: Comprehensive understanding is the final step in the phenomenological hermeneutic method of analysis employed in this study. According to Lindseth and Norberg (2004) [25], comprehensive understanding involves summarizing and reflecting on the themes related to the research question and the study's context. A comprehensive understanding was reached by repeatedly reading the text and reflecting on the themes generated from the lived experiences of nurses during nursing encounter with the deaf. Since hermeneutic phenomenology rejects the concept of bracketing, my pre-understanding based on prior knowledge of communication issues in healthcare during a nursing encounter played a significant role in interpreting the data at this stage. Engaging with relevant research on communication in healthcare during a nursing encounter further enriched the interpretation of the text and the phenomenon (Morgan, 2021) [28].

The final step involves synthesizing the findings from the previous stages to form a holistic interpretation. The researcher integrates the identified themes and reflects on the broader implications, ensuring that the understanding is both deep and contextually grounded. This step allows for a more profound comprehension of the lived experiences, offering a nuanced interpretation that ties the data back to the research questions.

Trustworthiness of the Study

Ethical Considerations

The study received formal approval from the Humanities and Social Sciences Research Ethics Committee (HSSREC) at the University of Zambia (UNZA), under reference number [2023-Jan-035]. Furthermore, the study adhered to the essential ethical principles throughout its implementation.

Research Findings and Discussion

The research finding and discussion dwell on overlapping theoretical perspectives, including hermeneutic phenomenology by van Manen and Lazarus and folkman theory of coping, to enhance the interpretation of the lived experiences of nurses during a nursing encounter with the deaf. The study draw on Heidegger's concept of "Being and

Time" and van Manen's four reflective thematic areas on lived experiences (Van Manen, 1997) [40], which provide a framework for understanding human experiences in a more comprehensive way. The four existential themes used to interpret the data included lived time (temporality), lived space (spatiality), lived body (corporeality), and lived human relation (relationality) (Van Manen, 1997) [40].

Table 1: Communication barrier

Code	Subthemes
Communication barriers	▪ Lack of sign language knowledge ▪ Lack of Assistance and Support ▪ Diagnostic Challenges ▪ Lack of Privacy and Confidentiality ▪ Challenging to give information Education and communication

***Source*:** Own illustration based on current study

Lack of sign language knowledge among nurses

The findings revealed that seven (7) nurses identified the lack of sign language knowledge as a major challenge in communicating with deaf individuals. Their experiences underscore the significant difficulties this poses, often leading to misunderstandings, misdiagnoses, and inadequate care. These communication barriers frequently left nurses feeling frustrated and helpless. A Sarah described the difficulty of treating a rape victim who was deaf (Corporeality), explaining how challenging it was due to the lack of sign language competence. She shared,

> *"It was very difficult because I am not competent in sign language, so this patient who came to the hospital couldn't talk it was a case of rape. I would write, then she could read, and she could do the sign language, then relatives interpreted for me."*

The patient, unable to speak, could only read the written notes provided. She communicated through sign language (Corporeality), which had to be interpreted by her relatives (Relationality). This highlights the significant communication barriers in such sensitive situations (Spatiality) and underscores the urgent need for healthcare providers such as nurses to be trained in sign language to ensure accurate, respectful, and confidential communication. The reliance on written communication was insufficient, as it did not fully bridge the communication gap. The necessity of involving relatives as interpreters further complicates the scenario, raising concerns about confidentiality, accuracy, and the emotional strain on both the patient and her family. This situation highlights the impact of communication barriers in providing effective care. This finding is consistent with (Negi *et al*., 2017) [31], who found that effective communication is crucial for patient trust, particularly in traumatic situations. The involvement of untrained interpreters can lead to misinterpretations and breaches of confidentiality (Spatiality). Moissac and Bowen (2019) [10] highlight the risks of using untrained interpreters, including family members, noting that they can cause miscommunication, misunderstandings, and breaches of patient confidentiality.

James recounted his frustration in a situation where his inability to understand sign language hindered his ability to provide necessary medication to a deaf patient. He said,

> *"The person really needed some drugs. The person was our client, found me who did not understand the language itself. I really failed to interact because I couldn't get the signs I didn't know what to do really."*

This illustrates the limitations of not knowing sign language in addressing urgent medical needs. The nurses' narratives reveal the physical presence and gestures (Corporeality) involved in their interactions with deaf clients. The inability to use or understand sign language affects the embodied interaction (Corporeality), leading to miscommunication and frustration. This barrier can have serious consequences, particularly in sensitive situations such as during labor and delivery (spatiality). Simon faced difficulties communicating with a deaf couple during labor and delivery. He described,

> *"My situation was that on that material day a couple came in; the wife was pregnant with a term pregnancy and was in labor. So that period when they came, I had challenges with my colleagues to communicate effectively with the couple because both the husband and the wife were unable to talk they were also equally deaf. So they were literally using signs, and now coming to us, it was a challenge because we couldn't communicate using sign language."*

The participant highlighted the difficulty faced by the healthcare team, as none of them were proficient in sign language (Corporeality), making effective communication with the couple a significant challenge (Relationality). In labor and delivery (Temporality), effective communication is critical for ensuring the safety of both the mother and the child. The timing (Temporality) of interactions is crucial in healthcare during a nursing encounter, especially in emergencies or labor and delivery. The delays (Temporality) caused by communication barriers can have serious consequences. This highlights how emergency scenarios can exacerbate communication challenges. In busy areas like the Outpatient Department (OPD), communication barriers can lead to delays and misunderstandings. Lucy shared two challenging experiences. In one case, she struggled to communicate with a patient who only understood sign language, stating,

> *"My experience was quite challenging with a deaf person because I myself am not really conversant with sign language. One was only able to understand in sign language, and I couldn't translate information in sign language, so it was very difficult."*

In another instance, Lucy encountered a deaf patient at a screening room door in out patient department, unable to understand the patient's needs. She eventually sought assistance from a doctor who could communicate in sign language, demonstrating the importance of teamwork. In busy departments such as Outpatient Department (OPD) (Spatiality), the language barrier can lead to significant delays (Temporality) in care and heightened frustration for both patients and the nursing staff working there. The physical environment in healthcare settings (Spatiality) can either facilitate or hinder communication. For instance, in busy areas such as the Outpatient Department (OPD), the lack of a quiet, private space (Spatiality) for communication

exacerbates the challenges faced by nurses and deaf individuals (Corporeality). These experiences emphasize the importance of having a team approach (Relationality) to communication, where nurses can rely on colleagues proficient in sign language. A study by Iezzoni *et al*. (2016) [18] supports this, noting that healthcare teams with diverse language skills can significantly reduce communication barriers. The relationship between nurses and patients is fundamental to effective care (Relationality). Communication barriers hinder the development of trust and rapport, essential components of the nurse-patient relationship (Relationality). The inability to communicate effectively in emergencies, such as obtaining consent for procedures, can lead to critical delays (Temporality) in treatment. However, the inability to communicate effectively can delay (Temporality) the provision of necessary services'. This finding aligns with Barnett *et al*. 2014) [7], who emphasize that difficulties in communication can result in dissatisfaction with the quality of health care.

Lack of assistance and support

The absence of adequate assistance during nursing encounters with deaf patients significantly exacerbates communication barriers, leading to ineffective care and potential adverse outcomes. The lack of interpreters, support staff, or even family members who can facilitate communication often leaves nurses feeling frustrated and helpless. These challenges illustrate the critical need for a mediator or interpreter to ensure that patients receive the care and services they need. Lucy, a nurse, highlighted the necessity of seeking assistance to communicate effectively with deaf patients, stating,

> *"I always look for someone to assist me when I have such an encounter. I just have to find someone who will be able to be our mediator for us to communicate and for me to deliver my services to the client. I need a mediator because I can't leave the client unattended just because I can't communicate with them. Apart from that, I would say it's really challenging. So for me, I would even say that it's difficult to deliver our service to these clients, especially if there is no one to interpret for you, and if they are not able to write. So it means, again, they go back home unsatisfied because they don't get what they really want due to lack of communication."*

The physical and embodied (Corporeality) aspects of communication are critical in nursing encounters with deaf people. The inability to use or understand sign language or other non-verbal cues significantly affects the embodied (Corporeality) interaction between nurses and people (Relationality). This aligns with Van Manen's concept of corporeality, emphasizing the importance of physical presence and gestures (Corporeality) in effective caregiving. The dependence on informal interpreters or family members, rather than professional ones, illustrates the physical challenges and potential frustration involved in overcoming these communication barriers. Orrie & Motsohi (2018) [32] similarly found that the presence of an escort who can sign makes communication easier for healthcare providers, although it does not fully resolve the challenges. This alignment between the studies highlights the crucial role of physical interaction and the difficulties encountered when adequate mediation is lacking. Findings from the study illustrate the time-sensitive nature of healthcare interactions. The nursing care is affected by the delays caused when immediate assistance is unavailable. Delays in finding interpreters can lead to increased patient frustration, anxiety and potentially adverse outcomes. This is consistent with Masuku *et al*. (2021) [26], who highlight that while interpreters are critical, their absence leads to longer consultation times. Orrie and Motsohi (2018) [32] also acknowledge that the presence of interpreters, while helpful, does not completely eliminate the time challenges faced by healthcare providers. Furthermore, due to time constraints, nurses sometimes avoid direct communication and instead rely on intermediaries, such as family members, to communicate with deaf patients (Hemsley *et al*., 2012) [16]. These findings emphasize the need for timely support to manage communication barriers effectively, aligning with Van Manen's existential of temporality. The physical environment where interactions occur significantly impacts the effectiveness of communication. The study reveals that busy environments (Spatiality), such as those in healthcare settings, exacerbate communication challenges. The study illustrates how the lack of a private space and adequate support affects communication. This finding reflects Van Manen's existential of spatiality, emphasizing how the physical space and the presence of interpreters or family members influence the caregiving process. The absence of a conducive environment for communication complicates care delivery, as supported by Appiah *et al*. (2018) [4], who found that effective communication is facilitated by the presence of skilled interpreters, enhancing patient satisfaction and care quality.

Grace a nurse emphasized the importance of having someone who can interpret or translate for the patient, especially when the patient cannot read or write. She shared,

> *"In my case, I have never really failed to find one. I make sure I look for one person. This is where you need to look around for a person who understands the signs. Otherwise, we have never sent back any in my case, I have never sent back any. I always look around for one. Some do come with relatives those that know that this person is having issues with communication, they will come with them."*

However, not all patients have access to an interpreter or supportive relatives, which can lead to significant communication challenges. Lucy a nurse recounted a situation where a patient did not have anyone to assist and was unable to read or write, making it extremely difficult to communicate. Effective communication is fundamental to developing trust and rapport between nurses and deaf people. The nurse's proactive effort to find someone to interpret, despite the challenges, underscores the relational aspect of care (Relationality). The findings highlight the importance of building and maintaining a functional relationship through effective communication. This finding aligns with Appiah *et al*. (2018) [4], who emphasize that skilled interpreters significantly improve patients' overall experience and establish trust between patients and healthcare providers (Relationality). The inability to communicate directly affects the nurse-patient relationship, leading to feelings of dissatisfaction among patients (Relationality). This supports the idea that relational dynamics are crucial for providing quality care and underscores the importance of having

professional interpreters to foster effective relationships (Relationality).

4.2.1.3 Diagnostic challenges

Diagnostic challenges are a significant concern when nurses encounter deaf patients who are also illiterate or have limited literacy skills. The inability to communicate effectively can lead to delayed or inaccurate diagnoses, severely impacting patient outcomes. In these nursing encounters, the challenges are twofold. Firstly, the language barrier hinders effective communication, making it difficult for nurses to understand the patient's symptoms, medical history, and concerns. Secondly, the lack of literacy skills complicates the situation further, as patients may struggle to read and understand written instructions, medication labels, or health-related educational materials.

The importance of effective communication in the diagnostic process, particularly when the condition is not visibly apparent, is crucial. This challenge is echoed in Lucy's experience:

> *"The challenges are there because, especially with those who are not able to read and write, it's very difficult to communicate with them. I mean, if they are not able to communicate, you cannot be able to attend to them effectively. And if what they have come for at the hospital is not visible, you can't see the problem, you can't guess the condition unless it's something that you are able to see."*

The physical presence of the patient and the nurse, and their ability to communicate through bodily gestures and expressions, is crucial in healthcare during a nursing encounter (Corporeality). For deaf patients who cannot read or write, the absence of effective non-verbal communication methods like sign language significantly hampers the diagnostic process. The nurse's reliance on visible symptoms highlights the corporeal aspect of diagnostic challenges. Without the ability to understand the patient's internal bodily experiences (Corporeality) through communication, the nurse is left to interpret only what is visibly apparent, which can lead to inadequate or incorrect diagnoses The timing of interactions in the diagnostic process is critical. The inability to communicate effectively with deaf people can lead to delays (Temporality) in diagnosis and treatment, impacting the overall quality of nursing care. The nurse's frustration reflects the temporal strain caused by communication barriers, as more time is needed (Temporality) to attempt alternative methods of understanding the patient's condition. These delay (Temporality) can exacerbate the patient's health issues and lead to prolonged suffering and anxiety. The findings from various studies in developed countries emphasize the critical need for professional interpreters to ensure accurate diagnoses and appropriate treatments for individuals with hearing impairments. Dimitra *et al*. (2014) [11] underscore the prevalence of wrong diagnoses due to communication barriers. Mulumba *et al*. (2014) [29] Mulumba *et al*. (2014) [29] further illustrate the challenges doctors face in taking medical histories and understanding patient symptoms, leading to incorrect treatments. Further Masuku *et al*. (2021) [26] also emphasized the importance of professional interpreters in healthcare settings. Their study found that the absence of immediate assistance to facilitate communication can cause delays in care and heighten patient anxiety, reflecting the temporal and relational challenges highlighted in Van Manen's existential framework. The inability to communicate effectively with deaf people affects the development of trust and rapport (Relationality) essential for accurate diagnosis. The nurse's statement reflects a relational gap where the lack of mutual understanding and communication prevents the formation of a therapeutic relationship. This relational deficit can lead to feelings of isolation and dissatisfaction among patients, further hindering the diagnostic process as supported by Kwadwo Mprah, who found that healthcare providers often fail to understand patients' explanations of their health conditions, resulting in wrong prescriptions.. The tools and resources available, such as interpreters or communication aids, play a crucial role in mitigating communication barriers. This lack of material support affects the overall mood in the healthcare setting, creating an environment where both nurses and patients feel unsupported and stressed.

Lack of Privacy and Confidentiality

Ensuring privacy and confidentiality poses a significant challenge when communicating with deaf individuals, particularly in sensitive situations. Ideally, healthcare interactions during a nursing encounter should occur in a private and secure environment (Spatiality) to ensure confidentiality. However, the need to involve a third party (Relationality) often transforms these spaces into less private ones (Spatiality). Sarah shared,

> *"It was very difficult explaining through the relative because we needed to talk to the patient in confidence. It was a case of rape, and we didn't want the relative to be there because I couldn't understand the sign language. Then we had to call the relative, and it was a bit difficult because the patient could not express herself."*

Souza *et al*. (2017) [38] reported the need for a family member with trustworthiness of confidentiality or an interpreter to be present during the consultation (Spatiality). Tun *et al*. (2016) [39] revealed that those who go to health centers with the support of an assistant or family member as interpreters report difficulties in maintaining confidentiality. The participant's experience of needing to involve a relative during a rape case underscores the critical need for professional interpreters trained in confidentiality. The lack of privacy and confidentiality can undermine the patient's trust (Relationality) and their willingness to share sensitive information, ultimately affecting the quality of care they receive. The concept of the lived body (Corporeality) is evident as both the nurse and the patient experience physical and emotional strain due to the lack of direct communication. The involvement of a third party (Relationality) can alter the communication dynamic, making the patient feel exposed and vulnerable. This study's findings align with Mweri (2018) [30], who found that using interpreters or family members can interfere with privacy and confidentiality (Relationality). Similarly, Grace recounted an instance where a patient needed medication, but the communication barrier and reliance on a third party for communication compromised confidentiality. James explained,

> *"The person really needed some drugs. The person was our client, found me who did not understand the language itself. So even the clinician themselves also could not*

interact, not until we had to look for one of the people within the area here, one of the clients who knew how to communicate. That's the person who actually helped us. Of course, we were actually breaking the confidentiality there."

Similarly, Tun *et al*. (2016) [39] revealed that individuals who visit health centers with the support of an assistant or family member as interpreters report difficulties in maintaining confidentiality. The necessity to involve someone else physically embodies (Corporeality) the breach of privacy, especially when dealing with sensitive issues such as sexual assault (Relationality). This breach of confidentiality can erode the patient's trust in the nurse and the healthcare system (Relationality).

4.2.1.5. Challenge to give information education and communication

Providing information, education, and communication (IEC) to deaf people presents significant challenges, particularly when visual aids and sign language interpreters are not available (corporeality). These challenges are critical as they impact the quality of care and the ability to obtain informed consent. The corporeality of giving communication with deaf people is vividly illustrated from this study by the necessity of involving family members to explain medical procedures and obtain consent. This scenario illustrates the embodied (corporeality) nature of communication barriers, where the physical presence of an interpreter or family member (Corporeality) is essential to bridge the gap. However, it also highlights the strain on patient autonomy and the ethical implications of involving third parties in sensitive healthcare decisions. Emily shared,

"The patient came in as an outpatient and had surgery scheduled for the following day. When we were communicating, he needed to sign the consent form for the procedure. We realized he was not understanding what we were saying about signing the form. It became difficult to explain the procedure until we had to involve the brother to come and help."

The healthcare setting (spatiality) significantly influences the effectiveness of IEC for deaf individuals. Providing IEC to deaf patients can also be challenging when visual aids and sign language interpreters are not available. Lucy noted the difficulty of delivering IEC without adequate resources, stating,

"It was difficult to give information, not even information education and communication (IEC); you can't teach it. We don't even have visual aids on IEC to give information."

The absence of visual aids and tailored communication tools not only hampers the ability to convey critical information but also affects the overall quality of patient care. This gap in resources leads to potential misunderstandings and compromises the patient's ability to make informed decisions about their health. Moreover, it places additional strain on healthcare providers, who must navigate these barriers without the proper tools, further complicating the interaction and potentially delaying necessary treatments. Communication with deaf individuals is crucial, as effective communication often requires more time (Temporality). A Participant emphasized the need for patience and slowing down the pace of communication. Written communication with deaf individuals can be time-consuming (Temporality) and may impact the efficiency of healthcare providers' workflow.Lucy stated,

"It's really challenging; it needs time. You can't communicate as fast as you can, so it really needs time. You need to be patient enough for them to write and finish whatever you are asking them before moving to the next question."

The inability to effectively communicate with deaf patients can hinder healthcare providers' ability to deliver services. This means that while written communication can facilitate understanding, it can also slow down the process, leading to potential delays and inefficiencies in patient care Temporality). Using written communication with deaf patients can also impact the efficiency of healthcare providers' workflows. Simon described the time-consuming nature of written communication, noting,

"When exchanging information using written communication, it's challenging because for you to have a normal conversation, it will take a bit longer. You might have other patients to attend to, which is also a bit disadvantageous in terms of time because you will take longer than necessary on one patient as you are trying to communicate back and forth."

The need to allocate more time for each patient can be disadvantageous, particularly in busy healthcare settings (spatiality), and stresses the importance of finding more efficient communication strategies to ensure all patients receive timely (Temporality) and effective care. They feel satisfied when nurses listen patiently and seek clarification by asking additional questions to ensure understanding, even if speech is poorly articulated or pronounced.

Conclusion

The study has demonstrated nurses frequently encounter communication barriers when interacting with deaf individuals. These challenges often lead to frustration, stress, and a sense of inadequacy. Nurses rely heavily on written communication, common gestures, and the use of visual aids to convey essential information. However, the effectiveness of these methods is often limited by the literacy levels of patients and the availability of appropriate resources, such as sign language interpreters or visual aids. Despite these challenges, nurses strive to provide patient-centered care, adapting their communication strategies to meet the individual needs of their patients. Despite these challenges, the study concluded that nurses were hopeful that improvements in institutional support, such as providing interpreters and sign language training, would greatly enhance the quality of communication and care. Based on the findings, it can be concluded that communication in the nursing encounter between nurses and deaf individuals can be extremely challenging and stressful for both parties. However, with appropriate training and institutional reforms, these challenges can be mitigated, leading to more effective healthcare outcomes and improved nurse-patient relationships.

Recommendations

In view of the findings and conclusion above, the following recommendations were made:

1. Nurses should be trained in sign language to enhance communication with deaf patients.
2. Hospital management should provide technology in healthcare facilities to support information, education, and communication (IEC). This includes visual aids like pictures, diagrams, and videos to explain medical procedures and treatments.
3. The Hospital management should organize workshops and training sessions for nurses to learn basic sign language, promoting understanding and effective communication
4. Policymakers should develop policies that incorporate sign language as a vital component of healthcare communication. These policies should include sign language in healthcare standards and guidelines and ensure sign language services are available at every level of care.

Research implications

1. To consider doing a national quantitative study to bring out a contextual cultural picture which can inform policy
2. Investigate the effectiveness of sign language training programs for nurses and their impact on communication quality and patient outcomes for deaf individuals.

Recommendations

1. In view of the findings and conclusion, the following recommendations were made:
2. Nurses should be trained in sign language to enhance communication with deaf patients. Health facility management should also encourage self-motivation among health care staff members to learn sign language using mobile apps for continuous professional development.
3. Hospital management should provide technology in healthcare facilities to support information, education, and communication (IEC). This includes visual aids like pictures, diagrams, and videos to explain medical procedures and treatments.
4. Hospital management can adopt or adapt the communication framework as a standard communication protocol in healthcare settings. This could serve as a model for improving interactions between healthcare providers and deaf patients.

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Author Contributions

The three authors contributed equally conducting interviews, reviewed analyses, and co-authored the paper.

Conflicts of Interest

The authors declare no conflict of interest.

References

1. Adu P. A step-by-step guide to qualitative data coding. Routledge; c2019.
2. Aiken LH, Sloane D, Bruyneel L, Heede KVD. Nurse staffing and education and hospital mortality in nine European countries: a retrospective observational study. The Lancet. 2014;383(9931):1824–1830. https://doi.org/10.1016/S0140-6736(13)62631-8.
3. Andrews MM, Boyle JS. The Andrews/Boyle transcultural interprofessional practice (TIP) model. Journal of Transcultural Nursing. 2019;30(4):323–330.
4. Appiah PK, Fenu GA, Asalu GA, Dzata WM, Bonchel DA, Abdul-Rahman TI, *et al*. Communication experiences of speech and hearing impaired clients in accessing healthcare in Hohoe Municipality of Volta Region, Ghana. European Scientific Journal (ESJ). 2018;14(12):209. https://doi.org/10.19044/esj.2018.v14n12p209.
5. Australian Commission on Safety and Quality in Health Care (NSQHS Standards). Governance for safety and quality in health service organisations: safety and quality improvement guide. Sydney: ACSQHC; c2012. (Issue October). http://www.safetyandquality.gov.au/wp-content/uploads/2012/10/Standard1_Oct_2012_WEB1.pdf.
6. Australian Commission on Safety and Quality in Healthcare (ACSQHC). Framework for Australian clinical quality registries. Sydney: ACSQHC; c2014.
7. Barnett DD, Koul R, Coppola NM. Satisfaction with health care among people with hearing impairment: a survey of Medicare beneficiaries. Disability and Rehabilitation. 2014;36(1):39–48. https://doi.org/10.3109/09638288.2013.777803.
8. Cawthon SW, Fink BW, Johnson P. Trauma and the use of formal and informal resources in the deaf population: perspectives from mental health service providers. Journal of the American Deafness & Rehabilitation Association. 2008;51(3):25–43.
9. Creswell JW. Qualitative inquiry and research design: choosing among five approaches. 3rd ed. Thousand Oaks, CA: Sage Publications; c2013.
10. De Moissac D, Bowen S. Impact of language barriers on quality of care and patient safety for official language minority Francophones in Canada. Journal of Patient Experience. 2019;6(1):24–32. https://doi.org/10.1177/2374373518769008.
11. Dimitra M, Christina A, Evangelos F. Deaf people accessibility in health services. Health Sciences Research; 2014:1(4). http://www.aascit.org/journal/hsr.
12. Eatough V, Smith JA. Interpretative phenomenological analysis. In: Willig C, Stainton-Rogers W, editors. Handbook of qualitative psychology. Sage Publications; c2017.
13. Francisqueti Marquete V, Ramos Costa MA, Ferraz Teston E. Communication with hearing impaired people from the perspective of health professionals. Revista Baiana de Enfermagem; 2018:32.
14. Geanellos R. Exploring Ricoeur's hermeneutic theory of interpretation as a method of analysing research texts. Nursing Inquiry. 2000;7(2):112–119.
15. Gračanin A. The importance of the nurse as part of a multidisciplinary team in care of children with disabilities. Quality of Life (Banja Luka)—APEIRON. 2020;18(1–2):47–57. https://doi.org/10.7251/QOL2001047G.
16. Hemsley B, Balandin S, Worrall L. Nursing the patient with complex communication needs: time as a barrier and a facilitator to successful communication in hospital.

Journal of Advanced Nursing. 2012;68(1):116–126. https://doi.org/10.1111/j.1365-2648.2011.05722.x.
17. Husserl E. Phenomenological psychology: lectures, summer semester, 1925 (Scanlon J, Trans.). Boston: Martinus Nijhoff; c1977. (Original work published in 1925).
18. Iezzoni LI, Day BLO, Killeen M, Harker H. Communicating about health care: observations from persons who are deaf or hard of hearing. Health Affairs; 2016:23.
19. Karlsson V, Bergbom I, Forsberg A. The lived experiences of adult intensive care patients who were conscious during mechanical ventilation: a phenomenological-hermeneutic study. Intensive and Critical Care Nursing. 2012;28(1):6–15.
20. Mprah WK. Perceptions about barriers to sexual and reproductive health information and services among deaf people in Ghana. Asia Pacific Disability Rehabilitation Journal. 2013;24(3):21–36. https://doi.org/10.5463/DCID.v24i3.234.
21. Laverty SM. Hermeneutic phenomenology and phenomenology: a comparison of historical and methodological considerations. International Journal of Qualitative Methods; 2003:2(3). https://doi.org/10.1177/160940690300200303.
22. Lazarus RS, Folkman S. Stress, appraisal, and coping. New York: Springer Publishing Company; c1984.
23. Leftridge VC. Nurses leading in bridging the culture gap: communicating with the deaf community [Doctor of Nursing Practice dissertation]. Abilene, TX: Digital Commons @ ACU; c2022. (Electronic Theses and Dissertations; 484).
24. Levesque JF, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. International Journal for Equity in Health. 2013;12(1):18. https://doi.org/10.1186/1475-9276-12-18.
25. Lindseth A, Norberg A. A phenomenological hermeneutical method for researching lived experience. Scandinavian Journal of Caring Sciences. 2004;18(2):145–153. https://doi.org/10.1111/j.1471-6712.2004.00258.x.
26. Masuku KP, Moroe N, van der Merwe D. 'The world is not only for hearing people – It's for all people': the experiences of women who are deaf or hard of hearing in accessing healthcare services in Johannesburg, South Africa. African Journal of Disability. 2021;10:1–8. https://doi.org/10.4102/AJOD.V10I0.800.
27. Moodley J, Ross E. Inequities in health outcomes and access to health care in South Africa: a comparison between persons with and without disabilities. Disability & Society. 2015;30(4):630–644. https://doi.org/10.1080/09687599.2015.1034846.
28. Morgan DA. Analysing complexity: developing a modified phenomenological hermeneutical method of data analysis for multiple contexts. International Journal of Social Research Methodology. 2021;24(6):655–667. https://doi.org/10.1080/13645579.2020.1847996.
29. Mulumba M, Nantaba J, Brolan CE, Ruano AL, Brooker K, Hammonds R. Perceptions and experiences of access to public healthcare by people with disabilities and older people in Uganda. International Journal for Equity in Health. 2014;13:1–9.
30. Mweri JG. Privacy and confidentiality in health care access for people who are deaf: the Kenyan case. Health Policy. 2018;November:1–5.
31. Negi S, Kaur H, Singh G, Pugazhendi S. Quality of nurse-patient therapeutic communication and overall patient satisfaction during their hospitalization stay. International Journal of Medical Science and Public Health. 2017;6(4):1. https://doi.org/10.5455/ijmsph.2017.0211522112016.
32. Orrie S, Motsohi T. Challenges experienced by healthcare workers in managing patients with hearing impairment at a primary health care setting: a descriptive case study. South African Family Practice. 2018;60(6):207–211. https://doi.org/10.1080/20786190.2018.1507566.
33. Ricoeur P. Ideology and utopia as cultural imagination. Philosophical Exchange. 1976;7(1):17–28. http://digitalcommons.brockport.edu/phil_ex/vol7/iss1/5.
34. Ricoeur P. Interpretation theory: discourse and the surplus of meaning. Fort Worth, TX: Texas Christian University Press; c1976.
35. Samantha. The deaf population in Zambia. ICphS2019; c2022. https://www.icphs2019.org/the-deaf-population-in-zambia.
36. Schwarz JL, Witte R, Sellers SL, Luzadis RA, Weiner JL, Domingo-Snyder E, *et al*. Development and psychometric assessment of the healthcare provider cultural competence instrument. Inquiry: The Journal of Health Care Organization, Provision, and Financing. 2015;52:0046958015583696. https://doi.org/10.1177/0046958015583696.
37. Simui F. Lived experiences of students with visual impairments at Sim University in Zambia: a hermeneutic phenomenological approach [dissertation]; c2018.
38. Souza MFNS de, Araújo AMB, Sandes LFF, Freitas DA, Soares WD, Vianna RS de M, *et al*. Principais dificuldades e obstáculos enfrentados pela comunidade surda no acesso à saúde: uma revisão integrativa de literatura. Revista CEFAC. 2017;19(3):395–405. https://doi.org/10.1590/1982-0216201719317116.
39. Tun W, Okal J, Schenk K, Esantsi S, Mutale F, Kyeremaa RK, *et al*. Limited accessibility to HIV services for persons with disabilities living with HIV in Ghana, Uganda, and Zambia. Journal of the International AIDS Society. 2016;19:20829. https://doi.org/10.7448/IAS.19.5.20829.
40. Van Manen M. Researching lived experience: human science for an action sensitive pedagogy. 2nd ed. New York: Routledge; c1997.
41. World Health Organization. Addressing the rising prevalence of hearing loss. Geneva: World Health Organization; c2018. http://www.who.int/pbd/deafness/estimates/en/.