

Reflecting on Communication Practices for Health Literacy among People with Hearing Impairment in Tanzania amid Covid-19 Pandemic

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ABSTRACT

Background: Lack of proficiency in using languages (except sign languages) among people with hearing impairment poses difficulties for them to comprehend health-related information, thus, having low health literacy. To bridge this gap, healthcare providers adopt various communication practices to reach people with hearing impairment (HI), some of which prove success while others prove a failure. Consequently, reflection on health literacy communications becomes paramount for the sustainability of health education for people with HI. **Objective:** The present study reflects on communication practices during Covid-19 pandemic control in Tanzania contexts concerning people with hearing impairment. **Methods:** The study adopted a qualitative research approach in which the data were collected through interviews from five (5) people with HI obtained through a snowball sampling technique, and three (3) healthcare providers who were purposively sampled. **Results:** Findings showed that adopted communication practices (writing on papers, lip-reading, and using family members as interpreters) were perceived as less effective by people with hearing impairment. Instead, people with HI preferred communication from other sources that used sign language. **Conclusion:** Therefore, there are calls for healthcare providers' pre-service and in-service training programs to impart skills for communicating properly with HI to all healthcare providers.

Keywords: Communication Practices, Covid-19, Health Literacy, Hearing Impairment.

INTRODUCTION

Health literacy is vital for individual protection against health-related risks. The more access and use of health information by the community, the more people can protect themselves from health risks (McQueen et al., 2007). However, people with hearing impairment exhibit low Health Literacy (HL) because of their lack of proficiency in using conventional communication such as spoken and written communication (Pollard Jr et al., 2009; Middleton et al., 2010; McKee et al., 2015; Chiluba et al., 2019), which is related to their low literacy level (Ladd, 2003; McKee, 2012; Glickman and Hall, 2018; Leigh, Andrews and Harris, 2018). Therefore, the adoption of alternative communication practices such as the use of sign language, use of sign interpreters, and emphasis on communication reliance on friends and family members, seemed to cater to some communication deficits with people with HI despite their weaknesses such as contradicting deaf culture and medical privacy (Harmer, 1999; Cardoso,

Rodrigues and Bachion, 2006; Middleton, Turner et al., 2010; Mathews et al., 2011; Alexander et al., 2012; Shuler et al., 2013). However, the emergency of Covid-19 worsened the communications between healthcare providers and people with HI, which called for the rethinking of existing alternative communication practices. This is because Covid-19's control measures interfere with alternative communication practices for people with HI. For instance, the use of face masks prevents people with HI to access information through lip-reading. Social distancing limits access to interpreters and access to lip-reading communication. Consequently, a new communication framework was inevitable. In response, various scholars and health organizations proposed several communication frameworks with similar communication aspects, such as digital-based communication, using transparent masks, using sign language, and multimodal communication. Furthermore, these frameworks emphasized the use of a transparent face mask to facilitate lip-reading when necessary, and the use of

digital-based communication (McKee, Moran and Zazove, 2020; West, Franck and Welling, 2020). However, it is unknown whether all healthcare centers, including in Tanzania, could afford such requirements. To meet these requires preparations in terms of infrastructure and human resources. As a result, most of the world's countries fail to accommodate people with HI. Thus, reflecting on these practices becomes a central focus of this study. Specifically, the study intends to identify and examine adopted communication practices and enhance HL among people with HI during Covid-19 in the Tanzania context where infrastructure to support people with HL is still low.

METHODS

Research Approach and Design

This study uses a qualitative research approach. Qualitative research involves investigation related to people's social practices in their natural setting (Dawson, 2002; Hennink, Hutter, and Bailey, 2011; Creswell and Creswell, 2018). The study focused only on the effectiveness of health-related communication to people with HI in Tanzania contexts to gain in depth-understanding of the phenomena, thus a case study research design. A case study research design focuses on specific individual, events, or topic using few participants to gain in-depth understanding of a natural phenomenon (Dawson, 2002; Hennink, Hutter, and Bailey, 2011; Creswell and Creswell, 2018). This study involved five people with HI from different parts of Tanzania who were obtained through the snowballing sampling technique. The decision to use only five participants was determined by the data saturation point. The researcher collected data until there were no new information emerging from participants. It also involved three health workers (doctors) from various public hospitals located in Dar es Salaam who were obtained through a purposive sampling technique.

Data collection was done by using in-depth interviews. Because of the communication challenge between the research and people with HI, the interviews were conducted through WhatsApp chat. Interview guides were sent to the respondents. After receiving responses, the researcher continued to

probe until the respondents hit the point. The interviews with doctors were conducted orally. Data were recorded and stored in the computer for transcription and were analyzed thematically. The researcher adhered to ethical review by seeking clearance from responsible bodies and consent from the participants.

RESULTS AND DISCUSSION

The presentation and discussion of findings are categorized into two subsections based on the specific objectives, namely adopted communication practices, and effectiveness of the adopted communication practices.

Adopted Communication Practices

Data indicate that healthcare providers adopted lip-reading, written communication, and using relatives as interpreters to reach information related to HL for people with HI during Covid-19 in the Tanzanian context. The majority of people with HI who participated in this study stated to force doctors to remove masks so that they can lip-read or write on the paper, while some stated to be accompanied by their relatives as interpreters. This is supported by data from doctors who admitted that there were no specific communication plans that accommodated people with HI rather than asking them to write, lip-read, and come with relatives. For instance, one of participants with HI stated

"I told them that I was deaf and I asked them to speak to me without face masks that I can lip-read them or write on the paper. Eventually they opted to write on paper to accommodate me." (A, person with HI, female).

Another participant stated,

"The method used was through lip-reading where I used to force the doctor to remove a mask so that I could read the mouth as they do not know the Sign Language." (M, person with HI, female).

Those statements were supported by a participant from the healthcare providing group that stated,

"We just use written communication or gesture if the person with HI has no one to interpret for him or her." (A, health worker, male).

Therefore, it is clear that communication applied to improve HL among people with HI are lip-reading, written communication, and interpretation by the accompanying relative.

Lack of usage of sign language to people with HI perpetuates the view that they are medically disadvantaged. According to Ladd (2003), most the service providers, such as educational institutions, believe that people with HI are medically disadvantaged. They force people with HI to adopt communication strategies of hearing people such as communicating through spoken language by lip-reading. This is against the communication culture of people with HI who prefer sign language (Harmer, 1999; Ladd, 2003; Leigh et al., 2020). As Harmer (199, p.90) emphasizes, Doctors also tend to view disability as a deviation from the mainstream norm that should be corrected if possible. These beliefs and preconceptions affect both provider and patient expectations, interactions, and decisions. Additional problems occur when the physician fails to recognize or appreciate the different frames used by hearing and deaf individuals when viewing many situations, including health care delivery.

Therefore, it can be argued that adopted communication practices to increase HL among people with HI during Covid-19 are related to healthcare providers' lack of awareness of the communication culture of people with HI.

This finding corresponds to several studies (Chiluba et al., 2019) in Kapiri Mposhi, Zambia, (Middleton, Niruban et al., 2010) in the UK, and (McKee et al., 2015) in the US that reported that information to improve HL for people with HI was available in oral and written communication. Those similarities could be influenced by the medical model approach to people with HI as alluded to by Ladd (2003) that the model requires that such people should be treated according to the mainstream norm rather than accommodating their differences. Therefore, it is necessary to change the attitude among health workers toward people with HI.

Effectiveness of the Adopted Communication Practices

Data suggest that the communication practices adopted during

Covid-19 were not effective to enhance HL literacy among people with HI as the majority perceived such practices as problematic, challenging, and difficult. The employed communication practices forced many people with HI to search for HL-related information from social networks groups created by deaf as they believed information from such platforms was friendlier for them.

During the interview a participant with HI stated,

"I had to search for additional information on the internet and deaf platforms like WhatsApp and Facebook where health education was provided by various people. Tanzania Association of the Deaf has posted friendly information using sign language and also distributed CDs and publications that provide that education." (A, person with HI, male)

Such dissatisfaction with HL information offered by various healthcare centers was also clear from another participant with HI, who stated,

"Serious catastrophe like this was not supposed to be taken as a joke; 85% of people with HI do not know how to write and read, they depend only on sign language communication." (D, person with HI, male).

It shows that the failure to communicate information related to HL in sign language made people with HI unable to understand the message.

The Tanzania Deaf Association used friendly ways such as Drama via CDs and social networks, but the information was released late. This implies that people with HI will still have low HL literacy despite the effort of the Tanzania Deaf Association. Also, the fact that a lot of information available on digital media means most people with HI may not have access to smartphones or TVs. Moreover, the WHO communication practice framework requires government, health centers, and health workers to ensure that all health-related information is available in sign language to accommodate people with HI (WHO, 2020). The governments, health centers, and health workers should be the trusted sources of HL-related information during Covid-19 rather than private entities such as the Tanzania Deaf Association.

Therefore, if these reliable sources of HL information can't communicate effectively with people with HI, it will cause low HL among people with HI.

This finding is similar to those from McKee et al. (2019) in the US, Middleton et al. (2010) in the UK, and Chiluba et al. (2019). These scholars noted that poor communication practices in health service providing centers lead to low HL among people with HI. This correspondence can be attributed to poor training among health workers on the communication culture of people with HI. According to Mathews et al. (2011), the training of prospective healthcare workers raises their awareness to communicate properly with people with HI. Therefore, prospective health workers should be trained to communicate with people with HI.

As people with HI found the information provided by the Tanzania Deaf Association interesting, HL communication should fit their needs. Pollard Jr et al. (2009) revealed that people with HI in the US expressed positive experiences toward HL-related information presented in sign language and dialogic mode. They noted that the use of written text and interpreters is the major concern of people with HI in education contexts. It shows how cultural disparity in communication raises a significant challenge. Perhaps, this is what makes the proposed framework for health-related communication practices during Covid-19 emphasizes the use of sign language. Therefore, it can be argued that the use of sign language could promote HL among people with HI.

In contrast, the use of assistants from families, written communication, and lip-reading is not attractive to people with HI for various reasons. The use of anyone who is not a medical professional may lead to misleading information (Shuler et al., 2013; Chiluba et al., 2019). Also, lip-reading seems not to be effective for all people as Gregory reports that people with HI who can lip-read effectively only decode 30% of the message communicated (Shuler et al., 2013). Likewise, written communication is challenging for people with HI because most of them have low reading literacy (McKay and Weinstein-Shr, 1993; Harmer, 1999; McKee and Paasche-Orlow,

2012; McKee et al., 2019). Therefore, there is a need for the healthcare professionals to understand the implications of all communication practices adopted for enhancing HL among people with HI.

CONCLUSION

The main communication practices adopted during the pandemic are using family members as interpreters, writing on paper, and lip-reading. These communication practices were not effective because it raises challenges for people with HI to understand HL-related information. As a result, people with HI preferred information provided by the Tanzania Deaf Association because they use sign language.

It is recommended that health professional training and development should incorporate communication skills with people with HI in their curriculum. Moreover, healthcare providers should work collaboratively with the Tanzania Deaf Association to address urgent needs of communication to improve HL communication.

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