ASSESSMENT OF ACCESSIBILITY OF SIGN LANGUAGE SERVICES TO THE HEARING IMPAIRED COMMUNITY IN TANZANIA: THE CASE OF INDEPENDENT TELEVISION AND TANZANIA BROADCASTING CORPORATION

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A DISSERTATION SUBMITTRD IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF ARTS IN MASS COMMUNICATION (MAMC)

DEPARTMENT OF MEDIA AND LIBRARY STUDIES

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CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by The Open University of Tanzania a dissertation entitled, *"Accessibility of Sign Language Services to the Hearing Impaired Community in Television : The Case of Independent Television (ITV) and Tanzania Broadcasting Corporation (TBC 1)Accessibility of Sign Language Services to the Hearing Impaired Community: The case of Independent Television (ITV) and Tanzania Broadcasting Corporation (TBC 1)"* in partial fulfillment of the requirements for the award of Degree of Master of Arts in Mass Communication (MAMC).

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Date

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DECLARATION

I, Janet Phillip, declare that, the work presented in this dissertation is original. It has never been presented to any other University or Institution. Where other people's works have been used, references have been provided. It is in this regard that I declare this work as originally mine. It is hereby presented in partial fulfillment of the requirement for the Degree of Masters of Arts in Mass Communication (MAMC).

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Signature

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Date

DEDICATION

I dedicate this work to the Almighty God, whose guidance and wisdom have been my constant source of strength. May this work glorify His name and contribute to the betterment of humanity.

ACKNOWLEDGEMENT

First and foremost, I express my profound gratitude to the Almighty God for His unwavering guidance, blessings, and strength throughout my academic journey.

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ABSTRACT

This study assessed accessibility of sign language services to the hearing impaired community in television media in Tanzania with reference to Independent Television (ITV) and Tanzania Broadcasting Corporation (TBC1). The study was guided by general objective and specific objectives used a case study research design with application of both qualitative and quantitative methods. Stratified and purposive sampling techniques were employed to 101 hearing impaired respondents and the method used to collect data was questionnaire. In- depth interviews was another collection method used to collect data to 4 sign language interpreters' respondents and 3 respondents from the management crew. The findings revealed that, the concentration of sign language services in one program at 62(61.38%) compared to the next highest at 9(8.9%) which highlighted a lack of variety in accessible programming. About coverage of essential information, the majority 46(45.54%) respondents felt that sign language services rarely covered all essential information in programs, with 18(17.82%) indicating coverage was adequate only sometimes. Only 16% felt information was always adequately covered suggesting substantial gaps in providing full accessibility. The findings showed that satisfaction levels of the interpretation service varied, with 7.92% reporting they were very satisfied, 28.71% satisfied, and 16.83% feeling neutral. However, dissatisfaction was notable, with 25.74% dissatisfied and 9.98% very dissatisfied. The study revealed that, with 72(71.29%) of respondents reporting technological challenges, while 12(13.86%) did not experience such challenges which indicates that when the technology is functional and appropriately utilized, it is possible to deliver satisfactory services. The study recommended that, there is a need for a more widespread implementation of sign language services across all channels and programs to increase accessibility. Also focus should be on enhancing the quality and comprehensiveness of the information provided through sign language to better meet the needs of the hearing-impaired community.

Keywords: *Sign Language, sign language services*, *hearing impairment*, *Sign*

Language Interpretation, Deaf, Hearing   Impaired, Television, Media.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURE

LIST OF ABBREVIATIONS

ADA   Americans with Disabilities Act

UNCRPD   United Nations Convention on the Rights of Persons with

                            Disabilities

TV   Television

S.L.I   Sign Language Interpreter(s)/ Interpretation

ITV   Independent Television

TBC 1   Tanzania Broadcasting Corporation

DHH   Deaf and Hard of Hearing

TAD   Tanzania Association of the Deaf

BAKITA   Baraza la Kiswahili Tanzania

CHAVITA   Chama cha Viziwi Tanzania

TCRA   Tanzania Communication Regulation Authority

PEPMIS   Public Employees Performance Management Information Systems

CHAPTER ONE

INTRODUCTION

1.1 Chapter Overview

The accessibility of television media for the hearing impaired remains a significant challenge, despite the growing recognition of the importance of inclusive communication. This chapter presents the background to the study topic, statement of the problem, the purpose of the study, objectives of the study, and research questions related to the objectives of the study, significance of the study and scope of the study as well as organization of the study.

1.2 Background of the Study

This study explored ways to enhance national and universal access to services for the hearing impaired. Sign language, a visual communication tool, plays a critical role in enabling effective communication in various settings, such as medical appointments, educational institutions, and workplaces. Despite its importance, the availability of qualified sign language interpreters is limited, leaving the hearing impaired at a disadvantage. This lack of access often leads to communication barriers that isolate them from society, resulting in emotional and psychological challenges that further hinder their ability to fully integrate and succeed (Liang, Li, & Chai, 2023).

To combat this isolation, several countries have made strides to incorporate sign language in public communications. For instance, integrating sign language interpreters into news broadcasts and other significant public information channels has proven effective. A notable example is the Ugandan Sign Language Project,

which used sign language to provide accurate information to the deaf community, especially to combat misinformation during critical times (Edremit, 2024).

However, a 2024 review of Deaf television viewers in the UK highlighted a scarcity of research on their viewing preferences and experiences. Existing studies are either outdated or based on small sample sizes, and representation of Deaf individuals on screen remains minimal (Sheffield University, 2024). Much of the research has concentrated on improving content comprehension for the Deaf by enhancing the visual aspects of television, particularly in educational and entertainment contexts, through methods such as captioning and sign language (Jensema, 1998; Linebarger, 2001; Lewis & Jackson, 2001; Downey, 2007; Egelston-Dodd & Ting, 2007; Burnham et al., 2008; Cambra et al., 2009; Golos, 2010; Kushalnagar, 2015; Evmenova et al., 2015; Jones et al., 2015).

In television news broadcasts, sign language interpretation is often provided through a small video display in the corner of the screen, where an interpreter communicates the news in sign language (Kurniawan, 2021). Despite this, a lack of sensitivity towards the informational needs of the hearing impaired persists, limiting their access to important content. Many hearing-impaired individuals employ alternative strategies, such as lip-reading, analyzing visual cues, and reading captions to access news content (Yunitasari, 2019).

A 2023 study further emphasizes the frustration Deaf individuals experience in accessing real-time information, especially during emergencies. The absence of sign

language interpreters on major networks during such broadcasts exacerbates this accessibility gap (Microsoft Research, 2023). In Ghana, 73% of Deaf individuals reported switching to television brands with embedded captions in their adverts, showing the importance of accessible media (Quinn, 1995, as cited in Haller & Ralph, 1996). In recent years, countries like the United States have made progress in making television more accessible by including sign language interpretation. For example, PBS KIDS added on-screen ASL interpreters to popular children's shows (PBS, 2024), and HBO's The Last of Us featured ASL-interpreted episodes with deaf actors (Bleeding Cool Staff, 2025). These initiatives reflect growing efforts to promote inclusivity in both children's and adult television programming.

In many low- and middle-income countries like Tanzania, sign language services on television are still limited and inconsistent. Research shows that current provisions do not adequately serve the hearing-impaired community (Lugongo, 2018).

Challenges such as weak enforcement, a shortage of interpreters, and low broadcaster awareness hinder progress. While institutions like TCRA, CHRAGG, and CHAVITA have roles in promoting accessibility, their efforts need to be better evaluated and strengthened. Gernsbacher (2015) pointed out that captioning not only aids Deaf and hard-of-hearing individuals but also benefits non-native language learners and children developing reading skills.

Sign language, as documented by Dewi and Rodly (2022) and Kurniawan (2017), is an essential non-verbal communication method for the Deaf and speech-impaired. It

utilizes standardized body movements and gestures, frequently employed in television broadcasts to convey meaning. Sign language interpreters play a pivotal role in this communication process, allowing the hearing impaired to access crucial information (Rastgoo et al., 2021). The inclusion of interpreters in media, particularly in news programs, is vital for ensuring Deaf individuals receive accurate and timely information (El-Din & El-Ghany, 2020).

For instance, Indonesia's Ministry of Communication and Informatics has mandated the inclusion of sign language interpreters in all television news broadcasts to promote accessibility for the Deaf community. This policy applies not only to news but also to religious, political, and other significant public programming (Press Release No. 232/HM/KOMINFO/09/2018). These efforts illustrate a growing global recognition of the importance of sign language in ensuring media accessibility.

Guidelines from the National Association of the Deaf (2016) further emphasize the need for comprehensive disaster communication strategies that include Sign Language interpreters. Properly trained interpreters and the integration of clear graphic illustrations can greatly improve Deaf individuals' ability to understand and respond to crucial information during emergencies.

1.3 Statement of the Problem

Despite legal frameworks such as; the Americans with Disabilities Act (ADA) and International efforts to ensure equal access to information, there are ongoing challenges in the provision of sign language services in television media for the

hearing impaired. Research by Machado and de Oliveira (2020) indicates that while some broadcasters have made efforts to include sign language interpretation during live events, these services are often inconsistent, with interpreters either absent or not clearly visible on the screen. Furthermore, Baker and Lee (2019) argue that the reliance on subtitles as a primary method of accessibility overlooks the unique needs of those who rely on sign language as their first language, which can result in significant information loss. This is particularly concerning during emergencies, where timely and accurate information is crucial. The inconsistent implementation of these services, as noted by these authors, highlights a broader systematic issue that requires urgent attention to ensure that the hearing impaired community has equal access to television content (Machado & de Oliveira, 2020; Baker &Lee, 2019).

The accessibility of television media for the hearing impaired remains a significant challenge, despite the growing recognition of the importance of inclusive communication. For example, during the COVID-19 pandemic, critical health updates were often broadcast without adequate sign language interpretation, leaving many hearing impaired individuals without access to vital information. According to Smith (2022), while some networks provided sign language services, these were frequently limited to certain regions or specific broadcasts, leading to inconsistencies in access. Furthermore, Jones and Lee (2021) found that even when sign language interpretation In Tanzania, television remains one of the most accessible forms of mass communication. However, for the Deaf and hearing-impaired community, access to television content is significantly limited due to the lack of comprehensive sign language services. Despite national policies advocating for inclusivity and equal

access to information, the availability of sign language interpreters on television is inadequate (Mgonda, 2018). is available, it is often relegated to small, hard to see windows on the screen, diminishing its effectiveness. This study seeks to explore these issues further by examining the prevalence and quality of sign language services in television media, identifying key barriers, and proposing actionable solutions to enhance accessibility for the hearing impaired community.

1.4 Objectives of the Study

The study was guided by the following general and specific objectives.

1.4.1 General Objective

The general objective of this study was to assess accessibility of sign language services to the hearing impaired community in television media in Tanzania.

1.4.2 Specific objectives

The study was guided by the following four specific objectives

i) To assess availability of sign language services to the hearing impaired community in television media;

ii) To evaluate adequacy of the sign language services to the hearing impaired community in television media;

iii) To assess the extent to which the sign language interpreters on TV media meet the demands of the sign hearing impaired community; and

iv). To evaluate challenges that sign language services face when attending to the hearing impaired in Television media.

1.5 Research Questions

The study is guided by the following four research questions:

i)   What is the status of the availability of sign language services to the hearing
        impaired community in television media;

ii).   What is the adequacy of the sign language services to the hearing impaired
        community in television media;

iii).   What is the extent to which the sign language interpreters on TV media meet
        the demands of the sign hearing impaired community; and

iv).   What challenges that sign language services face when attending to the hearing
        impaired community in television media?

1.6 Significance of the study

The significance of this study lies in its potential to uncover and address the critical challenges faced by the deaf and hard of hearing community in accessing information through sign language in media on Tanzanian media channels, particularly ITV and TBC1. In Tanzania, media is a vital source of information, education, and cultural expression. Ensuring that deaf and hard of hearing can access this information via sign language is crucial for promoting inclusivity and equality in Tanzanian society. Therefore the findings of this study will enable enhancement of National Media Accessibility Standards in ensuring that media outlets like ITV and TBC1 can better serve the deaf and hard of hearing community. The findings also can be useful in advancement of technology that can improve the delivery of sign language interpretation and other accessibility features in media broadcasts.

1.7 Research Scope

This study was conducted in Dar es Salaam city, particularly at Mwenge and Mikocheni on two media centers which are ITV and TBC1. The researcher selected Dar es Salaam region to represent other media channels and Tanzania as a whole because the place is easily accessible by the researcher.

The study focused on accessibility of sign language services to the hearing impaired community in Tanzania in media particularly on TV. The conceptual scope of the study is on the impact of the deaf and hard of hearing community, the effectiveness of sign language interpreters on TV, comprehension of visual content on TV without proper descriptions and the visibility and size of sign language interpreters on TV.

1.8 Limitations of the Study

The study was limited by sample size due to difficulties in reaching a large number of deaf and hard of hearing individuals. Also limitation in geographical constraints since the study is primarily conducted in urban areas, which may not fully capture the experiences of those in rural regions where access to media and sign language services differ. The study is also limited by cultural and linguistic variations where Tanzania has multiple sign languages and dialects, which not all is represented in the study. The study is also limited by availability of qualified sign language interpreters and technological resources that hinder collection of comprehensive data. The study also provides a snapshot in time and might not account for evolving technologies and policies.

1.9 Organization of the Study

Organizing the study into chapters is an important step in structuring research report. Each chapter serves a specific purpose and contributes to the overall narrative and analysis of the study. Below is a typical chapter-wise organization of the research about accessibility of sign language services to the hearing impaired in television media.

Chapter one includes; Introduction, chapter overview, background of the study, statement of the problem, objectives of the study, general objective, specific objectives, research questions, significance of the study, research scope, and limitations of the study. Chapter two includes; literature review, introduction, definition of key terms, theoretical framework, social model of disability theory, empirical literature review, conceptual modeling of the study, and knowledge gap. Chapter three include: research methodology, introduction, study approach, study design, study population, sampling design, sample and sample size, sampling technique, data collection methods, data analysis and presentation of research findings, and ethical consideration. Chapter four includes data analysis and discussion of findings. Finally chapter five includes summary, conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Chapter two highlights the definition of key terms, theoretical framework; related literature reviews from various media scholars; empirical studies as well as knowledge gap.

2.2 Definition of Key Terms

2.2.1 Deaf

The term Deaf is used to denote individuals who have significant hearing loss and identify culturally and linguistically with the Deaf community, often using sign language as their primary mode of communication" (Lane, Hoffmeister, &Bahan, 1996, p. 10).

2.2.2 Hard of Hearing

Hard of hearing refers to individuals who have varying degrees of hearing loss that can range from mild to severe, but who typically use spoken language as their primary mode of communication and may use hearing aids or other assistive devices" (Northern & Downs, 2014, p. 5).

2.2.3 Media

Media, which is the plural form of medium, encompasses all methods of communication. This includes various platforms such as printed materials, digital content, news, art, educational materials, and any other type of information that can

reach or affect people. Examples of media include television, radio, books, magazines, and the internet (Stoltzfus, 2020).

2.2.4 Television

Television is a mass medium that transmits moving images and sound from a source to a receiver, creating a sense of immediate presence and engagement for the viewer. It combines visual and auditory elements to deliver news, entertainment, education, and various forms of programming to a wide audience" (Creeber & Martin, 2009, p. 2).

2.2.5 Sign Language

Sign language is a visual-manual mode of communication that utilizes hand shapes, movements, facial expressions, and body postures to convey meaning, and it is fully capable of expressing abstract and complex concepts" (Valli& Lucas, 2000, p. 12).

2.2.6 Sign language Interpretation

Sign language interpretation involves translating spoken language into sign language and vice versa, enabling effective communication between Deaf and hearing individuals in various settings such as educational, medical, legal, and social environments" (Humphrey & Alcorn, 2007, p. 15).

2.2.7 Hearing Impaired

Hearing impaired is a term used to describe individuals with any degree of hearing loss, including both hard of hearing and deaf persons. (Brown, 2017, p. 85)

2.3 Theoretical Framework

This study deployed social model of disability theory which posits that disability is primarily a consequence of societal barriers, rather than being solely a result of individual impairments. It emphasizes the need to address external obstacles such as discrimination and lack of accessibility, rather than focusing on 'fixing' the individual. Fiveable. (2024). The social model of disability was structured in opposition to the medical disability model, The medical model of disability is a framework that views disability primarily as a deficit or impairment resulting from an individual's physical, emotional, or mental conditions. (Community, Equity, Data & Information Lab, 2024; American Medical Association, 2022).

The theory can be used to identify barriers by examining how media content is produced, the availability and quality of sign language interpretation, and the accessibility of broadcasting platforms. Also the theory can be used to evaluate accessibility by assessing whether sign language interpreters are provided during the broadcasts and whether captions are available and accurate. The theory can also be used for user experience analysis where researchers can explore how these individuals navigate media content, the challenges they face in understanding information without proper sign language support, and their overall satisfaction with current accessibility measures. The theory can also be used for policy and practice recommendations, community involvement and comparative studies.

However, in the field of deaf and hard of hearing, there are a number of theories that can be used to explain the accessibility of sign language services to the deaf

community in television media which include Media Richness Theory, Cognitive Load Theory, and Universal Design for Learning, Technology Acceptance Model, and Information- Seeking Behavior Models. But in this study, the researcher decided to choose the Social Model of Disability Theory (Fiveable, 2024) because it involves identifying societal barriers in TV media that hinder access for deaf viewers.

Shakespeare, T. (2006), provided both support and critique of the Social Model. He acknowledges its importance in shifting the focus from individual impairments to societal barriers but also highlights its limitations Shakespeare argues that the model can be overly simplistic and neglect the complexities of individual experiences and impairments. He calls for a more nuanced understanding that integrates both social and medical perspectives. Barnes, C. (2012) has extensively written about the Social Model and its impact on disability studies and policy. Barnes supports the model's emphasis on societal barriers and its role in promoting social justice. He also discusses its influence on disability activism and policy-making.

Koutsoklenis and Adam (2023) argue that the Social Model of Disability Theory's insistence on viewing disability primarily as a social issue fails to account for the complexities of impairment and individual agency, suggesting that a more integrated model is necessary to address the multifaceted nature of disability. French, S., & Swain, J. (2001) have contributed to the understanding of the Social Model by exploring its application in various contexts, including education and employment. They emphasize the need for practical applications of the Social Model to create inclusive environments and policies that address the needs of disabled individuals.

Crow, L. (1996) has provided a critical perspective on the Social Model, arguing for a balanced approach that includes both social and medical aspects of disability.

Crow suggests that while the Social Model is essential for addressing societal barriers, it should not completely disregard the medical aspects of disability that impact individuals' lives.

2.4 Social Model of Disability Theory

This study deployed social model of disability theory which posits that disability is primarily a consequence of societal barriers, rather than being solely a result of individual impairments. It emphasizes the need to address external obstacles such as discrimination and lack of accessibility, rather than focusing on 'fixing' the individual. Fiveable. (2024). The social model of disability was structured in opposition to the medical disability model, The medical model of disability is a framework that views disability primarily as a deficit or impairment resulting from an individual's physical, emotional, or mental conditions. (Community, Equity, Data & Information Lab, 2024; American Medical Association, 2022) .

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2.5 Empirical Literature Review

The accessibility of sign language services in television media is a critical subject globally, regionally, and nationally. By examining the availability, adequacy, interpreter responsiveness, and challenges faced in the provision of these services, this review offers a comprehensive understanding of the issue.

Availability of Sign Language Services in Television Media

Globally, studies highlight the inconsistent availability of sign language services in television media. In the United States, Napier and Barker (2015) observed that while legislative mandates like the Americans with Disabilities Act (ADA) require sign language interpretation for live broadcasts, compliance is often limited to major networks. Variables such as program genre (news, entertainment) and network type (public vs. private) heavily influence availability.

In Europe, Wurm and Seiler (2016) highlighted that public broadcasters often lead in providing sign language services, driven by EU regulations, but private networks lag behind due to perceived high implementation costs.

Regionally**,**within Africa, the availability of sign language services varies. In Kenya, Otieno and Mweri (2015) reported that interpretation is primarily limited to news and political events. Variables include network ownership (state-owned vs. private) and event type (e.g., elections receive priority). Similarly, in Uganda, Mubangizi and Namara (2016) found that cultural events and entertainment programming are largely inaccessible to the hearing impaired, emphasizing the need for broader service coverage.

In Zambia, Chilufya and Mwansa (2017) observed that sign language services are often limited to state-run television stations, with private broadcasters rarely offering these services. This disparity is influenced by variables such as broadcaster funding and audience reach.Machado & de Oliveira, 2020; Baker & Lee, 2019) who said that the inconsistent implementation of these services, as noted by these authors, highlights a broader systematic issue that requires urgent attention to ensure that the hearing impaired community has equal access to television content.

Nationally, Mwakalinga and Ndomba (2017) found that the inconsistent availability of sign language services in Tanzania is exacerbated by a lack of enforcement of regulations by the Tanzania Communications Regulatory Authority (TCRA).

In Tanzania, research by Kilangi and Mlozi (2015) found that most broadcasters lack a structured schedule for sign language services, with interpreters often appearing sporadically during prime-time news. This inconsistency leaves the hearing-impaired community with limited access to essential information, particularly during emergencies.

Kisanga, 2018; Mwansoko,2022) supported the findings of this specific objective by saying that, 'the lack of legislative enforcement regarding mandatory sign language interpretation in public broadcasts means that television stations do not consistently prioritize or include interpreters in their programming.'

Adequacy of Sign Language Services

Globally**,** studies in developed countries underscore the importance of service quality. For example, in the UK, Emery and Valentine (2014) identified variables such as interpreter training and visual accessibility (e.g., interpreter placement and screen size) as critical factors affecting the adequacy of services. According to Smith and Paulson (2015), interpreter positioning on-screen is critical for visual clarity and comprehension, with improper placement often leading to reduced accessibility for the hearing impaired. In (Microsoft Research, 2023) where a 2023 study further emphasizes the frustration deaf individuals experience in accessing real time information, especially during emergencies. The absence of sign language interpreters on major networks during such broadcasts exacerbates this accessibility gap.

(Dal Fovo, 2016; De Meulder&Heyerick, 2013; Del Vecchio&Franchi, 2013) who said that, while the inclusion of sign language interpreters on TV and in the media is praiseworthy, it does not necessarily guarantee high quality service that fully benefits sign language users. Currently, there's no formal training program for media sign language interpreters, and there is limited information on how to provide optimal sign language interpreted media. Most interpreters learn on the job, some receive

mentorship from more experienced colleagues, and a few have taken short courses on the topic. So far, only a limited number of studies have explored sign language interpretation in TV and media settings.

Regionally, across Africa, studies reveal significant gaps in service quality. In South Africa, Motsaathebe and Mathibela (2016) highlighted that interpreters often lack the technical resources to ensure visual clarity, such as proper lighting and screen positioning. Variables include production quality and interpreter skill levels. In Nigeria, Adeleke and Omololu (2018) emphasized the importance of contextual appropriateness in interpretation, finding that misinterpretations often occur due to a lack of familiarity with local dialects and sign variations.

In Rwanda, Mukarusanga and Iyamuremye (2018) highlighted the lack of standardized training for broadcasters on incorporating sign language services, leading to inconsistencies in quality.

In Tanzania, Kabonge and Mashauri (2016) noted that the adequacy of sign language services in Tanzania is hindered by poor screen positioning of interpreters and a lack of synchronization between spoken content and sign interpretation. Variables such as technical training for broadcasters and interpreter collaboration during program planning significantly influence adequacy.Mkude and Sanga (2016) found that inadequate lighting and poor technical setups in Tanzanian broadcasts often obscure interpreters, reducing the effectiveness of sign language services.

Meeting the Demands of the Hearing-Impaired Community

Globally, the alignment of interpreter services with audience demands remains a challenge. In Canada, Stokoe and Hall (2015) found that audience satisfaction is influenced by variables such as interpreter certification and specialization in specific content genres, such as medical or legal topics. Research in Germany by Reinhardt and Vogel (2017) showed that interpreters who specialize in specific genres, such as sports or political commentary, are better able to meet viewer needs due to their contextual familiarity. In television news broadcasts, sign language interpretation is often provided through a small video display in the corner of the screen, where an interpreter communicates the news in sign language (Kurniawan, 2021). Despite this, a lack of sensitivity towards the informational needs of the hearing impaired persists, limiting their access to important content. Many hearing-impaired individuals employ alternative strategies, such as lip-reading, analyzing visual cues, and reading captions to access news content (Yunitasari, 2019).

Regionally, in East Africa, Otieno and Mwangi (2016) revealed that most interpreters lack access to formal training programs, which affects their ability to meet diverse audience needs. Variables such as interpreter availability, audience size, and program diversity were found to impact responsiveness. Similarly, in Ethiopia, Abebe and Kebede (2017) reported that resource constraints limit interpreter deployment during non-news programming, leading to unmet audience demands.

In Nigeria, Okafor and Adebayo (2017) noted that the absence of real-time feedback mechanisms, such as surveys or focus groups, hampers broadcasters' ability to gauge

audience satisfaction with interpreter services. According to Dewi and Rodly (2022) and Kurniawan (2017), sign language is an essential non-verbal communication method for the deaf and speech impaired. it utilizes standardized body movements and gestures, frequently employed in television broadcasts to convey meaning.

Nationally, Chikopa and Lugoe (2016) observed that Tanzanian interpreters often face overwhelming workloads due to the limited number of qualified professionals, impacting their ability to meet the needs of the hearing impaired. Variables such as interpreter-to-program ratios and funding for training programs are critical determinants.

Chuwa and Lymo (2017) observed that Tanzanian interpreters often rely on outdated signs that fail to keep pace with evolving language trends, limiting their effectiveness in meeting the demands of younger audiences.

Mashaka and Nyirenda (2016) identified a need for greater collaboration between television stations and organizations for the Deaf to improve the relevance and quality of interpreter services.According to (Mgonda, 2018), television remains one of the most accessible forms of mass communication. However, for the Deaf and hearing-impaired community, access to television content is significantly limited due to the lack of comprehensive sign language services. Despite national policies advocating for inclusivity and equal access to information, the availability of sign language interpreters on television is inadequate.

However, a study by Mweri, Judith (2014) examined the accessibility of information for the deaf community in Tanzania, with a particular focus on television media. Research findings highlighted several challenges, including the limited availability of sign language interpreters on TV, the poor quality of interpretation, and the lack of awareness among broadcasters about the needs of deaf viewers.

Challenges in Providing Sign Language Services

Globally, challenges in sign language services are often systemic. In the United States, Napier and Leeson (2016) identified variables such as policy enforcement, funding, and technological infrastructure as significant barriers. Despite advanced regulations, gaps remain in private broadcasting.In the United Kingdom, Emery and Valentine (2014) highlighted the lack of long-term funding for accessibility projects as a major challenge, with variables such as government policy changes and broadcaster priorities affecting sustainability.

But also, despite legal frameworks such as the Americans with Disabilities Act (ADA) and International efforts to ensure equal access to information, there are ongoing challenges in the provision of sign language services in television media for the hearing impaired. Research by Machado and de Oliveira (2020) indicates that while some broadcasters have made efforts to include sign language interpretation during live events, these services are often inconsistent, with interpreters either absent or not clearly visible on the screen.

Regionally, African countries face a mix of logistical and structural challenges. In Ghana, Boateng and Mensah (2017) found that limited investment in accessibility tools, such as teleprompters (a display device that prompts the speaker with a script or text while they are speaking or presenting)for interpreters, affects service delivery. Variables such as technology availability priorities were significant. Similarly, in Zimbabwe, Dube and Nyoni (2016) highlighted that rural broadcasters often lack the funding or technical expertise to provide consistent services.

In Ghana, Boateng and Mensah (2017) noted that interpreter burnout, due to insufficient numbers of trained professionals, undermines service quality and consistency.

In Tanzania, Mkude and Sanga (2014) identified variables such as regulatory gaps and limited technical resources as key barriers to accessibility in Tanzanian media. Challenges include insufficient funding for interpreter recruitment and outdated broadcasting equipment that cannot support simultaneous interpretation.

Kweka and Mnyuku (2016) found that political broadcasts in Tanzania often exclude interpreters, citing logistical challenges, which limits the hearing-impaired community's access to vital information. Lusekelo and Chacha (2017) noted that most television stations in Tanzania lack specialized staff trained to integrate sign language services into live broadcasts, a critical barrier to widespread accessibility.

2.6 Conceptual Modelling of the Study
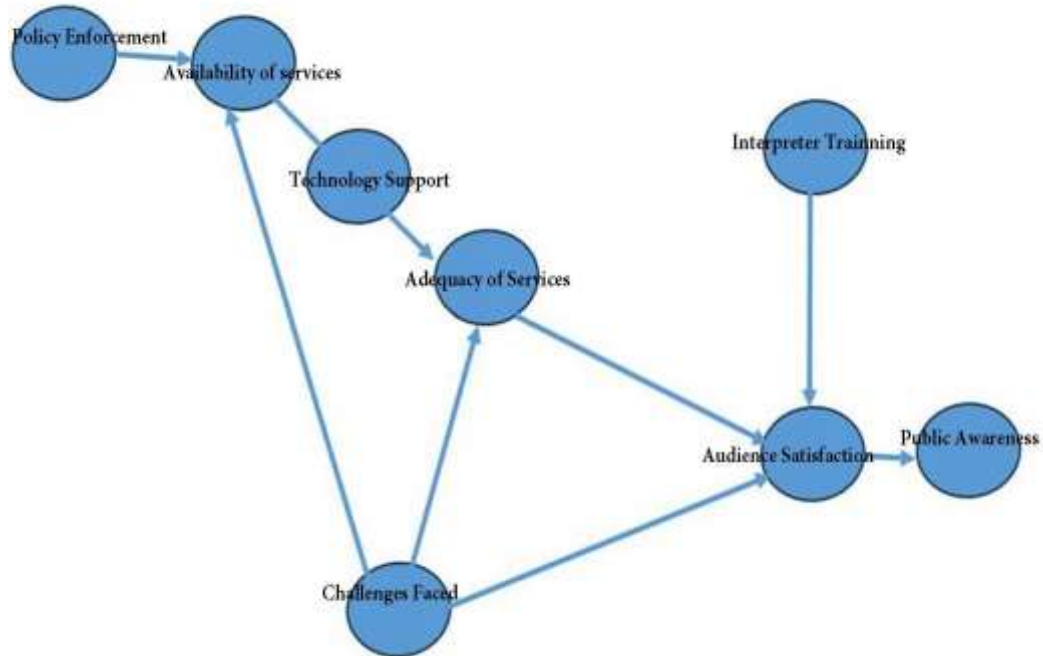
Source: Internet, 2024

Conceptual Model Description

1. **Main Components**:

   o **Availability of Sign Language Services**: Positioned at the top, representing the starting point. Arrows flow downward to indicate its influence on other factors.

   o **Adequacy of Services**: Connected directly to "Availability" with an arrow, signifying that higher availability supports adequacy.

   o **Audience Satisfaction**: Linked to both "Availability" and "Adequacy" with two incoming arrows. This indicates that audience satisfaction depends on both availability and adequacy.

- **Challenges Faced**: Positioned to the side, connected to all other components with bi-directional arrows, showing its interplay and impact on all elements.

- Influencing factors like "Policy Enforcement," "Interpreter Training," and "Technology" are external nodes connected to "Challenges Faced" and other components.

2. **Flow Design**:

- Use arrows to indicate directional relationships. For example:

  - "Government Policy" → "Availability of Services"

  - "Technology Support" → "Adequacy of Services"

  - "Interpreter Training" → "Audience Satisfaction"

3. **Visual Enhancements**:

- Color-coded nodes for clarity: e.g., green for positive factors (availability, adequacy) and red for challenges.

- Clean alignment to maintain simplicity and readability.

Variables and Their Relationships

Independent Variables (Inputs)

These are factors that influence the availability, adequacy, and challenges of sign language services but are not affected by other variables in the model. They act as driving forces.

1. **Policy Enforcement**: Regulatory frameworks and enforcement mechanisms ensuring broadcasters include sign language services.

2. **Interpreter Training**: The quality and quantity of professional training for sign language interpreters.

3. **Technology Support**: Availability of technical resources like teleprompters, advanced video systems, and broadcasting tools.

4. **Public Awareness**: Awareness campaigns to highlight the importance of accessibility services for the hearing impaired.

Intermediate Variables (Processes)

These mediate the relationship between independent variables and the final outcome, showing how inputs translate into impacts.

1. **Availability of Services**: The extent to which sign language services are offered on television (e.g., frequency, coverage across channels).

2. **Adequacy of Services**: The quality of these services in meeting the technical and linguistic needs of the hearing impaired.

Dependent Variable (Outcome)

This is the final outcome influenced by all other variables.

1. **Audience Satisfaction**: The degree to which the hearing-impaired community feels their needs are met by the availability and adequacy of sign language services.

2. **Challenges (Feedback Loop)**

Challenges are both outcomes and influencing factors, creating feedback loops in the system. They affect availability, adequacy, and satisfaction while also being impacted by policy, technology, and other variables. Key challenges include:

- Insufficient resources.

- Inconsistent implementation of policies.

- Lack of real-time interpreter coordination.

Diagram Explanation

1. **Independent Variables Influence Intermediate Variables**:

   o Policy Enforcement → Availability of Services.

   o Interpreter Training → Adequacy of Services.

   o Technology Support → Adequacy of Services.

   o Public Awareness → Audience Satisfaction (direct impact).

2. **Intermediate Variables Build Toward the Dependent Variable**:

   o Availability of Services + Adequacy of Services → Audience Satisfaction.

3. **Challenges Act as a Feedback Mechanism**:

   o Challenges impact all stages, from availability to audience satisfaction, creating cycles of improvement or stagnation.

2.7 Knowledge Gap

The literature review above highlights several key studies that contribute to understanding the challenges faced by the DHH in accessing information through sign language in media. While these studies provide valuable insights, there are still research gaps that need to be addressed. One research gap conceptually is the need for more comprehensive studies to examine fragmented Understanding of accessibility where by accessibility in television media is often understood in silos.

For example, while some studies address the availability of sign language interpreters, they rarely consider other essential factors like audience satisfaction or the integration of interpretation with other accessibility tools (e.g., subtitles, real-time captions). This piecemeal approach limits the formulation of holistic solutions.

Another one is lack of a systematic approach in that, the interplay between policy, technology, training, and audience needs is rarely conceptualized as a dynamic system. Without a systemic understanding, solutions tend to address symptoms rather than root causes of accessibility challenges. When it comes to literature gaps, research from high-income countries (e.g., USA, UK) emphasizes the availability of advanced technologies, such as automated speech-to-sign language software, but does not address how such technologies could be adapted for use in resource-constrained settings. Furthermore, these studies assume widespread infrastructure and regulatory compliance, which may not apply elsewhere.

Also, key challenges specific to African broadcasters, such as limited funding, lack of awareness, and linguistic diversity in sign languages, remain underexplored. Studies focusing on Tanzania often highlight challenges but do not sufficiently examine solutions or successful case studies.

The lack of empirical data on compliance with Tanzania Communications Regulatory Authority (TCRA) guidelines limits understanding of broadcasters' practices.

Theoretical gaps such as the Social Model of Disability and other accessibility frameworks are not adequately applied to analyze the challenges faced by the hearing-impaired audience. The absence of these models results in superficial recommendations that fail to address systemic barriers.

Theoretical models rarely incorporate feedback loops, such as audience satisfaction driving improvements in service delivery, leading to static rather than iterative solutions.

Knowledge gaps include integration of Sign Language Services in that, there is little research on how to seamlessly integrate sign language services into live television broadcasts, particularly in the context of emergencies or breaking news, where real-time interpretation is critical.

The impact of existing policies on the availability and quality of sign language services remains unclear. Also, compliance among broadcasters is uneven, but there is no systematic research on the reasons for non-compliance.

Studies often generalize the difficulties faced by interpreters without exploring context-specific issues, such as urban versus rural workload disparities or the psychological impact of working in high-pressure environments.

Mechanisms for gathering and utilizing feedback from the hearing-impaired community are underdeveloped, leading to a disconnect between services offered and audience needs.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents methods and techniques that were used to conduct this study. The methodology comprise research design, area of study, population, sample size, sampling procedures, data collection, and data analysis.

3.2 Study Approach

Jones (2021) defined a study approach as the comprehensive strategy that includes the research design, data collection methods, and analytical techniques used to investigate a research question. (p.45). The study approach used in this study was qualitative research approach. According to Creswell, (2013) defines qualitative research as a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. Qualitative research approaches involve collecting and analyzing non-numerical data to understand concepts, opinions, or experiences.

3.3 Study Design

Research design is provided by IdeaScale (2023), as "the overall plan, structure, or strategy that guides a research project, from its conception to the final analysis of data". This definition emphasizes the importance of a well-constructed research design in ensuring the validity, reliability, and generalizability of research findings, which ultimately contributes to the knowledge in the field. This study woulduse case study design so as to obtain the objective of the study. Yin (2009) argued that a

single case study is a qualitative approach in which a researcher explores a bounded system (a case) or multiple bounded (cases) through detailed in depth data collection involving multiple sources of information (such as observation, interviews, and documents or reports) and report a case description and case- based themes.

3.4 Study Population

According to Creswell (2014), a study population refers to the entire group of individuals or entities that a researcher is interested in studying. In this study population individuals who are deaf and hard of hearing and who rely on sign language for communication and media practitioners such as broadcasters. Other media personnel and sign language interpreters were included in order to provide insights into the specific challenges faced in accessing media content through sign language interpretation.

3.5. Sample and Sampling Technique

3.6 Sample Size

Sampling is the process of selecting a sample from a population. Loru, (2020).Sampling techniques used were stratified and purposive sampling techniques. In stratified sampling technique, participants were selected to represent various strata within the hearing impaired population such as age groups, degrees of hearing loss, geographic locations in order to ensure comprehensive representation. In purposive sampling, interpreters from two specific media stations were intentionally chosen to provide expert insights into the implementation and challenges of sign language services in television media. .And also purposive sampling was used where by

management personnel responsible for hiring sign language interpreters were deliberately selected to understand decision-making processes and organizational policies related to accessibility services. According to Ames *et al*., (2019) a sample is a subset of people, items or events from a larger population that you collect and analyze to make inferences. The sample size for this study was 136 respondents. Among them 120 were the hearing impaired because they can be able to give accurate information about the services rendered to them. A sample size of 10 was for sign language interpreters because this is a specialized professional group, so even a sample size of 10 interpreters was adequate for qualitative insights. And finally 6 people from the media management crew in both television stations that is TBC1 and ITV since the researcher was only dealing with a small group of decision-makers, a sample size of **6** managers was likely sufficient for the researcher's purposes.

3.7 Sampling Technique

Sampling technique is defined as a method used to select a subset of individuals or elements from a larger population, aiming to draw conclusions about the whole population based on the characteristics of the sample. (ResearchMethod.net, 2024; Analytics for Decisions, 2024).

Two sampling techniques were used in the study and are defined as follows: Cochran defines stratified sampling as a method where the population is divided into groups or strata, and samples are then drawn from each stratum, which ensures that different groups are adequately represented in the sample. This definition emphasizes the

process of dividing the population into subgroups (strata) and then randomly

sampling from each subgroup to ensure representation across the entire population.

Subgroup	Sample Size	Sampling Techniques	Description/Justification
Hearing Impaired Individuals	60	Stratified Sampling	Participants were selected to represent various strata within the hearing impaired population (e.g., age groups, degrees of hearing loss, geographic locations) to ensure comprehensive representation
Sign Language Interpreters	10	Purposive Sampling	Interpreters from two specific media stations were intentionally chosen to provide expert insights into the implementation and challenges of sign language services in television media.
Management Crew	6	Purposive Sampling	Management personnel responsible for hiring sign language interpreters were deliberately selected to understand decision-making processes and organizational policies related to accessibility services.

1.   **Stratified Sampling for Hearing Impaired Individuals**:

- **Purpose**: To ensure that the sample accurately reflects the diversity

  within the hearing impaired community.

- **Method**: The population was divided into distinct strata (e.g., age,

  severity of hearing impairment, location), and participants were

  randomly selected from each stratum proportionally.

Purposive Sampling for Sign Language Interpreters and Management Crew:

- **Purpose**: To obtain detailed and relevant information from

  individuals with specific knowledge or roles related to the research

  topic.

- **Method**: Participants were selected based on their expertise (interpreters) and their role in decision-making (management crew) within the media stations. This non-random sampling technique ensures that the insights gathered are directly pertinent to the research objectives.

By employing these sampling techniques, the research ensures a comprehensive and relevant collection of data that accurately reflects the experiences and perspectives of all key stakeholders involved in the accessibility of sign language services in television media.

3.8 Sampling Design

Kabir (2016) defined sampling design as the framework or roadmap that serves as the basis for selection of the survey sample and affects many other important aspects of a survey as well. In broad context, survey researchers are interested in obtaining some type of information through a survey for some population on universe of interest (Kabir, 2016).

3.9 Data Collection Methods

According to Bhattacherjee, A. (2012), data collection is the process of gathering and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research questions, test hypotheses, and evaluate outcomes. In this study, the researcher selected two methods which are in-depth interviews and questionnaires. These methods conveniently support the

researcher because in-depth interviews allow the researcher to gather detailed information and explore complex issues related to the implementation of sign language services in television media. This method is particularly effective for understanding the experiences, opinions, and challenges faced by sign language interpreters and management crew. The researcher will also use observation method and record in a notebook due to the nature of the respondents who express themselves through sign language after a question is being posed through both signing and written questions depending on the respondent at hand.

The researcher can ask open ended questions that encourage respondents to elaborate on their thoughts, leading to richer data. This is especially useful when interviewing the management crew, as it allows the researcher to delve into organizational policies, decision making processes, and the rationale behind the hiring of sign language interpreters.

Questionnaires are a practical tool for collecting data from a larger number of respondents, particularly the 60 hearing impaired individuals in the study. They allow the researcher to collect data from a large, more representative sample of the hearing impaired population, thus enhancing the generalizability of the findings of sign language services in television media.

3.10 Data Collection Instruments

Data collection instruments are tools used to gather, measure and analyze data related to research question or hypothesis. These instruments must be systematically applied

to ensure that the data collected are reliable and valid (Creswell, 2014). The instruments used were interviews, questionnaires and observation. Questionnaires ensure validity since they make sure that questions cover all aspects of the research topic by consulting the people concerned. The questionnaires can be addressed to a small group of respondents twice at different times and check for consistent results for reliability. For the case of interviews, an interview guide is developed based on a thorough understanding of the topic and ensure questions are clear and relevant. For reliability and consistency interviewers are to be trained thoroughly to reduce variability in how questions are asked. When it comes to observation, for the case of validity, observations are conducted in natural settings where the behavior typically occurs, to ensure that the data reflects real world scenarios. For reliability, multiple observers can be used and comparison of their findings can be done to ensure consistency in the recorded observations.

3.11 Data Analysis and Presentation of Research Findings

Data analysis is the most skilled task in the research. It calls for researcher's own judgment and skills. Krishnaswami (2003) points out that analysis means critical examination of the assembled and grouped data for studying the characteristics of the objects and for determining relationships among the variables relating to it. In the researcher's findings section, the researcher integrated qualitative and quantitative data to provide a holistic view. For instance, the researcher will present survey data on satisfaction levels with sign language services alongside quotes from interviews that explain why some respondents are dissatisfied. The study presents the findings

from thematic analysis in a narrative format, with subheadings for each major theme, supported by direct quotes from the participants.

3.12 Ethical consideration

When conducting research on the accessibility of sign language services for the hearing impaired in Tanzanian TV media, the following ethical considerations must be addressed:

3.12.1. Informed Consent

- **Clarity and Accessibility**: The researcher introduced the intention of the research and how it would benefit the respondents when the data would be worked upon. Respondents were informed that they were to fill the questionnaires which were in Kiswahili language and each respondent with one questionnaire. They were informed they were to choose one answer were there were multiple ones and when the answer needed was only one so that to get clarity of the data collected. They were informed to be free to express themselves in the open ended questions and incase of any problem, the researcher and other sign language interpreters were ready to help explain or sort anything that may not be clear to them accordingly.

- **Voluntary Participation**: The respondents were informed that the activity was voluntary, it was not a must to fill the questionnaires if they never wanted to and give room to those who wanted instead of wasting the papers without clear intent of giving information. The respondents were not forced

to answer questions which they skipped though they were reminded at the collection point. Others went back and answered and others had different reasons for not answering them which was all accepted.

3.12.2. Confidentiality and Privacy

- **Data Protection**: The researcher ensured that any personal information collected was kept confidential and securely stored by informing the respondents never to put their names on the papers and the questionnaires collected were put back in the envelope without passing to any other person to read apart from the ones assigned to assist incase of any query in order to provide clarity.

- **Anonymity**: The researcher ensured by reminding the respondents several times that they were not to put their names on the questionnaires in order to anonymize participants' identities, especially in a relatively small and interconnected Deaf community where individuals might be more easily identified.

3.12.3. Cultural Sensitivity and Respect

- **Respect for Deaf Culture**: The Deaf community has its own norms, values, and communication preferences. The researcher was careful to respect these cultural differences, including the use of sign language and not ignoring their questions and their suggestions however much sometimes they didn't make that much sense.

- **Avoiding Misrepresentation**: What was said by the respondents was the only data that was presented without adding or removing anything. The researcher avoided assumptions of any reaction or written answer but reported exactly what was collected at the field from the respondents.

3.12.4 Inclusivity in Research Design

- **Collaboration with the Deaf Community**: To avoid bias and ensure the research is meaningful, Deaf individuals were actively involved in the research process, in data collection which avoided bias and made sure the research was meaningful. The hearing impaired themselves are the ones who gave data on what they wanted to be worked upon which ensured that the research addresses the actual needs of the community.

- **Avoiding Tokenism**: The researcher genuinely included and represented the hearing impaired by giving them an opportunity to express their feelings towards the sign language services rendered to them in the questionnaires in a meaningful way rather than superficially or merely for appearance's sake.

3.12.5 Harm and Benefit Balance

- **Non-Maleficence**: The researcher explained the intention of the research and never forced any person to be a part of it. There were those who refused, but the researcher was not mad at them. The language used was a polite one even to those who needed more and more elaboration since to some of them, their understanding was low.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

4.1 Introduction

This chapter dealt with data analysis, presentation and interpretation. The results of the study were presented and discussed in relation to the research questions outlined in chapter one. This study assessed the accessibility of sign language services to the hearing impaired community in Television media in Tanzania: The case of ITV and TBC 1. In analysis, data from questionnaires was coded in both qualitative and quantitative summary reports. The study involved 120 deaf participants and among them 102 returned the questionnaires which were filled but a few skipped some questions which will be shown in this chapter. 1 respondent returned the questionnaire unfilled completely.

Also an interview was done to the sign language interpreters and the management crew from both ITV and TBC 1. Unfortunately, the targeted number was not reached due to some reasons. When we start with ITV, there's no any sign language interpreter who is hired. There's only one sign language interpreter who comes once in a week. It was not easy to interview the management crew but finally the researcher managed to interview one of them. At TBC 1 there are only 3 sign language interpreters who are hired and the researcher managed to interview all of them. 2 people from management crew team out of the 3 as was planned were interviewed and the rest were out of reach. The researcher will start reporting about the hearing impaired, followed by sign language interpreters and finally the management crew.

4.2. Respondents demographic

Before presenting the analysis of the findings, it was important to analyze the hearing impaired respondents' demographic data in order to establish whether it was obtained from relevant groups. This demographic information includes;

4.2.1 Gender Distribution

The study sought to know the gender distribution of the respondents. From the responses, the majority 61(60.4%) were male while female were 40 (39.6%) as shown in the table 4.1. This implies that male are more engaged or impacted by the lack of sign language interpreters' services on TV.

Table 4.1: Gender Distribution of Respondents

Gender	Counts	Percentage
Male	40	39.6%
Female	61	60.4%
Total	**101**	**100**

Source: Field Data, 2024

4.2.2 Age of Respondents

The respondents' age was categorized in four groups which started from the age of below 18 years to 56 and above. The investigation of respondent's age was important because they have different varying accessibility needs such as experiences of younger and older hearing impaired individuals may differ widely, impacting their perspectives on what constitutes effective accessibility. Also age affects media consumption preferences. Younger people may prefer quick on demand media, while older age groups might consume more scheduled television broadcasts.

Understanding these preferences can help tailor sign language services to meet the consumption habits of each age group. Majority of the respondents were youths in the age group of between 26-35 who were totalling to 45 (44.6%). This shows that sign language services mostly impact this group. Respondents in the age group between 36-45 years were 12.9%. Respondents between the ages of 46-55 were 6.9%. Respondents of the age between 56 and above were 1.98% and finally below 18 years was 0.99% of the respondents.

Table 4.2: Distribution of Respondents by Age (N=101)

Age	Counts	Percentage%
26-35	45	44.6
36-45	13	12.9
46-55	7	6.9
56 and above	2	1.98
Below 18	1	0.99
Non response	32	31.68
Total	**101**	**100**

Source: Field Data, 2024

4.2.3 Hearing Status

Out of 101 respondents, the hearing status distribution was as follows: There was a high deaf representation by 85.1% which shows that there is a clear indication of a need for tailored television accessibility services for this community in Tanzania. Minority of the hard of hearing respondents were 13.9%, this group may have specific needs distinct from those of the deaf, such as amplified audio and visual aids. But still sign language interpretation can be of help to them depending on the severity of their hearing loss and their communication preferences. The 2% non-response rate is low and didn't significantly impact the overall findings. But this may

imply different factors such as some respondents may have felt uncomfortable disclosing their hearing status, possibly due to privacy concerns or social stigma associated with hearing disabilities.

Table 4.3: Hearing status (N=101)

Hearing Status	Number of Respondents	Percentage (%)
Deaf	86	85.1
Hard of Hearing	14	13.9
Non-Response	2	2.0
Total	**101**	**100**

Source: Field Data, 2024

4.2.4 Location of the respondents

Respondents were represented by 19 regions from Tanzania since it was a deaf week's meeting all over the country that took place in Shinyanga region. From the response, the majority came from Dar es Salaam which were 29 (28.7%), 9(8.91%) came from Shinyanga, 2(1.98%)came from Ruvuma, 1(0.99%) came from Tanga, 4(3.96%) from Kagera, 1(0.99%) from Sumbawanga, 2 (1.98%) from Kigoma, 2(1.98%) from Mtwara, 1(0.99%) from Iringa, 5(4.95%) from Pwani, 2(1.98%) from Tabora, 3(2.97%) from Mbeya, 9(8.91%) from Dodoma, 7 (6.93%) from Arusha, 1(0.99%) from Mara, 3(2.97%), Morogoro, 11(10.89%) and finally 4(3.96%) did not reply anything based on their location.

Table 4.4: Location of the Respondents

Region	Number of Respondents	Percentage (%)
Dar es Salaam	29	28.7
Shinyanga	9	8.91
Ruvuma	2	1.98
Tanga	1	0.99
Kagera	4	3.96
Sumbawanga	1	0.99
Kigoma	2	1.98
Mtwara	2	1.98
Iringa	1	0.99
Pwani	5	4.95
Tabora	2	1.98
Mbeya	3	2.97
Dodoma	9	8.91
Arusha	7	6.93
Mara	1	0.99
Morogoro	3	2.97
Not Specified	11	10.89
Total	**101**	**100**

Source: Field Data, 2024

4.3 Availability of Sign Language Services

Knowing the availability of Sign Language Services is crucial for assessing accessibility and inclusivity of the deaf and hard of hearing communities. It helps identify gaps in communication, informs policy decisions, and ensures equitable access to information and services. This awareness can also guide improvements in media, education, and public services, ultimately fostering a more inclusive society.

4.3.1 Access to Television

The question was categorized into two answers which is yes and no. From the response, the results showed that the majority of which were 73(72.3%) watched television regularly and the minority 27(26.7%) did not. But 1(1.0%) respondent did not reply anything.

Table 4.5: Access to Television (n=101)

Response	Number of Respondents	Percentage (%)
Yes (Watched TV)	73	72.3
No (Did not watch)	27	26.7
No Response	1	1.0
Total	**101**	**100**

Source: Field Data, 2024

4.3.2 Sign language services

Respondents who replied whether there were or no television programs watched that provide sign language interpretation were categorized into two parts which were yes and no. Those who said yes to availability of programs being watched that provided sign language services were 70(69.3%) and those who said there weren't were 30(29.7%) and 1(1.0%) respondent did not respond anything.

4.6: Table for TV programs watched that provide sign language services

   (N=101)

Response	Number of Respondents	Percentage%
Yes	73	72.3
No	27	26.7
No Response	1	1.0
Total	**101**	**100**

Source: Field Source, 2024

4.3.3 Television stations

This question was open ended, among the respondents, 29 people never responded completely, 10 respondents gave answers that were irrelevant to the question which is research error and 62 respondents responded accordingly about the television stations that provide sign language services in Tanzania as follows: The majority

mentioned TBC which was mentioned 52 times, channel 10 was mentioned 15 times, ITV 20 times, Azam TV 11 times, UTV 6 times, Star TV 6 times, Clouds TV 3 times, Channel 10 plus 2 times, ZBC 2 times, BBC 2 times, Shinyanga media 1 time, ETV 1 time and ATV 1 time.

Table 4.7: Television Stations that provide sign language services

Table of Television Station	Number of Mentions
TBC	52
ITV	20
Channel 10	15
Azam TV	11
UTV	6
Star TV	6
Clouds TV	3
Channel 10 Plus	2
ZBC	2
BBC	2
Shinyanga Media	1
ETV	1
ATV	1

Source: Field Data, 2024

4.3.4 Program types that provide sign language services

In this part the question was divided into five segments about the types of programs that provided sign language services as follows: News program was mentioned by 62(61.38%) respondents, entertainment program 0 (0%), educational program 9(8.9%), religious program 4 (3.96%) and finally in the part of any other programs, there was no respondent. But 12(%) respondents did not reply to this question completely. Never the less, some other respondents selected more than one program as follows: Religious and educational programs were chosen by 9(8.91%), news and

educational programs 4(3.96%),news, educational and religious programs was 3(2.97%).

Table 4.8: Program types that provide sign language services

Program Type	Response	Percentage (%)
News	62	61.38
Entertainment	0	0.0
Educational	9	8.9
Religious	4	3.96
No Response	**12**	**11.88**

Source: Field Data, 2024

Table 4.9: Programs that show Multiple Program Selections

Combination of Programs	Number of Respondents	Percentage (%)
Religious and Educational	9	8.91
News and Educational	4	3.96
News, Educational, and Religious	3	2.97

Source: Field Data, 2024

4.4.1 Adequacy of Sign Language Services

Understanding how well current sign language services meet the needs of the hearing impaired allows researchers, policy makers and media organizations to make informed decisions about improvements and resource allocation. Also the adequacy helps gauge user satisfaction among the hearing impaired. If services are lacking, it can lead to feelings of exclusion and frustration, impacting their overall media experience. Adequate sign language services ensure that the content is accurately conveyed. This is vital for understanding especially for news, educational programs and critical information during emergencies.

4.4.2 Quality of Interpretation

The quality of sign language interpretation provided on television was rated in four

categories where by the majority of the respondents 39(38.61%) rated it as fair,

28(27.72%) respondents rated it as excellent, 22(21.78%) rated it as good and finally

5(4.95%) rated it as poor. However, an error occurred to 2(1.98%) respondents and

5(4.95%) of the respondents never replied anything.

Table 4.10: Showing Quality of Interpretation

Rating Category	Number of Respondents	Percentage (%)
Fair	39	38.61
Excellent	28	27.72
Good	22	21.78
Poor	5	4.95
Error	2	1.98
No Response	5	4.95
Total	**101**	**100**

Source: Field Data, 2024

4.4.3 Coverage of Information

Respondents asked how they felt about sign language interpretation coverage to all

the essential information in the program was categorized into five answers whereby

the majority 46(45.54%) responded rarely, 18(17.82%) respondents replied

sometimes, 12(11.88%) respondents selected always, 16(15.84%) respondents said

most of the time and 2(1.98%) said never, that they don't feel that the sign language

interpretation covers all the essential information in the program. However, 6(5.94%)

of the respondents did not reply anything at all and 1(0.99%) was research error.

Table 4.11: Coverage of Information (N=101)

Response Category	Number of Respondents	Percentage (%)
Rarely	46	45.54
Sometimes	18	17.82
Always	12	11.88
Most of the Time	16	15.84
Never	2	1.98
No Response	6	5.94
Research Error	1	0.99
Total	**101**	**100**

Source: Field Data, 2024

4.4.4 Interpreter Skills

The respondents belief on whether the interpreters being well trained and skilled in sign language was categorized into three parts whereby the majority 50(49.5%) said yes they believed, 27(26.73%) said they were unsure and 16(15.84%) said no, they didn't believe. However, 6(5.94%) did not reply anything and 1(0.99%) was research error.

Table 4.12: Interpreter Skills

Response Category	Number of Respondents	Percentage (%)
Yes (Believed)	50	49.5
Unsure	27	26.73
No (Did not believe)	16	15.84
No Response	6	5.94
Research Error	1	0.99
Total	**101**	**100**

Source: Field Data, 2024

4.5.1 Meeting the demands of the hearing impaired

Meeting the needs of the hearing impaired is essential and it is a fundamental right for ensuring access to information, whether in news, education, or emergency

broadcasts. For the hearing impaired communities, this often means that the content is available in formats they can fully understand, such as sign language interpretation. Also making safety and emergency preparedness information accessible to the hearing impaired reduces vulnerability, enhances preparedness and improves response times.

4.5.2 Relevance of content

The question of whether the sign language service meet daily information needs of the respondents was categorized into three parts where by the majority 32(31.68%) said partially, then 31(30.69%) said no it didn't and finally the least 29(28.71%) said yes it meets their daily information needs. However, 9(8.9%) of the respondents did not reply anything.

Table 4.13: Relevance of Content (N=101)

Response Category	Number of Respondents	Percentage (%)
Partially	32	31.68
No (Did not meet needs)	31	30.69
Yes (Met needs)	29	28.71
No Response	9	8.90
Total	**101**	**100**

Source: Field Data, 2024

4.5.3 Program accessibility

The question of whether there are specific programs or times that sign language services are unavailable that the respondent liked to be covered was open ended, and the answers were as follows: ITV programs was mentioned 14 times including a program by the name of 'kipimajoto', all TV programs was mentioned 14 times,

government leaders meetings was mentioned 10 times including the president's speech, films was mentioned 7 times including a certain program by the name of 'sinemazetu', soap operas was mentioned 4 times, music of all types including Gospel, football 3 times, KIX 1 time, breaking news was mentioned 6 times including accidents, funerals and disaster, entertainment 3 times, educational programs including artistic work, seminars and sign language training was mentioned 5 times, news 1 time, advertisements 1 time, special programs 1 time and finally health program was also mentioned once.

Table 4.14: Program Accessibility

Program accessibility	Number of Mentions
ITV Programs (e.g., Kipima Joto)	14
All TV Programs	14
Government Leaders' Meetings (e.g., President's Speech)	10
Films (e.g., SinemaZetu)	7
Soap Operas	4
Music (All Types, including Gospel)	3
Football	3
KIX (Action Movies Channel)	1
Breaking News (e.g., Accidents, Funerals, Disasters)	6
Entertainment	3
Educational Programs (e.g., Artistic Work, Seminars, Sign Language Training)	5
News	1
Advertisements	1
Special Programs	1
Health Program	1
Total	**75**

Source: Field Data, 2024

4.5.4 Satisfaction with Availability of Sign Language Services

The question about satisfaction with the current availability of sign language services on television was divided into five parts where the majority 29(28.71%) of the

respondents were satisfied, 26(25.74%) respondents were dissatisfied, 17(16.83%) were neutral, 10(9.90%) were very dissatisfied and 8(7.92%) were very satisfied. However, 11(10.89%) respondents did not reply anything.

Table 4.15: Satisfaction with Availability of Sign Language Services (N=101)

Response	Number of Respondents	Percentage (%)
Satisfied	29	28.71
Dissatisfied	26	25.74
Neutral	17	16.83
Very Dissatisfied	10	9.90
Very Satisfied	8	7.92
No Response	11	10.89
Total	**101**	**100**

Source: Field Data, 2024

4.6.1 Challenges Facing Sign Language Services

Understanding the challenges facing sign language services is crucial for several reasons such as improving access where by identifying barriers helps organizations and policy makers develop strategies to enhance access to sign language interpretation and services for the hearing impaired individuals. Also recognizing challenges such as interpreter shortages, training deficiencies, and inconsistent quality can lead to improvements in service delivery, ensuring that users receive effective communication support. Insights to these challenges can inform legislation and policies that promote equal rights and accessibility for deaf communities, leading to systematic changes.

4.6.2 Challenges Faced by Interpreters

The question was open ended and out of 101 respondents, 60(59.4%), responded according to the question, 33(32.67%) respondents did not reply anything and 8(7.92%) respondents gave irrelevant answers leading to research error. The answers were as follows: The majority whose comment appeared 15 times said that the anchor's speed was faster than the sign language interpreter could afford. It was also commented 5 times that different sign language interpreters have different signs for the same thing which brings to confusion. About interpreters receiving information when already in the studio interpreting without having preparations was commented 5 times; interpreters screen being too small was commented 4 times leading to invisible signs; some interpreters don't know some of the signs which lead them to spell them sometimes which takes time was said 6 times; the interpreter's speed being too high which leads to failure to take the message effectively; low payment to the interpreters may discourage them to work and put more effort was commented 3 times; insufficient training leading to insufficient information to the hearing impaired; interpreters need their own studio to work effectively due to audio overlap that disturbs them was commented 2 times.

The continuing responses appeared only once which were as follows: some of the media stations lack much awareness so interpreters are not supported effectively; the interpreter skipping some of the message which may be due to the high speed and not getting the message effectively due to hard vocabularies and other issues; the interpreter fails to get feedback from the audience when there' s a problem that needs to be rectified, interpreters are exposed in unfriendly situations which to others seem

okay and yet to the hearing impaired it's their tradition, therefore interpreters are forced to be in such situations; interpreters get hard time when meeting with words that all have the same sign, interpreters also get hard time reaching all groups of the hearing impaired since they understand signs at different levels and differently, interpreters are of different levels, some are good and others aren't, so they may receive comments that may discourage them in the way presented to them; Finally, 2 people suggested the question to be answered by the interpreters themselves and 5 others didn't know of the challenges they faced.

4.6.3 Television Station Barriers

The question about the main barriers for television stations in providing sign language services was open ended. Among the respondents, 63(64%) of the respondents answered, but among the answers some were not responding to the question but instead were giving their opinions about the interpretation service. It seems the question confused most of them. 36(35.64%) did not reply anything and 2(1.98%) gave irrelevant answers to the research topic which leads to research error. The respondents said that, professional interpreters should be increased in the media houses; In some of the media houses they lack professional sign language interpreters; Not being considerate of the importance of sign language services; The hearing impaired's rights are not taken into action effectively; They don't listen to the hearing impaired about their opinions and finally, lack of sufficient awareness to some of the media houses.

4.6.4 Technological challenges

The question about experiencing any technological issues such as poor visibility of interpreters, time mismatches with sign language services on television was categorized into two answers whereby those who said yes, they did experience were 72(71.29%) respondents and those who said no, they didn't were 14(13.86%). However, there were those who didn't reply anything who were 15(14.85%) respondents.

Table 4.16: Technological Issues (N=101)

Response Category	Number of Respondents	Percentage (%)
Satisfied	29	28.71
Dissatisfied	26	25.74
Neutral	17	16.83
Very Dissatisfied	10	9.90
Very Satisfied	8	7.92
No Response	11	10.89
Total	**101**	**100**

Source: Field Data, 2024

4.6.5 Suggestions for Improvement

The question was open ended and the suggestions for improvements for sign language services on television were given by respondents in such a way that 72(29.29%) respondents gave their suggestions and 29(71.29%) respondents did not respond anything. The majority of the respondents whose suggestion appeared 30 times suggested that the interpreter's screen size be increased at least to 1/3 or 1/4 and others said it should be half of the screen since they don't understand, see clearly since they have to strain their eyes that can lead them to get other problems and also when they are a bit far from the TV still they can't see very well; All channels should

have sign language interpretation service for all programs including national programs, advertisements and ITV programs was suggested 20 times; The quality of the picture should be improved appeared 11 times such that there should be special lights for the interpreter so that the interpreter can be seen clearly without damaging the interpreter's eyes and the hearing impaired's.

Also the quality of the camera be improved such that it reflects light and not absorb, the interpreter shouldn't put on black clothes and also the background should be in black color and the interpreter be in white attires so that the interpreter can be seen clearly; There should be a special place for the interpreters to make corrections for their work was commented 3 times; The interpreter should use a friendly language to take information such as the use of proper signs, this was commented 5 times; There should be interviews for sign language interpreters before hiring them to understand whether they reach the professional standards since some are not understandable was said 4 times; Sign language interpreters should be employed was said 2 times. The rest of the suggestions were commented only once which includes sign language interpreters should cooperate, they should be exchanging not working for long hours; Interpreter's speed should be moderate; The beginning and the end of the sign language interpretation service should be known in the timetable; There should be programs for the hearing impaired where the interpreter can be seen on the larger screen and the speaker on the smaller one; In films and soap operas sign language interpreters should provide the service and finally sign language interpreters who volunteer should be given first priority when it comes to hiring.

Table 4.17: Suggestion for Improvement

Suggestion	Number of Mentions
Increase interpreter's screen size (1/3, 1/4, or half of the screen for better visibility)	30
All channels should have sign language interpretation service for all programs	20
Improve picture quality (e.g., special lighting for interpreters, better camera quality)	11
Interpreter should use friendly language (proper signs)	5
Conduct interviews to ensure interpreters meet professional standards	4
Create a special place for interpreters to review their work	3
Employ more sign language interpreters	2
Other suggestions (one mention each):	1
- Interpreters should cooperate and take shifts (not work long hours)	1
- Interpreter's speed should be moderate	1
- Add timetable for beginning and end of sign language services	1
- Programs for hearing impaired should feature a larger screen for interpreters	1
- Sign language interpreters for films and soap operas	1
- Volunteer interpreters should have hiring priority	1

Table 4.18: (Continuation) of the Number of Respondents

Response Summary	Number of Respondents	Percentage (%)
Responded with suggestions	72	71.29
Did not respond	29	28.71
Total	**101**	**100**

Source: Field Data, 2024

4.7 Additional comments

The hearing impaired provided additional comments or suggestions regarding sign language services in television media which was open ended and the responses were as follows: Sign language interpretation uses feelings and facial expressions so all

these should be considered; Techniques for solving sign language interpreters mistakes should be clear; More professional training should be done to the interpreters; Consideration for policies to people with special needs should be done; There should be a program that teaches sign language interpretation every day; There should be a team that may include the National Kiswahili council in Tanzania ie; Baraza la Kiswahili Tanzania (BAKITA) and the Deaf party in Tanzania ie; Chama Cha Viziwi Tanzania (CHAVITA); The interpreter should understand sign language for different age groups; The interpreter's screen should be full screen; Sign language interpreters should be exchanging in the service in the appropriate professional time to reduce and avoid wearing out; Sign language should be the same just like how the national language is and not like tribal languages and international languages; Sign language interpreters working on TV must have qualifications to be sure of their service; Interpreters should improve their service;

Sign language interpreters should move to another step in their careers and not just be stuck on interpretation; sign language has not being given priority just like Kiswahili language; sign language subject should be official to all primary schools; The interpreters should have a special uniform; Monitoring and dropping down of sign language interpreters should be done since not all know what they are doing; There should be captions alongside with the interpreter; Education awareness to the society about the hearing impaired and how they can be treated should be emphasized in television; The service should be improved such that the hearing impaired who also have sight problems can see clearly: Sign language service is of greater importance since information reaches them; Journalists should use sign

language. Finally, much appreciation should go to the government and the sign language service in the media houses that ensures information reaches the hearing impaired and help bridge the communication gap between the hearing audiences and the hearing impaired.

4.8 Sign Language Interpreter's Interview Report

The interview was carried out in such a way that all the objectives were covered. The target of interviewing 10 sign language interpreters and 6 respondents from management crew was not reached due to fewer employed sign language interpreters than the sample whereby 3 sign language interpreters were employed in TBC 1 and there was 1 sign language interpreter in ITV who is not employed but works once in a week. In ITV it was very hard to get them and at TBC, 2 respondents out of 3 were interviewed and the rest were out of reach. The results were as follows:

4.8.1 Background and Experience

The interpreter from ITV had 6 years of working experience as a sign language interpreter. From TBC 1 there were 2 sign language interpreters with 6 years of experience and one with 5 years of experience. About the qualifications they hold in sign language interpretation, the Sign language interpreter (S.L.I) from ITV had a certificate for sign language but not from recognized universities or institutes in Tanzania such as Tanzania Association of sign Language interpreters (TASLI) and the Denmark project. In TBC 1, among the 3 interpreters, 1 has no certificate but got the training from the Deaf organization by the name of Chama cha Viziwi Tanzania (CHAVITA), 1 has a certificate in Sign language and interpretation and the last one

has no any qualifications but works through experience. When it comes to ITV the the kind of program or content interpreted by the S.L.I is just one program by the name of 'Matukio ya Wiki' which means weekly events which has different types of contents. In TBC1 all the 3 S.L.I. interpret news and other national events mostly which are in the calendars already and others that may arise.

In the media house, among all the 4 S.L.I. in ITV and TBC 1 , there's no any specialized training for interpreting that has ever being provided to them. However, the S.L.I. got into the media in different ways in that, the one from ITV was helping the previous interpreter when he wasn't around. And after he left completely, that's how he got the position. Among the 3 from TBC 1, one was already a civil servant and a legal officer but was transferred to TBC 1 due to lack of S.L.I. especially who were civil servants; The other one was just being called and the last one, some names of capable S.L.I. were required by an organization and one interpreter was picked by TBC 1. In this career path, S.L.I. were motivated by different things such as the one from ITV was motivated by availability of a deaf student who attended the interpreter's teachings. Among the 3 S.L.I. from TBC 1, 1 liked the language and was motivated by a certain S.L.I on TV. The other one wanted to bridge the gap between the hearing people and impaired ones and the last one said it was just a talent in inside the interpreter; it was something natural that was coming from within.

4.8.2 Job Responsibilities and Work Experience

A typical day in the role of S.L.I. in the media house was described as follows: In ITV, the S.L.I. reaches at work at around 5-6pm, then previews the pre recorded

program and at 6:30pm -7;30pm , interpretation begins and after the program has ended, he leaves the place. When it comes to TBC 1, all the 3 S.L.I. don't interpret in the morning since they are few and can't interpret everything, therefore, they usually don't come in the morning. But in case an important program to interpret in the morning arises, that's when they divide themselves in that two of them go in the morning to evening which may be around 3:00pm-4;00 pm then the other interpreter comes in to prepare for evening news by previewing, seek for new signs that are unknown, understanding meaning for hard terms if it is a pre-recorded program which takes place in the evening for two hours. And also at night they may come if anything important to interpret arises. But the time table is not permanent it changes. So, at TBC 1 S.L.I. mostly go in the evening at work, they preview the prepared news and interpret when it is time. In case of live broadcasts, both ITV and TBC sign language interpreters (S.L.L) just go with the flow without preparing for anything. What will be found is what will be interpreted.

S.L.I. coordinate with the production team to ensure smooth delivery of their service in that both S.L.L. from ITV and TBC 1 corporate in such a way that sound from the speaker is set to be audible enough to the interpreters, cameras are set to produce a picture of good quality, lighting is set such that the interpreter becomes visible enough, a chair that is comfortable for the service, background colour which is suitable and the monitor in front of the interpreter to make sure they see themselves and what takes place. In TBC 1, one of the interpreters said that the production team calls interpreters to ensure the person on duty. And also trickster personnel are available to ensure all is well. At TBC 1 at first it was hard to work with the

production team since sign language settings was something new to them but training was given to them training gradually until they understood. This was reported by another interpreter. For the case of ITV, there are neither briefings nor meetings for the S.L.I.in pre broadcasts but at TBC 1 all said are given some briefings but two of them said once not regularly because they have now already understood what is two be done.

4.9 Challenges and Difficulties

The main challenges S.L.I. face while interpreting live television broadcasts in media houses includes facing new vocabularies that are not understood to the interpreters and hard to interpret such as proverbs, idioms which have to be interpreted in their meaning and not like how they are said. Also other words such as SAKO kwa BAKO may not be understood easily for the first time. This is faced by both interpreters in ITV and TBC 1. In TBC 1 more challenges were faced such as 2 interpreters reported the quality of sound recorded from the site which comes with the noise of the area which won't be audible enough for the interpreter to hear well. For example fishermen talking along the shore where it's windy. That is the natural environment needed by the journalists. 1 interpreter reported that it was difficult taking information to different understanding levels of hearing impaired since some of them were born deaf and their sign language uses grammar and there are those who became impaired when already adults who use a different grammar. This can be caused due to the high speed of the speaker. This was reported by all the S.L.I. of TBC.

2 S.L.I. reported that sometimes there's no chronological order in news preparation when the journalists get information from the site, there can be five people who all need to appear, so each one is shown in few seconds and the visual editor cuts them before they finish talking which becomes hard for the interpreter to interpret because the message doesn't make sense to the hearing impaired audience. 1 S.L.I. said that there are poor working tools such as the voice may be having echoes from the speaker used to record at the site so they put on socks on the microphone to reduce the noise. 1 interpreter from TBC 1 continued the following challenges; News is a highly filtered content and well packed in that a segment from Zanzibar may be 7 minutes and the one from Dodoma may be 15 minutes and all has to be squeezed by the editor in 10 minutes. This leads to a very high speed by the presenter, and pausing is not allowed since it takes time. To the interpreter, it may lead to failure creating the signs as they are supposed to be and also skipping information which may not send the proper information to its audience.

Working in the media for two hours is a very long time, this is due to lack of manpower. At least if they were two of them exchanging after an hour. Sometimes the new camera men fail to set to the standards. They fail to understand that it has to be in a screen size that is visible. They see it as something new to them and to them it feels like dirty work. The S.L.I. also gets hard time in choosing the attires to put on since all studios have bright light. The attire may appear nice when the light shines on it but when they see themselves on screen, it's something else. But this depends, sometimes the colour may appear good and sometimes it may burn and appear dim. S.L.I. need to choose attires that can make them seen on screen but until now, they

don't have a standard colour that can make them seen. They may appear on screen but their appearance disturbs the audience. In the middle of interpretation S.L.I. face changes of languages all of a sudden, at first it was Kiswahili then all of a sudden somebody appears speaking in English more over the English of a person whose accent is not easily understood. Sometimes the voice may not be in a noisy environment but just not recorded well to be audible enough.

In situations where the content is fast paced or complex, it's handled in different ways by S.L.I. in both ITV and TBC 1 such as trimming down some words and filtering is the best technique when the speaker's speed is beyond the interpreter's capacity. Sometimes they skip or drop some of the previous information so that they may synchronize with what is seen on screen to reduce creating bigger gaps which will miss taking proper information to the audience. 1 S.L.I. from TBC 1 added that at least half or quarter of the message should reach the audience by just taking what is important and dropping the unnecessary. When it happens to the scenario of five people who have to appear and say something in few seconds who are being cut before they finish, 1 S.L.I. from TBC 1 said that summarization is done since the most important thing is to the audience to get the message and not who said what. Two interpreter from TBC 1 said that when meeting complex issues, sometimes where possible informing the audience of the situation can be done. Also another interpreter from TBC1 said that it depends with how sharp your brain and speed can be to connect between the first and second message, and being careful not to lose the message.

Technological or logistical issues faced in delivering sign language services on TV as said by 1 S.L. L. from TBC1 that the process of interpretation in the brain and physical body. in that you have to listen very well, understand then command the hand to send information. Because they are aware of this challenge, they make sure that they have enough time to rest. When you are too busy during the day, you will notice the speed of processing information is too low, and that is the time you will fail tp synchronize information.

In order to ensure clarity and visibility on TV, challenges faced include, 1 interpreter from TBC 1 said that the pictures are not bright, they may be dark or too bright which may be due to equipment used and the smaller screen size leading to the audience coming much closer to the TV stretching their eyes which may lead to another disability. When they get tired of stretching their eyes they leave, so half of the message reaches them and half is gone. They only come back when they see an interesting picture. Another one from TBC 1 said that, the visibility and clarity of your work is all about the wideness of your signs and average speed. Regardless of the presenter's speed, you have to compose a moderate speed. This can be done using the techniques of filtering information. Just take what is basic without losing meaning. Also the interpreter added that of the clothes one puts on shouldn't be shouting such that a person fails to watch for a longer time. The interpreter from ITV deals with the technical personnel before the program begins to make sure the picture quality, audibility of voice, and positioning of the interpreter are okay.

S.L.I. face specific content types or topics that are particularly challenging to interpret. When it comes to ITV, the S.L.I. says that at first when he began he faced some challenges but now, not any more. 1 S.L.I from TBC 1 said that, since there's no specialization in different fields such as interpreting in hospitals, courts, and other places, the way sign language is taught here in Tanzania it's just general. Therefore, it's challenging when meeting with other fields so only the key message is taken. 2 interpreters interpreting the sports news segment challenges them especially that it's usually put at the end, and time is almost gone, so the speaker rushes and at that time the interpreter is already tired. Being tired and rushing, may lead to poor composition of signs and the message may not reach the audience appropriately. Again 2 interpreters continued in the same sports segment there are international news sports where they like mentioning names of the football players, cities, football pitches like Old Trafford and other terms like 'rebound' and teams like Lakers and yet those names are not popular in the country such that they could be given signs by the deaf instead of spelling them which is time consuming and on top of that you are in rush hours. Then on top of that they mention different types of games such as tennis, cricket, golf which all have no signs which becomes difficult to interpret. In the same sports segment, there are some stories which are narrated in such a style where by in sign language can hardly be interpreted because the brain hasn't practiced that style for so long. Changing to that kind of style means your changing the formation of the brain and on top of that, it can't go with the speed. This is because, there was a different style of content which was hard news and all of a sudden the brain needs to be tuned in another content which is soft news (music) that comes in which leads the

interpreter to change brain, physical movement, the face and everything. from this, specialization in sports news is required.

Due to these challenges, S.L.I. prepare themselves in different ways such as 1 interpreter from TBC 1 said that previewing helps to create the strategy to overcome by dropping some information to make sure the interpreter moves with time in that the audience won't miss the information, won't spoil the meaning but also not take everything to the audience. Sometimes pointing a person is done instead of mentioning their name. Another interpreter said that challenges shape them every day. Therefore, the interpreter prepares psychologically in that anything could happen at any time therefore being elastic is important, you may be in hard news, soft news(entertainment), sad news, serious news which all this requires character embodiment. Also having enough time to rest since the work has diversities can cope with the challenges since the brain has to be stable. Another interpreter avoids panic, because if that happens the message can be lost so calmness is being practiced to get the key point. The interpreter continued that the presenter has to be a few ahead of the interpreter to get an opportunity to cover some issues which are not right out of the seconds.

4.10 Training and Professional Development

In the two media houses ITV and TBC 1, the media does not provide any on going training or professional development. But S.L.l. stay updated with the latest developments in S.L.I. techniques in the following ways: The interpreter from ITV

attend BAKITA (Baraza la Kiswahili Tanzania) that offer S.L.I. trainings. Other 2 interpreters from TBC 1 attend training s prepared by Deaf Organizations, 3 interpreters also learn in hearing impaired whatsApp groups where the interpreter gets new vocabularies. Also in different seminars where the interpreter brushes techniques and any new issues that may arise. 1 interpreter keeps in touch with the hearing impaired to understand new vocabularies.

The interpreters have different opinions of their feelings in the adequacy of the training and resources provided such that the interpreter from ITV felt that the resources and training were adequate for the role. The rest from TBC 1, 2 interpreters said that they were not adequate. 1 interpreter added that they are workshops that are general, they don't specialize in any area unlike other countries were there's specialization. So they just learn normal societal issues and yet in the media they meet a lot. The other interpreter said that, since the trainings have just began, that are at least good but the trainings have to be on going. Much exposure is needed since the more they work the more they realize they need a lot including consultation. Apart from taking information, sign language interpreters are role models in the society and even others watch news simply because they learn S.L.I. from the interpreters.

Also S.L.I. gave different opinions and requests about additional support or resources that would be beneficial such that the interpreter from ITV said that, awareness from the society is much support needed since the society doesn't understand much about this service. 1 interpreter from TBC 1 had nothing to add. Another one added that

exposure is needed much and interpreters shouldn't just sit down to wait for the end product. Just like how journalists go in different workshops, interpreters also should do the same to improve on their work in different seminars as well such as election seminars. The last interpreter talked about S.L.I. health whereby some parts of their bodies are being affected when at work such as the spinal code, in that, when interpreting, the whole weight lies in the spinal code leading to weakness of the back muscles therefore, some kind of physiotherapy was needed since the available physiotherapists couldn't handle their cases according to their needs. And also tetragons are needed to massage the back. But also a therapy center has to be there to strengthen the S.L. I. health.

4.11. Interaction with the Hearing Impaired Community

All the 4 S.L.I. from ITV and TBC 1 receive feedback from the hearing impaired community about their interpretation and the feedback influences their work in the following ways: The interpreter from ITV and TBC 1 said that the feedback is taken positively since it brings encouragement to perform well especially when its positive though they receive both positive and negative feedback. They get to know that they are being watched and the audience gets something out of their work. They accept the corrections of their mistakes when given and change accordingly maybe to the signs, appearance (attires) colors and other things. Where there's something to add they add and where to reduce they do according to the guidelines of the profession not according to what they want.

The feedback from the hearing impaired is the one that assures the S.L.I. that their interpretation meet their needs and expectations. 2 interpreters from TBC 1 said that when there's silence that means everything is okay and their needs are met even if not to 100% since the hearing impaired have no habits of keeping quiet when a problem arises. 1 interpreter added that, it may not be 100% but in their discussions and whatsApp group they say they get the interpreter very well. The last interpreter said that flexibility that aligns with the context is what is done by the interpreter to meet their needs.

The key needs of the hearing impaired community that should be addressed in television broadcasts include the following: An interpreter from ITV said that they need to understand what is being said on TV; Other interpreters from TBC 1, 2 of them said that the size of the frame has to be increased, since it can lead to other disabilities and the size frame was given by TCRA to be 1/8. This has to be highlighted boldly so that it can help. 1 interpreter added that the needs of the service have to be ensured that they are compatible with the hearing impaired including the background color. The last interpreter said that the hearing impaired need more information than the one they receive now, all other programs need to be interpreted so that they can get information just like other hearing people since its their right to be informed.

4.11.1 Perception of the Role and Impact

The role of S.L.I. in enhancing accessibility for the hearing impaired in Tanzania is perceived differently by interpreters such that the interpreter from ITV said that, there's still a problem since many people who interpret call themselves S.L.I. aren't

supposed to have that title because they haven't fulfilled proper training. Anyone who knows alphabets and numbers and a few signs for sign language, call themselves S.L.I. This showed that there's still a great work of making awareness in our society. 2 other interpreters said that the role is fulfilling one of the requirements of UN Convention on the Rights of Persons with Disabilities (CRPD) which emphasizes the need for people with disabilities to have equal access to information, inclusivity through accessible formats like sign language and assistive technologies. The last interpreter said that the service is good since it helps the hearing impaired get information and now days they don't complain like before. On top of getting information from other social networks, they also get information from TV. At this time it's not easy for a hearing impaired person to lack important information unless if they come deep down in villages where there's no availability of such networks and those who don't know how to read, write and sign language. The interpreter continued that the country is being recognized as one of the countries that adheres to the rules and regulations of UN that nowadays Tanzania does inclusion for the hearing impaired.

All the 4 S. L. I. felt that their work is making a positive impact on the hearing impaired community because there are some specific instances where their interpretation work made a significant difference. The interpreters from TBC 1 shared these instances and the first one said that during corona period, all the measures that were to be taken to protect oneself were taken by the hearing impaired. The second interpreter said that, the hearing impaired participated in censor such that some of them did lobbying to make sure they participate in the work. Also, the issue

of door to door immunization to children below 5 years and other types of immunization since they sought information from the interpreter. The third interpreter said that about the issue of corona how they understood about it though there were still some complaints about the media not covering the information so well to this group of people. Finally, the interpreter from ITV said that it's hard to tell about the impact to the hearing impaired since research has to be done after the news. When they are silent that means everything is okay, but the interpreter couldn't figure out exactly what difference the interpretation made.

There are some strengths and weaknesses of the current sign language services provided by the media houses and when it came to ITV, the interpreter said that, the strength is taking information to the hearing impaired of what is being said. The weakness is that ITV has only one sign language interpreter and yet the information to be taken is beyond one interpreter's capacity. Other programs also have to be interpreted. An interpreter from TBC 1 said that there's a consecutive service for about 5 years now but other media houses they start and stop but for TBC 1 the interpretation service is assured every day. The weakness is that, the screen size is small and the interpreters are not able to cover all the programs since they are few. The other interpreter said that the strength is job availability, there are contracts, interpreters are not worried about it and they get their salaries as usual and on time unlike other media houses where people volunteer and don't even get transport allowance. Also all important things for a worker such as medical insurance, holidays and some trips are given to them.

4.12 Suggestions for Improvement

Suggestions for improving S.L.I. services in television media were as follows: The first interpreter from ITV and one from TBC 1 said that there has to be trainings or courses to give courage and make interpreters able. The interpreter from ITV continued that, also interpreters need to update themselves every day, they shouldn't be contented with what they have. 3 interpreters said that proper settings have to be done in news production including the screen size; More S.L.I. have to be employed and breaking news has to be on time to the hearing impaired. The last interpreter said that, an interpreter should get enough time to rest before work; should have a comfortable chair to sit on that supports the work and good for the spinal code; Finally, S.L.I. should work interchangeably and not for long hours, professionally not more than 30 minutes. But if that can't be afforded by our media houses, then at least after one hour they exchange instead of two.

The media house can better support S.L.I. in delivering high quality sign language interpretation in that, 1 interpreter from ITV said that to be enabled to attend trainings; Another one from TBC 1 said that, to make sure the S.L.I. get salary and allowance on time which brings motivation. Other 2 interpreter said that, there's a need for a special studio or specific room for an interpreter to avoid any distraction. And also have their own tools like cameras, speakers, monitor and every other thing needed to support the service. The last interpreter said that a massage bed should be bought for interpreters and any other worker who may wish to use it so that their spinal codes can be secured. Also allowance can be provided to interpreters at least

to do massage once in a week just like how engineers are given allowance for milk if the massage bed can't be bought.

Finally, an interpreter from ITV said that TCRA should punish media houses that don't incorporate S.L.I. in news and important issues. TCRA had set a policy that all TV news must have S.L.I. but it didn't put any punishment to the media houses who don't do that. It seems to the interpreter that many media houses are waiting for the punishment in order to put S.L.I. including ITV. 3 interpreters from TBC 1 said that, it's important to have a special room that keeps one away from disrupting activities. But also it's dangerous to be alone in the room since anything may happen such as experiencing natural needs in the middle of the program, you may feel bad at times and have no one to tell, can't give any signs and yet all the audience is looking at you. This is so because they assume after all the settings are done for you, then you are good to be left alone. But S.L.I. are human beings just like any other, therefore, they need people around to check on how they are doing. And also addition of interpreters is necessary since the work uses much energy.

4.13 Management team Discussions

In this part, the researcher was able to interview 1 respondent from ITV and 2 respondents from TBC 1, which was different from the initial plan. However, the interview went well and the respondents answered the questions. Some of a very few questions to some of them were not being able to be answered by them.

4.13.1 Hiring practices and Criteria

When hiring S.L.I., qualifications and experiences looked for differs in different media companies such that in ITV, they look for S.L.I. teachers not their students since most of the teachers got training from Germany where they acquire all skills effectively unlike those from Tanzania whose education level is still low. They may be having any qualifications above certificates. In TBC 1, one person from management said that the skim of service guides them, there are those with diplomas and those with degrees, but for degrees the take those with Bachelor of Education in Special needs. The other person said that they start with degree holders for profession level since they believe a person at that stage is conversant with the language. But also being with an experienced person is an added advantage.

Before hiring them the skill of S.L.I. are assessed in different ways in that in ITV the interview is done in the interpreters' training organizations; While in TBC 1, one person from management team said that they just look for experts and the other person said that the Tanzanian Employment Secretariat calls for an interview and selects the best. But in case of oral or practical interview, TBC members concerned can be called in the panel as judges and the interpreters' can be assessed. All the people interviewed from the management team in the two media houses said that, there's no process for selecting interpreters' who are specialized in certain contents, they just take an interpreter who fits everywhere since there's no specialization in that field in Tanzanian education.

4.13.2 Training and Professional Development

Provision of additional training or professional development for S.L.I. after they are hired depends with the organization, for instance in ITV the training is provided in such a way that people from BBC may come and have courses to offer and so the S.L.I. are included in the program. Sometimes the American embassy and others like UK embassy may give training that take place in their studios and also S.L.I. are called to have their own training. In a year, the training may be twice but it depends since ITV requests for them and they reply accordingly. All the 2 respondents said that there are no professionals to train that at TBC 1 so the interpreters attend training in their organizations which may happen twice or thrice a year depending with the situation, availability and financial issues. By doing so, TBC ensures and ITV ensures that their interpreters stay updated with new sign language terms or changes in the language.

4.13.3 Challenges in Providing Sign Language Services

The main challenges faced in recruiting in recruiting and retaining skilled S.L.I. are many for instance in ITV, S.L.I. when they come to work, they are fresh from school, they learned in class but not done any practical, so it's a challenge to direct them. They may know how to sit in the studio but may not arrive on time, the color of the clothes may be challenging until you make them understand. Sometimes they may stop working since they may see the work done and the payment given are two different things until you start pleading with them. They like high payment that's why most of them are being changed. Their studies are so hard and yet ITV hasn't reached to that point of paying them accordingly just like other organizations. Sometimes

they feel they are taken for granted due to the kind of work they do, their work may not be given priority like others though others do understand and others don't. Sometimes the interpreters may get training from different embassies through ITV, after they are done, they disappear since most of them get scholarships to study abroad for free about the same field; they send their interpretation videos from ITV to sponsors abroad and they are taken.

At TBC 1, all the 2 respondents talked about the issue of having few interpreters where the available work is beyond their capacity. 1 respondent added that, on top of being few, they are needed in many places and it's not easy to get someone who is just fixed at TBC 1. They have only 1 interpreter among the 3 who is permanently employed but professionally came from a different field, so they haven't got the exact person who is specialized in special education just like how the skim of service guides.

 However, there are particular challenges related to the Tanzanian context and media industry in that, 1 respondent from TBC 1 said that a person with special education profession has no journalism or mass communication ethics. They are fixed to give education to people with special needs but they are not groomed to fit in the media until further training takes place which takes time. The other respondent from TBC 1 said that, the sign language context in Tanzania is not well understood. Awareness is needed about this group of people. The hearing impaired community need information just like any other person. Some information is given to them and some is not given since interpretation is done on a few important programs due to lack of

enough interpreters which hurts them so much. But again, the Tanzanian constitution is clear that everybody has the right to get information. But this has not being worked upon effectively in one group of people.

The respondent from ITV said that the media industry has its own shortcomings because they don't sponsor the S.L.I. at least if they were being paid just a little bit, it could be better. But also the education ministry doesn't support them so much, they are still neglected, their worth is not seen so much. They are only looked for when there's a need then afterwards they are forgotten. They are not given teaching equipment since when at school and the education ministry doesn't sponsor them, they are not valued just like others.

Situations are handled differently when an interpreter is not available for instance at TBC 1 there's no such a challenge, it can hardly happen since there's a timetable organized, but in case if it happens, they look for replacement. At ITV, the respondent said that, they learn their psychology and they talk to them calmly, since they can listen and love somebody who talks to them calmly. But still if they don't show up, the programs go live without them because people can't miss programs because of interpreters. But when they arrive, the producer puts them on air.

These problems can be addressed differently like for example the respondents from ITV said that, technology has grown, the interpreter may not be at the particular place but still technology does its work and still the interpreter can be in the live program. they can be in different studios from the presenter's and sometimes can be

at home and use their phones as directed and can still be live though it's risky. On top of this, there are still some technological challenges such as the power may go off or the charger of the phone goes off and maybe the bundle gets over which leads to the interpreter to disappear from the live program. The solution planned here is to improve the available systems and change the structure though in the process of changing, there are some challenges too since Tanzanian technology hasn't grown to that extent.

4.13.4 Evaluation and Quality Control

Monitoring and evaluation of the performance of S.L.I. during their tenure is done in the following ways: The respondents from ITV said that they use companies that do monitoring, they go in the streets and have discussions with people, so from their response, it's when we do evaluation to understand where we want wrong and what can be improved. But again we receive so many complaints from our hearing impaired audience since most of the time S.L.I. are unavailable. 1 respondents from TBC 1 said that there's a system called PEPMIS where the interpreters fill their responsibilities and their leader approves. The other respondents said that, there's no monitoring since they don't know sign language, but since the Deaf organization watches them, if there could be any problem, they could have told them.

The question about whether there's a formal feedback system in place from viewers or the hearing impaired community was answered differently, for instance, at TBC 1, 1 respondent said that that issue is taken to be worked upon. The other respondent

said that, in the government there's what we call E-Mrejesho, where by the person dealing with communication, gets feedback from the audience.

When it is discovered that the S.L.I. doesn't meet the expected standards, there are some steps which are taken such as the respondent from TBC 1 said that, they find replacement, but if a person needed further training, they looked for it. They also do some counselling, since they have a counsellor who attends to the workers twice a week. The other respondent had no response about it. And finally, the respondents from ITV said that it's hard to take any measures since S.L.I. capacity in Tanzania is still low. Maybe just giving more training to put them to the standard and this must take time.

4.13.5 Demand and Audience Needs

Determination of which programs require sign language services is done in such a way that at ITV, the respondent said that, they look at the content type, they see if it,s an important program or information for all Tanzanians to know, that's when they put sign language interpretation. 1 respondents from TBC 1 said that they look at the audience demand and content type though not all are met due to lack of enough S.L.I. And the final one said that, they look at the content type. However, about the media's regular engagement with the hearing impaired community to understand their needs and expectations regarding sign language services was responded differently in that 1 respondent from TBC 1 and 1 from ITV said that they don't usually engage with them and the other one said that at some point they do when working with the community but it is not TBC's managerial.

The issue of noticing any changes in the demand for sign language services over time had different answers for instance, in ITV the demand is being noticed but there's nothing like adding more interpreters. At TBC 1, 1 respondent said that there's no demand and the other one said that the demands have never stopped, the calls have never stopped since they need interpreters in all programs. Although it is TBC's responsibility to take information to every Tanzanian, solving that case is difficult because it is above them. But the most important thing is to emphasize people to study sign language interpretation so that the profession may grow and the government employs them, then TBC 1 receives them because the demand is high.

4.13.6 Future Plans and Improvements

The plans that these media houses have to expand or improve sign language services in the future as said by the respondent from ITV is, they were planning to begin a sign language program for at least few minutes but the problem came in where to get the interpreters who could conduct the program by coming into agreement through a contract. This brought a lot of discussions and ended just like that. That's why there's no improvement in that area since there are no any upcoming initiatives or technologies considered. At TBC 1, 1 respondent said that they want S.L.L. to be available, and their plan is to make sure every program is interpreted from morning to midnight but still don't know how to go about it. The other respondent said that, they have plans to expand since now they have got news that university of Dodoma trains a lot of students in this field. So they are planning to request for a permit to employ more of them. The last respondent said that, they want to use artificial

intelligence to incorporate with media and cut across S.L.I. and they have just began and haven't yet reached anywhere.

The role of sign language services evolving in the these media houses over the next five years is seen differently by respondents such that at ITV, sign language won't grow because the government doesn't care about them that much. The media itself has no business with them completely, it doesn't give them priority just like other professions. The media chases for something that is beneficial, but for the case of interpreters, they don't see any beneficial returns to their company. The interpreters are put aside completely and the respondent doesn't think if they can be needed any more in future. At TBC 1, 1 respondent said that all programs will be having S.L.I. since they are requesting for the permit to employ them. The last respondent said that, the pace is still low, however much the late 5th president ordered all media houses to have S.L.I. However, research hasn't being done to tell how many media houses have and how many don't have. If only a law is stipulated that every media house should have a S.L.I., when that law is seen, in the next five years we shall be talking about something else.

The respondents gave opinions about additional resources and support they believe are necessary to enhance the quality and availability of sign language services in such a way that at ITV the respondent said that the government should recognize them that they are of importance to the society. All resources to be used in the media for interpreters should be considered. Also education to the media about the hearing impaired and their interpreters should be given to the media houses. There's no law to

protect them that's why they are misused. And if possible, a law should be set in the media houses that the S.L.I. must be there and have to be employed. A respondent at TBC 1 said that money is needed to support them. And the final respondent said that they need to make them comfortable. When they go to institutions, they are given incentives just like other workers, it was said in a certain meeting that since they are doing an extra job, they have to be given a special token apart from the incentive they get which will come to motivate others to do that field.

Apart from the challenges and successes the respondents experienced in providing sign language services, they had something else to add. When we start with ITV, the respondent said that, people refuse to study the course because there are few facilities which don't motivate them that's why there are few S.L.I. If there were facilities, people would go and study the course just like other courses such as doctors and lawyers. But also, the society doesn't accept their services because there's no awareness. The language should start in lower levels. Poverty also is a big challenge since their income is too small and yet the government and society have left them.

Another respondent from TBC 1 wished the S.L.I. knew how important they are. When dealing with a person of special needs, it's a great reward when you do justice to them. Let them know that they are taking the message from the media to the hearing impaired, but also, they are handling a very special group. Therefore, justice has to be done. Let S.L.I. be more committed, serious in their work and prepare themselves very well. S.L.l. are supposed to be part of the production in the news bulletin or the program because, they aren't supposed to meet in the program what

the presenter says but they have to know before what will be presented. Finally, the last respondent says that just money is needed for them and most of them have contracts so the respondent wishes they get a permanent job.

4.14. Analysis of Discussions

This discussion focuses on the four specific objectives of the study namely; assessment of availability of sign language services to the hearing impaired community in television media; Evaluation of adequacy of sign language services to the hearing impaired community in television media; Assessment of the extent to which the sign language interpreters on TV media meet the demands and evaluation of challenges that sign language services face when attending to the hearing impaired community in television media.

4.14.1 Availability of Sign Language Services to the Hearing Impaired Community

Analysis of the findings for the first specific objective is focused on assessing the availability of sign language services to the hearing impaired community in television media. The result from this specific objective provides insight into the availability of the service. The findings revealed that 73(72%) of the hearing impaired watch television and 27(26.7%) don't watch. Among them, 70(69.3%) agreed that there are television programs that provide sign language interpretation services which shows to a greater extent these services are provided to them and 30(29.7%) were programs watched without interpretation. Among the 13 channels that were mentioned to provide the service, TBC 1 was the highest which was

mentioned 52 times and yet other channels were not mentioned even more than 20 times. The program type mostly shown is news at 62(61.38%) followed by educational programs at 9(8.9%) and the least is entertainment at 0(0.0%) and other programs were less than 10%.

Findings of this specific objective were supported by the management crew respondents who said that there are only few programs that are being interpreted which include news and other important programs due to lack of enough sign language interpreters. And this was also supported by the S.L.I. themselves who mostly interpreted news and other important events. And even one interpreter went ahead and said that, in their media house there's just one program that happens once in a week that is being interpreted which shows how much information doesn't reach the hearing impaired. These findings were also supported by Machado & de Oliveira, 2020; Baker & Lee, 2019) who said that the inconsistent implementation of these services, as noted by these authors, highlights a broader systematic issue that requires urgent attention to ensure that the hearing impaired community has equal access to television content.

Kisanga, 2018; Mwansoko,2022) supported the findings of this specific objective by saying that, 'the lack of legislative enforcement regarding mandatory sign language interpretation in public broadcasts means that television stations do not consistently prioritize or include interpreters in their programming.' While significant 73% of the hearing impaired audience actively seeks out programs with sign language services, the availability of these services is concentrated on just a few channels and specific

programs. This indicates high demand but limited options for accessible viewing, as most channels and programs still do not provide adequate sign language support. The fact that one channel is frequently mentioned (52 times) compared to others (not exceeding 20 mentions) suggests a heavy reliance on this single channel by the hearing impaired audience. This imbalance indicates that, despite the availability across 13 channels, the service is primarily accessible on only one. The findings show that, the concentration of sign language services in one program at 62(61.38%) compared to the next highest at 9(8.9%) highlights a lack of variety in accessible programming. This restricts hearing impaired viewers' choices, forcing them to depend on one program for sign language accessibility.

4.14.2 Adequacy of Sign Language Services to the Hearing Impaired
   #### Community in Television Media

The second objective of the research evaluated the Adequacy of sign language services to the hearing impaired community in television media. The findings revealed that the majority 39(38.61%) of the hearing impaired audience rated the quality of the service as fair, followed by those who rated it as excellent 28(27.72%) and good(22%), with only a small minority (5%) rating it as poor. This indicates a moderate level of satisfaction but suggests that there's room for improvement.

The findings were also supported by respondents from the management team who some of them said that, the interpreters who come to the media are groomed to teach the hearing impaired so they find it difficult to switch to some other activity which is interpretation in the media setting, so they may not be of the best quality. But again,

the S.L.I. themselves said that learning doesn't have to stop and also they get feedback which is both positive and negative which shows that they still need to improve on what they already have to be of a better quality. From the hearing impaired, it was said that, sign language is a combination of facial expression, body movement and even feelings and yet most of the interpreters don't reach to that point. Also one of the interpreters had no any sign language certificate but works through experience which reduces the quality of the work. These findings were supported by Dewi and Rodly (2022) and Kurniawan (2017) that sign language is an essential non-verbal communication method for the deaf and speech impaired. it utilizes standardized body movements and gestures, frequently employed in television broadcasts to convey meaning.

About coverage of essential information, the majority 46(45.54%) felt that sign language services rarely covered all essential information in programs, with 18(17.82%) indicating coverage was adequate only sometimes. Only 16% felt information was always adequately covered, suggesting substantial gaps in providing full accessibility. The findings were supported by the respondents in the management team that they do cover the most important information that they feel all Tanzanians should know but it was said that they don't do it fully due to lack of enough sign language interpreters. But again this was evident by one of the interpreters that the hearing impaired got information about the corona disease but it was not fully covered to them. But another interpreter added that, sometimes they get information about something when it's no longer breaking news. These findings were also supported by (Microsoft Research, 2023) where a 2023 study further

emphasizes the frustration deaf individuals experience in accessing real time information, especially during emergencies. The absence of sign language interpreters on major networks during such broadcasts exacerbates this accessibility gap.

When it comes to interpreters training and skills, just under half 50(49.5%) believed interpreters were well trained and skilled, while 27(26.73%) were unsure, and 16% felt interpreters were not adequately skilled. This shows overall confidence in interpreters' competence but points to a need for standardized training to ensure consistency. This is evident with the respondents from the management crew that they look for experts from their organizations and look for those with qualifications and experience may be an added advantage. But also the sign language interpreters support these findings since they said that they attend training in their organizations to brush what they already know.

But again, the findings were also supported by (Dal Fovo, 2016; De Meulder & Heyerick, 2013; Del Vecchio & Franchi, 2013) who said that, while the inclusion of sign language interpreters on TV and in the media is praiseworthy, it does not necessarily guarantee high quality service that fully benefits sign language users. Currently, there's no formal training program for media sign language interpreters, and there is limited information on how to provide optimal sign language interpreted media. Most interpreters learn on the job, some receive mentorship from more experienced colleagues, and a few have taken short courses on the topic. So far, only

a limited number of studies have explored sign language interpretation in TV and media settings.

4.14.3 The Extent to Which the Sign Language Interpreters on TV Media Meet the Demands of the Hearing Impaired

The third objective of the research was to assess the extent to which the sign language interpreters on TV media meet the demands of the hearing impaired. The findings revealed that, about the relevance of the content, the majority of the hearing impaired felt that the sign language services only partially 32(31.68%) met their daily information needs, with a nearly equal proportion indicating either yes 29(28.7%) or no 31(30.69%). This suggests mixed effectiveness in addressing their information requirements.

The findings are supported by sign language interpreters where some of them said that, when the hearing impaired are silent, it means that everything is okay even if not to 100%. Also another said that, their demands are not met because they get tired of straining their eyes on the small screen size of the S.L.I. leading to some information reaching them and some other gets lost. Also, about the background color and the color of the interpreter's attires which may be too bright or too dark which is not friendly to their sight. Also, the interpreters supported the findings by talking about the issue of the speed where their speed is due to the presenter's. When this happens, the hearing impaired don't understand and so their needs are not met.

The findings were also supported by other scholars where they said that, In television news broadcasts, sign language interpretation is often provided through a small video display in the corner of the screen, where an interpreter communicates the news in sign language (Kurniawan, 2021). Despite this, a lack of sensitivity towards the informational needs of the hearing impaired persists, limiting their access to important content. Many hearing-impaired individuals employ alternative strategies, such as lip-reading, analyzing visual cues, and reading captions to access news content (Yunitasari, 2019).

The findings also show that hearing impaired identified many specific programs and times where sign language services were unavailable but desired. This indicates a significant gap in accessible programming that aligns with their preferences. This was supported by the management crew respondents that not all programmes are being interpreted due to lack of enough sign language interpreters. But again, (Mgonda, 2018) supported this by saying that, in Tanzania, television remains one of the most accessible forms of mass communication. However, for the Deaf and hearing-impaired community, access to television content is significantly limited due to the lack of comprehensive sign language services. Despite national policies advocating for inclusivity and equal access to information, the availability of sign language interpreters on television is inadequate (Mgonda, 2018).

The findings also showed that satisfaction levels varied, with 7.92% reporting they were very satisfied, 28.71% satisfied, and 16.83% feeling neutral. However, dissatisfaction was notable, with 25.74% dissatisfied and 9.98% very dissatisfied.

This highlights significant dissatisfaction among a portion of the audience. These findings point to limited alignment of sign language services with the daily needs and program preferences of the hearing impaired, contributing to mixed satisfaction levels and a need for better-targeted services. This is also supported by one of the respondents in the management team who said that the hearing impaired's calls have never stopped to their media house since they need more services in other programs. But also one of the interpreters is a witness to this especially during corona period when not all information was covered fully to them just like other people. And another interpreter added that sometimes they get information when it's no longer breaking news, which means, they can hear it from other people apart from the television.

The findings were also supported by the empirical literature on the accessibility of sign language services to the hearing impaired community in television media in Tanzania is relatively sparse compared to other regions. However, a study by Mweri, Judith (2014) examined the accessibility of information for the deaf community in Tanzania, with a particular focus on television media. Research findings highlighted several challenges, including the limited availability of sign language interpreters on TV, the poor quality of interpretation, and the lack of awareness among broadcasters about the needs of deaf viewers.

4.14.4 Challenges Facing Sign Language Services

The fourth objective was to evaluate the challenges that sign language services face when attending to the hearing impaired in television media, the findings revealed

that, technological challenges are a significant barrier to the effective delivery of sign language services in television media for the hearing-impaired community in Tanzania. With 72(71.29%) of respondents reporting technological challenges, it suggests that the infrastructure or tools required to provide seamless and high-quality sign language services may be inadequate or inconsistent. The small percentage (13.86%) who did not experience such challenges indicates that when the technology is functional and appropriately utilized, it is possible to deliver satisfactory services. These findings underscore the need for investments in better technology, training for operators, and system upgrades to ensure accessible and reliable sign language services for the hearing-impaired audience.

Apart from the technological challenges, the findings imply several broader issues related to the accessibility and adequacy of sign language services for the hearing-impaired community in Tanzanian television media: The mixed satisfaction levels and the perception that sign language services only partially meet daily information needs suggest that the services provided are not fully aligned with the hearing-impaired community's expectations and requirements. Beyond technology, logistical and structural gaps such as the lack of skilled personnel, limited program coverage, and insufficient funding hinder the expansion and improvement of sign language services. Disparities in interpreter skills and training, as well as inconsistencies in the quality and availability of services, point to a need for standardized practices and policies across television media. Despite the challenges, the findings also reveal opportunities for growth. For example, the community's reliance on and engagement

with programs that do provide sign language services highlight a demand that can drive improvements if adequately addressed.

The findings were also supported by sign language interpreters respondents who said that, about the issue of the dressing code, there's still no specific color that will match with the needs of the hearing impaired and also some of them said that, they needed cameras or lighting that will reflect instead of refract the light so that they can be seen clearly. Also some of the new camera men or women who may still lack awareness and knowledge of the settings of the S.L.I. which may lead to poor visibility. The findings were also supported by the management crew respondents who most of them said funding is a challenge for provision of better service, like for example in ITV, interpreters are being paid per program and so when they get more interpreters, t will so expensive for them. And another one said that apart from the incentives interpreters receive, there's still more to be paid to them which can influence more people to study the course due to the good services they give.

But also, despite legal frameworks such as the Americans with Disabilities Act (ADA) and International efforts to ensure equal access to information, there are ongoing challenges in the provision of sign language services in television media for the hearing impaired. Research by Machado and de Oliveira (2020) indicates that while some broadcasters have made efforts to include sign language interpretation during live events, these services are often inconsistent, with interpreters either absent or not clearly visible on the screen. This also supported the above findings.

But also, there was a group of respondents in the hearing impaired community in all the four objectives who gave irrelevant answers who were termed as research error and some of them didn't reply some of the questions completely and the majority of then never responded to the open ended questions. For example, in the question about TV stations that provided S.L.I., 29(28.71%) respondents never replied; About satisfaction with the service 11(10.89%) never replied; about challenges faced by interpreters, 33(32.67%) didn't reply and in the same question 8(7.92%) gave irrelevant answers; About television station barriers 36(35.64%) respondents never replied and 29(28.71%) respondents never replied about suggestions for improvement and some other questions.

The findings about the incomplete and irrelevant responses from the hearing-impaired participants reveal several implications and insights: The high number of non-responses to open-ended questions suggests that the hearing-impaired participants may have found it challenging to articulate their thoughts or felt unsure about how to respond. This could stem from: Limited experience in expressing needs through such format; Uncertainty about how their input would influence the outcome; possible misunderstanding of the question's intent due to communication barriers. Some respondents provided irrelevant answers, indicating that the phrasing or context of the questions might not have been clear or relatable to their experiences. This highlights a potential disconnect between the design of the questionnaire and the participants' ability to engage with it meaningfully.

The non-responses, especially for suggestions for improvement (28.71%), imply that participants may: Lack trust or confidence that their feedback will lead to actionable changes; Feel disempowered or not accustomed to being consulted on such matters; Require more structured prompts or examples to better convey their thoughts; The findings indicate that the data collection methods used may not have been fully adapted to the needs of the hearing-impaired community. Therefore, using more visual aids, structured multiple-choice options, or moderated discussions might yield richer responses.

Irrelevant responses about places they wished the service to be available (e.g., courts, markets, bus stations, hospitals, police stations) reveal a broader awareness of the gaps in accessibility in various public domains, even if unrelated to the specific focus of the research. This highlights the pervasive nature of accessibility challenges beyond television media. The limited engagement in some questions may reflect a lack of empowerment among the hearing-impaired community. They might not feel adequately represented in decision-making processes or see themselves as stakeholders who can influence change.

This implies that, future research with hearing-impaired participants should employ methods that consider their unique communication needs, such as simpler question structures, visual aids, or focus groups with interpreters. Building trust and encouraging active participation through advocacy and inclusive practices are crucial. The responses, even irrelevant ones, uncover the broader struggle for accessibility in daily life, pointing to areas for future intervention beyond media accessibility.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The study assessed the accessibility of sign language services to the hearing impaired community in Tanzania: The case of ITV and TBC 1. This chapter presents the summary of the major findings of the study. The chapter further provides a summary of the data collected, analysis of data, discussions of the findings on each research question and the logical interpretation emanating from the findings. Finally, the chapter makes recommendations on possible areas for further research.

5.2 Summary of the key Findings

The study examined the accessibility of sign language services to the hearing impaired community. Specifically, the study had four objectives namely, to assess availability of sign language services to the hearing impaired community in television media; to evaluate adequacy of the sign language services to the hearing impaired community in television media; To assess the extent to which the sign language interpreters on TV media meet the demands of the hearing impaired community and finally, to evaluate challenges that sign language services face when attending to the hearing impaired in TV media.

The result from the first specific objective provides insight to the availability of sign language services to the hearing impaired community in television media in Tanzania. The findings revealed that, sign language services are limited and unevenly distributed, meaning the hearing-impaired community has limited access to

diverse, sign language-accessible content. The second objective revealed that, there's a need for improvement in the quality and comprehensiveness of sign language services to meet the information needs of the hearing-impaired audience. The findings of the third objective revealed that, sign language services are not sufficiently meeting the expectations of the hearing-impaired audience, pointing to a need for more consistent, comprehensive, and accessible services. And finally the fourth objective revealed that, there were significant barriers in terms of technology and service delivery, suggesting a need for better infrastructure, more skilled interpreters, and improved methods of engaging the hearing-impaired community.

5.3 Conclusion

The research reveals that, while sign language services are available on some Tanzanian television channels, they are far from meeting the full needs of the hearing-impaired community. This is because, although a significant proportion of the hearing-impaired audience seeks sign language services, these services are concentrated on a small number of channels and programs. This lack of widespread availability restricts access to essential content. The quality of the services provided is generally considered fair by the majority of respondents, with substantial gaps in the coverage of essential information. Many hearing-impaired viewers report that the services fail to meet their daily information needs consistently.

The hearing-impaired community's satisfaction with the sign language services is mixed, with notable dissatisfaction regarding both the adequacy and quality of services. This suggests that sign language services do not fully meet the expectations

of the community, especially in terms of comprehensiveness and accessibility. The research identifies significant technological challenges that hinder the delivery of effective sign language services, including poor interpreter visibility and technical disruptions. These issues point to the need for better infrastructure and more skilled interpreters. Furthermore, the high number of non-responses and irrelevant answers, particularly in open-ended questions, suggests barriers in engaging the community and gathering meaningful feedback. The findings also highlight that the hearing-impaired community desires sign language services beyond television, citing places like courts, markets, and hospitals as key areas where they seek accessibility. This reflects a broader need for inclusivity in public spaces and services.

5.4 Recommendations

Based on the study findings, the following recommendations should be taken into consideration so as to improve on the accessibility of sign language services on television media and other places.

i) There is a need for a more widespread implementation of sign language services across all channels and programs to increase accessibility;

ii) Focus on enhancing the quality and comprehensiveness of the information provided through sign language to better meet the needs of the hearing-impaired community;

iii) Invest in better technology, equipment, and training for interpreters to ensure that sign language services are visible, clear, and consistent;

iv) Advocate for laws that mandate television broadcasters to provide sign language services consistently across all programs, not just select ones. This could be incorporated into national accessibility or disability rights legislation.

v) Promote public awareness campaigns to inform both service providers and the general public about the importance of sign language services, backed by legal frameworks that prioritize the inclusion of people with disabilities*; and*

vi) TCRA should set clear standards for the quality of sign language services, including guidelines on the visibility of interpreters, the timing and integration of sign language, and the inclusion of essential information in broadcasts.

5.5 Suggestions for Further Research

Since the study was based on the accessibility of sign language services on TV media, and while the study recognized that funding is one of the obstacles in providing the service, and also the service is not put to consideration that much, there's a need to do a research on cost-benefit analysis of implementing widespread sign language services. Research should be carried about effectiveness of legal frameworks in promoting accessibility in Tanzania.

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APPENDICES

QUESTIONNAIRE TITLE

"Assessment of Sign Language Services for the Hearing Impaired in Television Media in Tanzania"

Section 1: Demographic Information

1. **Age**:

   - What is your age?

   - ☐ Under 18

   - ☐ 18-25

   - ☐ 26-35

   - ☐ 36-45

   - ☐ 46-55

   - ☐ 56 and above

   Gender:

   - What is your gender?

   - ☐ Male

   - ☐ Female

   - ☐ Prefer not to say

   Hearing Status:

   - What is your hearing status?

- ☐ Deaf

- ☐ Hard of Hearing

- ☐ Hearing

Location:

- Where do you live?

- [Text box for respondents to enter their location]

Section 2: Availability of Sign Language Services

5. **Access to Television**:

- Do you regularly watch television?

- ☐ Yes

- ☐ No

6. **Sign Language Services**:

- Are there television programs you watch that provide sign language interpretation?

- ☐ Yes

- ☐ No

7. **Television Stations**:

- Which television stations provide sign language services in Tanzania?

- [Text box for respondents to list stations]

8. **Program Types**:

- What types of programs provide sign language services?

- ☐ News

- ☐ Entertainment

- ☐ Educational

- ☐ Religious

- ☐ Other (please specify): _____

Section 3: Adequacy of Sign Language Services

9. **Quality of Interpretation**:

- How would you rate the quality of the sign language interpretation provided on television?

- ☐ Excellent

- ☐ Good

- ☐ Fair

- ☐ Poor

10. **Coverage of Information**:

- Do you feel that the sign language interpretation covers all the essential information in the program?

- ☐ Always

- ☐ Most of the time

- ☐ Sometimes

- ☐ Rarely

- ☐ Never

11. **Interpreter Skills**:

- Do you believe that the interpreters are well-trained and skilled in sign language?

- ☐ Yes

- ☐ No

- ☐ Unsure

Section 4: Meeting the Demands of the Hearing Impaired

12. **Relevance of Content**:

- Does the sign language service meet your daily information needs?

- ☐ Yes

- ☐ No

- ☐ Partially

13. **Program Accessibility**:

- Are there specific programs or times when sign language services are unavailable that you would like to be covered?

- [Text box for respondents to specify]

14. **Satisfaction**:

- How satisfied are you with the current availability of sign language services on television?

- ☐ Very satisfied

- ☐ Satisfied

- ☐ Neutral

- ☐ Dissatisfied

- ☐ Very dissatisfied

Section 5: Challenges Facing Sign Language Services

15. **Challenges Faced by Interpreters**:

- What challenges do you think interpreters face when providing sign language services on television?

- [Text box for respondents to answer]

16. **Television Station Barriers**:

- What do you believe are the main barriers for television stations in providing sign language services?

- [Text box for respondents to answer]

17. **Technological Challenges**:

- Have you experienced any technological issues (e.g., poor visibility of interpreters, timing mismatches) with sign language services on television?

- ☐ Yes

- ☐ No

18. **Suggestions for Improvement**:

    - What improvements would you suggest for sign language services on television?

    - [Text box for respondents to answer]

Section 6: Additional Comments

19. **Open Feedback**:

    - Please provide any additional comments or suggestions regarding sign language services in television media.

    - [Text box for respondents to provide open feedback]

Questions for the Management Team

1. Hiring Practices and Criteria

- **What qualifications and experience do you look for when hiring sign language interpreters?**

    - *Follow-up*: Do you require specific certifications or levels of proficiency in sign language?

How do you assess the skills of sign language interpreters before hiring them?

    - *Follow-up*: Are there practical tests, interviews with a panel, or references from previous employers involved in the hiring process?

What is your process for selecting interpreters for specific programs (e.g., news, entertainment, educational content)?

- *Follow-up*: Do interpreters specialize in particular types of content?

2. Training and Professional Development

- **Do you provide any additional training or professional development for your sign language interpreters after they are hired?**

  - *Follow-up*: If yes, what type of training is offered, and how often is it conducted?

How do you ensure that interpreters stay updated with new sign language terms or changes in the language?

3. Challenges in Providing Sign Language Services

- **What are the main challenges you face in recruiting and retaining skilled sign language interpreters?**

  - *Follow-up*: Are there any particular challenges related to the Tanzanian context or media industry?

What challenges have you encountered in scheduling or coordinating sign language interpreters for live broadcasts?

- *Follow-up*: How do you handle situations where an interpreter is unavailable?

What technological or logistical issues have you faced in delivering sign language services on television?

- *Follow-up*: How have you addressed or are you planning to address these challenges?

4. Evaluation and Quality Control

- **How do you monitor and evaluate the performance of sign language interpreters during their tenure?**

  - *Follow-up*: Is there a formal feedback system in place from viewers or the hearing impaired community?

What steps do you take if a sign language interpreter is not meeting the expected standards?

- *Follow-up*: Do you offer additional training, or are there other measures in place?

How do you ensure the consistency and quality of sign language interpretation across different programs and interpreters?

5. Demand and Audience Needs

- **How do you determine which programs require sign language services?**

  - *Follow-up*: Is this based on audience demand, content type, or other factors?

  Do you regularly engage with the hearing impaired community to understand their needs and expectations regarding sign language services?

- *Follow-up*: If yes, how do you incorporate their feedback into your hiring and service provision processes?

Have you noticed any changes in the demand for sign language services over time?

- *Follow-up*: How have these changes influenced your hiring practices or the scope of services offered?

6. Future Plans and Improvements

- **What plans do you have to expand or improve sign language services in the future?**

  - *Follow-up*: Are there any upcoming initiatives or technologies you are considering?

How do you see the role of sign language services evolving in your media house over the next five years?

What additional resources or support do you believe are necessary to enhance the quality and availability of sign language services?

Closing

- **Is there anything else you would like to add about the challenges or successes you've experienced in providing sign language services?**

Questions for Sign Language Interpreters

1. Background and Experience

- **How long have you been working as a sign language interpreter in the media industry?**

  - *Follow-up*: What specific programs or types of content do you usually interpret (e.g., news, entertainment, educational)?

What qualifications or certifications do you hold in sign language interpretation?

  - *Follow-up*: Did you receive any specialized training for interpreting in the media?

How did you get into sign language interpretation for television, and what motivated you to choose this career path?

2. Job Responsibilities and Work Environment

- **Can you describe a typical day in your role as a sign language interpreter in this media house?**

  - *Follow-up*: How do you prepare for live broadcasts or pre-recorded programs?

How do you coordinate with the production team to ensure smooth delivery of your services?

  - *Follow-up*: Are you involved in any pre-broadcast meetings or briefings?

What tools or resources do you use to perform your duties effectively?

  - *Follow-up*: Are there any technological aids that assist you in your interpretation work?

3. Challenges and Difficulties

- **What are the main challenges you face while interpreting live television broadcasts?**

  - *Follow-up*: How do you handle situations where the content is fast-paced or complex?

Have you encountered any difficulties with the timing or synchronization of your interpretation on television?

  - *Follow-up*: How do you manage these issues when they arise?

What challenges do you face in ensuring that your interpretation is visible and clear to the audience?

Are there any specific content types or topics that are particularly challenging to interpret?

  - *Follow-up*: How do you prepare for these challenges?

4. Training and Professional Development

- **Does the media house provide any on going training or professional development for you?**

  - *Follow-up*: If yes, what kind of training have you received?

How do you stay updated with the latest developments in sign language and interpretation techniques?

Do you feel that the training and resources provided are adequate for your role?

  - *Follow-up*: What additional support or resources would be beneficial?

5. Interaction with the Hearing Impaired Community

- **Do you receive feedback from the hearing impaired community about your interpretations?**

    - *Follow-up*: How does this feedback influence your work?

    How do you ensure that your interpretations meet the needs and expectations of the hearing impaired audience?

    What do you believe are the key needs of the hearing impaired community that should be addressed in television broadcasts?

6. Perception of the Role and Impact

- **How do you perceive the role of sign language interpreters in enhancing accessibility for the hearing impaired in Tanzania?**

- **Do you feel that your work is making a positive impact on the hearing impaired community?**

    - *Follow-up*: Can you share any specific instances where your interpretation work made a significant difference?

    What do you believe are the strengths and weaknesses of the current sign language services provided by this media house?

7. Suggestions for Improvement

- **What suggestions do you have for improving sign language services in television media?**

    - *Follow-up*: Are there any specific changes or innovations you would like to see implemented?

How can the media house better support you in delivering high-quality sign language interpretation?

What additional resources, tools, or support do you think would enhance the quality of your work?

Closing

- **Is there anything else you would like to share about your experience as a sign language interpreter in television media?**

DODOSO

"Tathmini ya huduma ya Lugha ya Alama kwa watu wenye chanagamoto ya usikivu katika vyombo vya habari vya televisheni nchini Tanzania".

Sehemuya 1: Taarifa za Idadi ya Watu

5.   **Umri**:

Una umri gani?

- ☐ Chini ya 18

- ☐ 18-25

- ☐ 26-35

- ☐ 36-45

- ☐ 46-55

- ☐ 56 na zaidi

6.   **Jinsia**:

- Una jinsia gani?

- ☐ Me

- ☐ Ke

- ☐ Haupendelei kusema

7.   **Kiwango cha Usikivu**:

- Una kiwango gani cha usikivu?

- ☐ Kiziwi

- ☐ Unasikia kwa shida

- ☐ Unasikia

8. **Mahali**:

- Unaishi wapi?

- [   ]

Sehemu ya 2: Upatikanaji wa Huduma ya Lugha ya Alama

9. **Ufikiwaji waTelevisheni**:

- UnaangaliaTelevisheni mara kwa mara?

- ☐ Ndio

- ☐ Hapana

10. **Huduma za Lugha ya Alama**:

- Je, kuna vipindi vyovyote vya televisheni unavyovitazama vinavyotoa

  huduma ya Ukalimani wa Lugha ya Alama?

- ☐ Ndio

- ☐ Hapana

11. **Vituo vyaTelevisheni**:

- Ni vituo gani vya televisheni hapa Tanzania vinavyotoa huduma ya

  lugha ya alama?

- [   ]

12. **Aina yaVipindi**:

- Ni vipindi vya aina gani vinavyotoa huduma ya lugha ya alama?

- ☐ Taarifayahabari

- ☐ Burudani

- ☐ Elimu

- ☐ Dini

- ☐ Vinginevyo (tafadhalivitaje): _____

Sehemuya 3: Utoshelevu wa Huduma ya Lugha ya Alama

12. **Viwango vyaUkalimani**:

- Unakadiriaje viwango vya ukalimani wa lugha ya alama vinavyopatikana kwenye televisheni?

- ☐ Nzurisana

- ☐ Nzuri

- ☐ Nzurikiasi

- ☐ Mbaya

13. **Viwango vya Ufikiwaji waTaarifa**:

- Je, unafikiri kwamba ukalimani wa lugha ya alama unatoa taarifa zote za muhimu kwenye kipindi?

- ☐ Mara zote

- ☐ Mara nyingi

- ☐ Wakati mwingine

- ☐ Mara chache

- ☐ Haitoi kabisa

14. **Ujuzi waMkalimani**:

- Je, unaamini kwamba wakalimani wamepata mafunzo na ujuzi wa lugha ya alama ipasavyo?

- ☐ Ndio

- ☐ Hapana

- ☐ Sinauhakika

Sehemuya 4: Kukidhi Mahitaji ya wenye Changamoto ya Usikivu

15. **Umuhimu wa maudhui:**

- Je, huduma ya ukalimani, inafikia mahitaji yako ya taarifa za kila siku?

- ☐ Ndio

- ☐ Hapana

- ☐ Kiasi

16. **Upatikanaji wa vipindi:**

- Je, kuna vipindi au nyakati Fulani ambapo huduma za lugha ya alama hazipatikani ambazo ungependa ziwepo?

- Zitaje [

                                                            ]

17. **Kuridhika:**

- Je, unaridhikaje na upatikanaji wa sasa wa huduma ya lugha ya alama

  kwenye televisheni?

- Naridhika sana

- Naridhika ☐

- Sipo upande wowote ☐

- Siridhiki

- Siridhiki kabisa

Sehemu ya 5: Changamoto zinazoipata huduma ya lugha ya alama

19. **Changamoto wanazozipata wakalimani**:

- Unadhani wakalimani hukutana na changamoto gani wakiwa wanatoa

  huduma ya lugha ya alama kwenye televisheni?

- [   ]

20. **Vikwazo vya Vituo vya Televisheni**:

- Je, unaamini kuwa vikwazo vikuu katika vituo vya televisheni ni vipi

  katika kuboresha huduma za lugha ya alama?

- **Changamoto za Kteknolojia:**

- Umewahi kukutana na changamoto zozote za kiteknolojia (mfano;

  kutokuonekana vizuri kwa wakalimani, muda kutokuendana) na

  huduma za lugha ya alama kwenye televisheni?

- Ndio

- Hapana

21. **Maoni ya Kuboresha:**

- Je, unapendekeza maoni gani kwaajili ya kuboresha huduma za lugha ya alama kwenye televisheni?

- [   ]

Sehemu ya 6: Maelezo ya ziada

20. **Maelezo ya Wazi:**

- Tafadhali toa maelezo au maoni yoyote ya ziada yanayohusiana na huduma za lugha ya alama kwenye vyombo vya habari vya televisheni.

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

THE OPEN UNIVERSITY OF TANZANIA

Ref. No OUT/PG2022001680   24th October, 2024

Director General,

Tanzania Broadcasting Corporation (TBC),

P.O.Box 9191,

DAR ES SALAAM.

Dear Director,

RE: RESEARCH CLEARANCE FOR MS. JANETH PHILLIP, REG NO: PG2022001680

2.   The Open University of Tanzania was established by an Act of Parliament No. 17 of 1992, which became operational on the 1st March 1993 by public notice No.55 in the official Gazette. The Act was however replaced by the Open University of Tanzania Charter of 2005, which became operational on 1st January 2007.In line with the Charter, the Open University of Tanzania mission is to generate and apply knowledge through research.

3.   To facilitate and to simplify research process therefore, the act empowers the Vice Chancellor of the Open University of Tanzania to issue research clearance, on behalf of the Government of Tanzania and Tanzania Commission for Science and Technology, to both its staff and students who are doing research in Tanzania. With this brief background, the purpose of this letter is to introduce to you **Ms. Janet Phillip, Reg.No: PG2022001680),** pursuing **Master of Arts in Mass communication (MASSCOM).** We

here by grant this clearance to conduct a research titled **"Accessibility of Sign Language Services to the Hearing Impaired Community in Television Media in Tanzania: The Case of Independent Television (ITV) and Tanzania Broadcasting Corporation (TBC 1)**. She will collect her data at your office from 25th October to 30th November 2024.

4.   In case you need any further information, kindly do not hesitate to contact the Deputy Vice Chancellor (Academic) of the Open University of Tanzania, P.O.Box 23409, Dar es Salaam. Tel: 022-2-2668820.We lastly thank you in advance for your assumed cooperation and facilitation of this research academic activity.

Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA

Prof.Gwahula Raphael Kimamala

For: VICE CHANCELLOR

THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

THE OPEN UNIVERSITY OF TANZANIA

Ref. No OUT/PG2022001680   24ᵗʰ October, 2024

Director General,

Independent Television (ITV),

P.O.Box 4374,

DAR ES SALAAM.

Dear Director,

RE: RESEARCH CLEARANCE FOR MS. JANETH PHILLIP, REG NO: PG2022001680

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Yours sincerely,

THE OPEN UNIVERSITY OF TANZANIA

Prof.Gwahula Raphael Kimamala

For: VICE CHANCELLOR

THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF INFORMATION, COMMUNICATION AND INFORMATOIN TECHNOLOGY
TANZANIA BROADCASTING CORPORATION (TBC)

Kumb. AB.18/291/01

30 October, 2024

Vice Chancellor,
The Open University of Tanzania,
P.O BOX 23409
Dar es Salaam.

RE: Research Clearance for Ms.Janeth Phillip REG.NO.PG2022001680

Reference is made from your letter with Ref.No.OUT/PG202201680 dated 24 October 2024 the above-mentioned heading.

2   Concerning I am pleased to inform you that permission has been granted to your student, Ms.Janet Phillip, who is pursuing a Masters of Arts in Mass Communication (MASSCOM), to undertake the research she intends to conduct."Accessibility of Sign Language Services to the Hearing Impaired Community in Television Media in Tanzania"

3.   She is advised to report to the **Director of News and Current Affairs (DNCA)** for further details with a copy of this letter.

With Regards.

H. Kategule
Kny: **MKURUGENZI MKUU**

Copy:
Ms.Janeth Phillip
0755 574717

Nyerere Road, P.O.BOX 9191, DAR ES SALAAM - TANZANIA

ACCESSIBILTY OF SIGN LANGUAGE SERVICES TO THE HEARING IMPAIRED COMMUNITY IN TANZANIA: THE CASE OF INDEPENDENT TELEVISION AND TANZANIA BROADCASTING CORPORATION

Janet Phillip

Department of Journalism and Media Studies, The Open University of Tanzania

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Abstract

This study examined the accessibility of sign language services for the hearing-impaired community in Tanzanian television, focusing on ITV and TBC 1. Using a mixed-methods approach, the research explored the availability, adequacy, interpreter performance, and challenges facing these services. The findings reveal limited service availability, inconsistent quality, and systemic barriers that hinder effective inclusion. While some progress has been made, many hearing-impaired individuals continue to face exclusion from essential televised information. The study concludes with actionable recommendations, including policy reforms, investment in interpreter training, and enhanced regulatory oversight. Further research is recommended to evaluate cost-benefit aspects of wider implementation and the effectiveness of legal frameworks supporting accessibility.

Keywords: Sign Language Services, Hearing-Impaired, Television, Media, Sign Language Interpretation, Deaf.

INTRODUCTION

1.1 Background of the Study

Access to television media for the hearing impaired remains a major challenge despite global efforts to promote inclusive communication. Sign language, a vital visual communication tool, enables effective interaction in medical, educational, and social settings. However, the scarcity of qualified sign language interpreters limits access, leading to social isolation and psychological difficulties for many hearing impaired individuals (Liang, Li, & Chai, 2023).

Globally, countries have implemented sign language interpretation in public broadcasts to improve accessibility. For example, Uganda's Sign Language Project effectively provided accurate information to the Deaf community during critical periods (Edremit, 2024). Yet, in many regions, such as Tanzania, sign language services in television remain limited, inconsistent, and inadequately enforced (Lugongo, 2018). Many hearing impaired viewers resort to lip-reading, captioning, or visual cues, which often do not fully address their needs (Yunitasari, 2019).

Studies have also highlighted the frustration of Deaf individuals in accessing real-time emergency information without interpreters (Microsoft Research, 2023). Other countries, like the United States, have improved accessibility by embedding sign language interpreters in children's programming and popular shows, demonstrating the potential for inclusive media (Gernsbacher, 2015).

Sign language is a fully developed communication system using standardized gestures and facial expressions (Dewi & Rodly, 2022; Kurniawan, 2017). The inclusion of interpreters in television news is crucial to ensure timely, accurate information for the hearing impaired (Rastgoo et al., 2021; El-Din & El-Ghany, 2020). Some governments, such as Indonesia's, have mandated sign language interpretation in all major TV broadcasts to promote accessibility (Press Release No. 232/HM/KOMINFO/09/2018).

Statement of the Problem

Despite legal frameworks like the Americans with Disabilities Act (ADA) and international efforts to improve access, sign language services on television remain inconsistent. Machado and de Oliveira (2020) report that interpreters are often absent or not clearly visible during broadcasts. Baker and Lee (2019) further argue that reliance on subtitles neglects those for whom sign language is a primary language, leading to information loss especially during emergencies.

In Tanzania, although sign language is legally recognized, implementation on television is inadequate due to limited interpreter availability, weak policy

enforcement, and low broadcaster awareness (Majiwa, 2017; Olusanya & Sridhar, 2020; Kisanga, 2018). Consequently, many Deaf Tanzanians lack equitable access to televised news and important announcements.

Objectives of the Study

General Objective:

To assess the accessibility of sign language services to the hearing impaired community on Tanzanian television.

Specific Objectives:

1. To assess the availability of sign language services on television.
2. To evaluate the adequacy of these services.
3. To assess whether interpreter services meet the demands of the hearing impaired.
4. To identify challenges faced in providing these services.

Research Questions

1. What is the status of availability of sign language services on television?
2. How adequate are these services for the hearing impaired?
3. To what extent do TV interpreters meet community needs?
4. What challenges hinder provision of sign language services on TV?

Significance of the Study

This study provides valuable insights for researchers, policymakers, media practitioners, and students by highlighting gaps in sign language accessibility on Tanzanian television. Findings can inform policy improvements, regulatory enforcement, and strategies to enhance service delivery, ultimately promoting inclusivity and equal access to information for the hearing impaired.

Scope and Limitations

The study focuses on two television stations, ITV and TBC1, in Dar es Salaam, Tanzania. It examines availability, adequacy, and challenges of sign language

services. Limitations include a small sample size, urban-only setting, cultural and linguistic diversity in sign language, and technological constraints that may affect data comprehensiveness.

Definition of Key Terms

1.7.1 Deaf: Individuals with significant hearing loss who identify culturally with the Deaf community and use sign language primarily (Lane, Hoffmeister, & Bahan, 1996).

1.7.2 Hard of Hearing: Individuals with mild to severe hearing loss who primarily use spoken language (Northern & Downs, 2014).

1.7.3 Sign Language: A visual-gestural communication system using hand shapes, movements, and facial expressions (Valli & Lucas, 2000).

1.7.4 Sign Language Interpretation: Translating spoken language to sign and vice versa (Humphrey & Alcorn, 2007).

1.7.5 Hearing Impaired: Persons with any degree of hearing loss, including Deaf and hard of hearing (Brown, 2017).

LITERATURE REVIEW

Introduction

The literature review provides a theoretical and empirical grounding for this study on the accessibility of sign language services to the hearing-impaired community in Tanzanian television media. It outlines major debates, trends, and research gaps, while situating the current study within global, regional, and local contexts. The review is structured around a theoretical framework (Social Model of Disability) and key empirical themes: availability, adequacy, responsiveness to user needs, and implementation challenges.

Theoretical Framework: Social Model of Disability

This study adopts the Social Model of Disability, which shifts the focus from individual impairment to societal barriers that limit access and participation (Fiveable, 2024; Shakespeare, 2006). In contrast to the medical model which views

disability as a personal deficit the social model emphasizes environmental, institutional, and communicative constraints. Within the media context, this theory helps evaluate structural barriers to accessibility such as the inconsistent provision of interpreters, poor screen positioning, and the absence of user feedback mechanisms. Scholars such as Barnes (2012), French and Swain (2001), and Crow (1996) emphasize the model's relevance in policy design and inclusive communication but advocate a balanced approach that also considers individual needs.

Global and Regional Perspectives on Media Accessibility

Availability of Services

Studies in developed contexts (e.g., Napier & Barker, 2015; Wurm & Seiler, 2016) show that while regulatory frameworks mandate interpreter inclusion, implementation varies widely. In low-resource contexts like Tanzania, availability is inconsistent, under-researched, and poorly enforced (Otieno & Mweri, 2015; Lugongo, 2018). Few studies examine how institutions like the Tanzania Communications Regulatory Authority (TCRA) monitor compliance, or how broadcasters operationalize these mandates. Moreover, most research isolates interpreter presence without considering broader systemic and user-based data.

Adequacy of Services

Adequacy involves more than the mere presence of interpreters. Issues such as interpreter training, screen visibility, and contextual accuracy are critical (Smith & Paulson, 2015; Microsoft Research, 2023). In African countries, technical shortcomings such as poor lighting, outdated broadcasting tools, and untrained interpreters limit service quality (Motsaathebe & Mathibela, 2016; Mukarusanga & Iyamuremye, 2018). In Tanzania, poor collaboration between interpreters and producers further affects service delivery (Kabonge & Mashauri, 2016). However, little participatory research investigates these problems from the Deaf audience's perspective.

Meeting User Needs

Globally, interpreter services often fail to match the linguistic, cultural, and content-specific needs of the Deaf community (Stokoe & Hall, 2015; Reinhardt & Vogel, 2017). Many studies emphasize the limitations of corner-screen interpretation and the overreliance on captions (Kurniawan, 2021; Yunitasari, 2019). In Tanzania, interpreters often lack specialized training, and their use of outdated signs limits effective communication (Chuwa & Lymo, 2017). Further, the absence of structured feedback loops prevents broadcasters from adjusting services based on community input (Okafor & Adebayo, 2017).

Challenges in Implementation

Globally, even with legislation such as the ADA, implementation remains uneven due to funding gaps, technological barriers, and institutional disinterest (Machado & de Oliveira, 2020; Napier & Leeson, 2016). In Africa, challenges include interpreter shortages, lack of investment, and weak policy enforcement (Boateng & Mensah, 2017; Dube & Nyoni, 2016). In Tanzania, studies reveal minimal integration of trained staff, outdated infrastructure, and broadcasters' limited awareness of accessibility rights (Lusekelo & Chacha, 2017; Mkude & Sanga, 2014). Most existing research fails to adopt participatory approaches, thus ignoring the lived experiences of Deaf viewers and interpreters.

Identified Research Gaps

The reviewed literature reveals three major gaps:

1. **Contextual Gap** – Most studies focus on well-resourced countries and fail to reflect Tanzanian realities.

2. **Methodological Gap** – Few studies adopt mixed-method or participatory designs that center Deaf users.

3. **Conceptual Gap** – Accessibility is often defined too narrowly, focusing only on interpreter presence without addressing content relevance, user satisfaction, or institutional dynamics.

Conceptual Model of the Study

This study applies a systems-based conceptual model to examine how key factors policy enforcement, interpreter training, technology support, and public awareness influence the availability and adequacy of sign language services on television. These, in turn, determine audience satisfaction among the Deaf and Hard of Hearing (DHH) community.

Crucially, challenges such as poor funding, policy inconsistency, and lack of trained personnel act both as outcomes and constraints, creating feedback loops that affect service delivery. The model highlights the interconnectedness of systemic, institutional, and technical factors in shaping media accessibility.

Knowledge Gaps

Despite global efforts, several research gaps remain particularly in Tanzania:

- **Conceptually**, most studies isolate components like interpreters or captions without treating accessibility as a holistic system.

- **Contextually**, little is known about local enforcement of accessibility policies, interpreter availability, or how the DHH community in Tanzania experiences televised content.

- **Methodologically**, participatory research is rare; few studies engage DHH audiences directly or collect real-time feedback. The Social Model of Disability is often referenced but seldom applied in practical analysis.

These gaps highlight the need for context-specific, inclusive, and evidence-driven research to improve television accessibility for the hearing-impaired community in Tanzania.

 RESEARCH METHODOLOGY

Introduction

This chapter outlines the methodology used in exploring the accessibility of sign language services on Tanzanian television. It includes the research design, approach, study area, target population, sample selection, data collection, and analysis strategies.

Research Design and Approach

Research Approach

This study employed a qualitative approach, appropriate for exploring meanings and experiences from participants' perspectives (Creswell, 2013). It aimed to understand the social realities of the hearing-impaired community regarding sign language services on television.

Research Design

A case study design was adopted, enabling in-depth investigation of a bounded system (Yin, 2009). It allowed the researcher to explore complex dynamics within real-life contexts using interviews, documents, and observations.

Area of the Study

The study is positioned at the intersection of media accessibility, disability rights, and communication policy, focusing on how sign language services are provided by Tanzanian broadcasters. It integrates knowledge from media studies, disability studies, policy analysis, and sign linguistics.

Tanzania Broadcasting Corporation (TBC1)

TBC1 is Tanzania's national public broadcaster, originating in 1951 and restructured in 2007 to form the Tanzania Broadcasting Corporation. With a wide audience reach and a mandate to serve marginalized communities, TBC1 is central to national information dissemination. Governed under the Ministry of Information, it operates with directorates in broadcasting, news, technical services, and planning.

TBC1's mission is to inform, educate, and entertain while promoting inclusivity. Its selection for this study was based on its public service obligations and its role as a benchmark for regulatory compliance, particularly concerning the provision of sign language services.

Independent Television (ITV)

Established in 1994, ITV is a leading private television station owned by IPP Media. It has achieved national coverage through both terrestrial and satellite broadcasting.

ITV is known for its technological advancement, diverse programming, and strong audience engagement.

Operating under commercial objectives, ITV must also comply with accessibility regulations set by the Tanzania Communications Regulatory Authority (TCRA). It was selected to provide a comparative perspective to TBC1, enabling analysis of how public and private broadcasters differ in their approach to sign language services, challenges encountered, and policy responsiveness.

Study Population

The study population consisted of three key stakeholder groups directly involved with sign language services on Tanzanian television: 120 hearing-impaired individuals who rely on sign language for communication, 10 professional sign language interpreters, and 6 media management staff from TBC1 and ITV. This purposive sample reflects those who either consume, deliver, or manage accessible media content. The sample size was determined to provide rich qualitative insights and stakeholder diversity rather than statistical generalizability, following principles of data saturation

Sample Size

A total of 136 participants were selected purposively to align with the research objectives (Malterud, Siersma, & Guassora, 2016). The 120 hearing-impaired individuals represent the primary beneficiaries of sign language services, offering critical feedback. The 10 interpreters provide expert operational perspectives, while the 6 management personnel offer institutional views on policy and implementation. Sampling combined stratified sampling for hearing-impaired individuals ensuring diversity across age, degree of impairment, and geography and purposive sampling for interpreters and management, focusing on expertise and decision-making roles.

Sampling Technique

This study employed two sampling techniques. Stratified sampling was used to ensure adequate representation from different subgroups within the population. The population was divided into distinct strata, and samples were randomly drawn from

each group to enhance representativeness (Cochran, as cited in ResearchMethod.net, 2024; Analytics for Decisions, 2024).

Data Collection Methods and Instruments

Data were collected via in-depth interviews, questionnaires, and observations to capture comprehensive and triangulated insights (Bhattacherjee, 2012).

- **In-depth interviews** were conducted with interpreters and management to explore experiences, challenges, and organizational policies.
- **Questionnaires** targeted the hearing-impaired participants, facilitating broader data collection on service satisfaction and accessibility.
- **Observation** was used to document non-verbal communication during interactions, essential given the use of sign language.

Data collection instruments were designed and pre-tested for validity and reliability (Creswell, 2014). Interview guides ensured clarity and relevance; questionnaires were administered twice to verify consistency. Observations were conducted in natural settings, with multiple observers to cross-check data reliability.

Ethical Considerations

Ethical protocols prioritized respect, confidentiality, and inclusivity:

- **Informed Consent:** Participants were fully informed about study aims, voluntary participation, and the right to withdraw. Questionnaires were provided in Kiswahili with interpreter assistance where needed.
- **Confidentiality and Anonymity:** Personal identifiers were excluded; data were securely stored and accessed only by authorized personnel.
- **Cultural Sensitivity:** The study respected Deaf culture and communication norms, using sign language and ensuring participants' voices were authentically represented.
- **Avoiding Harm:** Participation was voluntary and conducted with sensitivity to participants' understanding and comfort.
- **Inclusivity:** The Deaf community was actively engaged throughout to ensure the research addressed their actual needs rather than token inclusion.

Data Analysis and Presentation

Data analysis integrated qualitative and quantitative methods to provide a holistic understanding:

- **Quantitative data** from questionnaires were analyzed using descriptive statistics in SPSS. Frequencies and percentages summarized satisfaction levels and service accessibility trends.

- **Qualitative data** from interviews were transcribed and subjected to thematic analysis. Manual coding identified key concepts which were grouped into themes such as resource limitations, interpreter availability, policy enforcement, and audience feedback.

- **Findings** are presented narratively, supported by participant quotes to illustrate themes and provide context to statistical results, enabling a rich, evidence-based interpretation of sign language service provision on Tanzanian television.

DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

Introduction

This chapter presents the findings on the accessibility and adequacy of sign language services in Tanzanian television media, based on data from 101 valid respondents out of 120 distributed questionnaires (84.17% response rate), supplemented by interviews with interpreters and media management.

Demographic Information

Among the hearing-impaired respondents, 60.4% were male and 44.6% were aged 26–35, indicating high media engagement among young adults. 85.1% were deaf, while 13.9% were hard of hearing. Participants came from 19 regions, with Dar es Salaam most represented (28.7%), providing national insight into service accessibility.

Availability of Sign Language Services

- 72.3% of respondents watch TV, and 69.3% have encountered sign language interpretation mostly on TBC, ITV, and Channel 10.

- News programs (61.4%) were the most common format with interpretation; no entertainment content included sign language.

- While availability exists, gaps persist, especially in program diversity and regional access.

Key Insight: Sign language services are present but concentrated in news segments, limiting full accessibility.

Adequacy of Sign Language Services

- 38.6% rated interpretation quality as fair, while 27.7% found it excellent.

- 45.5% felt essential information is rarely fully interpreted.

- 49.5% believed interpreters are well-trained, but over a quarter were unsure.

Key Insight: Interpretation quality and coverage are inconsistent. Respondents call for better training, full-screen interpreters, and standardized service delivery.

Summary of Findings

Sign language services in Tanzanian TV media exist but are unevenly distributed and inadequately implemented. While news programs on select channels feature interpreters, content range, quality, and visibility need improvement. Respondents emphasize daily programs, interpreter training, facial expression inclusion, and broader public awareness.

These results echo global concerns about sign language accessibility in media (Emery & Valentine, 2014; Microsoft Research, 2023), confirming the need for stronger policy enforcement and inclusive broadcasting in Tanzania.

Meeting the Demands of the Hearing Impaired

The study revealed that only 28.7% of respondents felt that sign language services met their daily information needs, while 31.7% said only partially, indicating widespread dissatisfaction. Respondents identified key program areas lacking

interpretation, such as presidential speeches, films, soap operas, sports, and educational content.

Satisfaction levels were modest: 28.7% were satisfied, while 35.6% expressed dissatisfaction or strong dissatisfaction, suggesting that current services do not adequately reflect the information preferences and needs of the Deaf and Hard of Hearing community.

These findings align with Mashaka & Nyirenda (2016) and Mgonda (2018), who found that the absence of collaboration with Deaf organizations and limited interpreter integration in programming result in service gaps. The need for relevant, inclusive, and user-informed programming is evident.

Challenges Facing Sign Language Services

Key challenges raised by respondents included:

- Fast-paced speech by anchors, making interpretation difficult.
- Inconsistent signs used by different interpreters, causing confusion.
- Lack of preparation before broadcasts.
- Small on-screen interpreter visibility and poor interpreter training.
- Low compensation, lack of support from stations, and insufficient awareness of sign language rights.

Respondents emphasized that some stations lack qualified interpreters, and others fail to prioritize or understand the importance of inclusive services. These barriers hinder the effectiveness and consistency of interpretation delivery.

Technological Challenges and Suggestions for Improvement

Technological barriers significantly hinder the effectiveness of sign language interpretation services on Tanzanian television. A majority (71.29%) of respondents reported encountering issues such as poor visibility of interpreters, mismatched timing between speech and sign interpretation, and low screen quality. These challenges compromise the clarity and accessibility of televised content for the Deaf

and Hard of Hearing (DHH) community. Respondents emphasized the need for improved visual clarity, including better lighting, clearer camera resolution, and standardized interpreter attire and background colors to enhance contrast and visibility.

Suggestions for Improvement

Suggestions for improvement centered on expanding interpreter screen size ideally to one-third or half the screen to ease viewing without eye strain. Participants also advocated for the inclusion of sign language services across all programs, not limited to news but extending to entertainment, education, government proceedings, and advertisements. Additionally, there was a call for structured interpreter recruitment processes, emphasizing professional standards, regular training, and cooperation between broadcasters and DHH organizations such as CHAVITA and BAKITA.

These insights echo concerns raised by Mkude and Sanga (2014) regarding infrastructural deficiencies and by Kweka and Mnyuku (2016) who noted that logistical limitations often result in the exclusion of sign language interpretation from essential broadcasts.

Interpreter Experiences and Operational Realities

The study also incorporated interviews with sign language interpreters from TBC 1 and ITV. It revealed critical gaps in staffing, professional qualifications, and institutional support. Out of the four interpreters interviewed, only one held a recognized certificate, while others relied on informal training or experiential learning. None had received specialized training through their media employers.

Work routines were inconsistent and largely reactive, particularly for live broadcasts, which left interpreters unprepared to handle fast-paced or complex content. Interpreters reported that they often have to "go with the flow," relying on experience rather than systematic preparation. Pre-broadcast briefings were rare, especially at ITV, and there was limited coordination between interpreters and technical teams in some instances.

Challenges reported include:

- Rapid speech from anchors,
- Audio issues from on-site recordings,
- Lack of standardized signs for foreign names, technical terms, or sports-related vocabulary,
- Difficulty shifting between content types (e.g., from political news to entertainment),
- Physical and cognitive fatigue from long shifts and lack of rotation,
- Poor visual production leading to unclear interpretation displays.

Despite these difficulties, interpreters employed various coping strategies such as information filtering, summarization, and psychological readiness. Some interpreters preview content in advance to plan key messages, while others rely on maintaining calmness and mental agility to adapt in real-time. However, these efforts are often limited by systemic issues including understaffing, lack of specialization, and poor equipment quality.

Training, Feedback, and Institutional Support for Sign Language Interpreters
Training and Professional Development
The findings reveal that neither ITV nor TBC 1 offers structured or ongoing training for sign language interpreters (SLIs). Instead, interpreters pursue professional development independently through community-led seminars, WhatsApp groups for the Deaf, and sporadic workshops organized by organizations such as BAKITA and CHAVITA. While some interpreters found these training opportunities helpful, others expressed dissatisfaction with their general nature and lack of specialization. One interpreter noted that most workshops focus on basic societal communication and fail to prepare SLIs for the unique demands of media work, such as interpreting technical or political content.

Some interpreters emphasized the need for continuous exposure and professional consultation, stressing that sign language interpreters are not only service providers but also role models whose performances influence language learning within the DHH community. One interpreter even raised health concerns related to posture and

spinal strain due to extended periods of work without ergonomic support—underscoring the need for physical wellness programs and therapy centers specific to interpreter needs.

Interaction with the Hearing-Impaired Community

SLIs from both ITV and TBC 1 reported receiving consistent feedback from the Deaf community, mostly through personal interactions and WhatsApp groups. This feedback both positive and critical serves as a tool for professional growth, helping interpreters refine their appearance, vocabulary, and delivery style. Interpreters stated that community feedback confirms whether interpretation meets audience expectations and needs. Notably, two interpreters observed that a lack of complaints from the community typically signals satisfaction, given that members of the Deaf community are quick to raise concerns when content is inaccessible.

Key audience needs included increasing the interpreter screen size (currently set at 1/8 of the screen by TCRA), improving background and clothing contrast, and ensuring that all programsnot just news—are interpreted. These reflections point to the broader issue of equal information access, aligning with the principles of the UNCRPD, as noted by several interpreters.

Perceptions of Role and Impact

Interpreters perceived their role as crucial in bridging information gaps between the hearing and Deaf communities. While some interpreters voiced concern about unqualified individuals assuming the title of SLI, they agreed that the presence of professional interpreters on TV fulfills the constitutional right to information and the global call for disability inclusivity. Practical impact was evident during major national campaigns like COVID-19 awareness and child immunization drives, where the Deaf community's compliance was attributed in part to interpreted televised content.

Strengths identified include job security (particularly at TBC 1), consistent service delivery, and societal recognition. Weaknesses involved inadequate staffing, lack of

content coverage across programs, small screen visibility, and insufficient ergonomic and technical support.

Suggestions for Service Improvement

Interpreters proposed multiple improvements for enhancing sign language services on television:

- **Training**: Regular, specialized courses in fields such as health, politics, and sports to meet the diverse content on TV.
- **Working Conditions**: Use of ergonomic chairs, massage allowances, and rotational shifts to prevent physical fatigue and burnout.
- **Infrastructure**: Establishing dedicated interpretation studios with appropriate tools (cameras, monitors, speakers).
- **Policy Enforcement**: TCRA should enforce and penalize non-compliance with existing regulations that mandate SLI presence in televised news.

Management Perspectives

Three management staff were interviewed one from ITV and two from TBC 1. Although the initial target sample was not met, their insights confirmed limited institutional support and acknowledged the operational challenges interpreters face. While supportive of the interpreters' role, they offered limited actionable plans for improving sign language services, underscoring a gap between policy expectations and organizational execution.

Institutional Management of Sign Language Services in Television Media
Hiring Practices and Criteria

Hiring practices for sign language interpreters differ between ITV and TBC 1. At ITV, priority is given to teachers of sign language, particularly those trained abroad, such as in Germany, under the assumption that foreign training yields higher proficiency. Conversely, TBC 1 follows government employment structures, guided by the *scheme of service*, and prioritizes applicants with a Bachelor of Education in Special Needs. In both institutions, experience and competence are key considerations, and assessments may include practical interviews or evaluations by

expert panels. However, both acknowledged the absence of content-specialized interpreters, largely due to limited specialization in Tanzanian education systems.

Training and Professional Development

Post-employment training opportunities vary by institution. ITV occasionally partners with external bodies such as the BBC and foreign embassies (e.g., the American and UK embassies) to provide skill-based training. These may occur once or twice a year depending on requests and availability. At TBC 1, training is limited and mostly conducted through external Deaf organizations due to a lack of in-house professionals. While these efforts help SLIs stay updated, they remain inconsistent and dependent on external support, revealing a gap in structured, ongoing development.

Challenges in Recruitment and Retention

Both media houses face significant challenges in recruiting and retaining qualified SLIs. ITV reported difficulties with inexperienced graduates lacking practical skills and professionalism. Issues such as punctuality, dress code adherence, and expectations for higher pay have led to interpreter turnover. ITV also noted that many interpreters, after receiving training opportunities through the station, often leave to pursue scholarships abroad.

At TBC 1, a shortage of interpreters is a critical concern, with most interpreters multitasking across programs and platforms. Only one out of three interpreters is permanently employed, and even this individual was not originally trained in special education. Additionally, the lack of cross-training in journalism or media ethics among special education graduates hinders their integration into media workflows. Both stations acknowledged the broader societal neglect of SLIs, reflected in weak government support, inadequate funding, and a lack of institutional recognition. Technological limitations were also highlighted. While some interpreters can now join live broadcasts remotely using mobile phones, challenges such as power cuts, internet disruptions, and insufficient devices compromise service delivery.

Respondents emphasized the need to restructure media systems to accommodate remote interpreting effectively.

Evaluation and Quality Control

Evaluation practices differ across the two media outlets. ITV relies on informal street-level feedback and public complaints, particularly from the Deaf community. However, interpreter absenteeism was frequently cited as a major issue. TBC 1 uses a performance management system called PEPMIS, where interpreters log duties which are approved by supervisors. Despite these systems, gaps persist in quality control. TBC 1 respondents admitted that, due to limited sign language skills among supervisors, performance is often not directly assessed, but monitored through Deaf organization feedback.

Formal feedback channels are either weak or nonexistent. While government platforms like *E-Mrejesho* exist to collect audience feedback, their impact on interpreter performance management appears minimal. In cases where SLIs fail to meet expectations, replacement and counseling are used as responses at TBC 1, while ITV favors offering additional training, acknowledging the shortage of qualified professionals as a barrier to stricter action.

Determining Demand and Program Inclusion

The process for selecting which programs receive sign language interpretation largely depends on perceived content importance and public demand. ITV focuses on national relevance, while TBC 1 also considers audience needs, though constrained by insufficient interpreter capacity. Regular engagement with the Deaf community is limited or informal. Most decisions are internally made, without systematic consultations with the primary users of the service.

Demand for SLIs appears to be increasing over time, especially at ITV. However, no significant steps have been taken to recruit additional interpreters to meet this demand. TBC 1 respondents offered contrasting views one noting no increase in demand, while another emphasized constant requests for interpretation across all

programs. Both stressed that addressing demand requires more trained interpreters and greater government intervention.

Future Plans and Perceived Trajectory

Future plans for expanding sign language services are inconsistent between the two institutions. ITV had considered introducing a dedicated sign language program but abandoned the plan due to challenges in securing contractual agreements with skilled interpreters. There are currently no active initiatives or technological upgrades being implemented. TBC 1, by contrast, has more optimistic goals, including interpreting all programs from morning to midnight and hiring more graduates from universities such as the University of Dodoma. There are also early-stage plans to explore artificial intelligence for sign language interpretation, though no progress has yet been made.

Perceptions of the future also varied. ITV's representative expressed skepticism, citing limited government interest and lack of financial returns for media companies as reasons SLIs are sidelined. TBC 1 offered more hopeful perspectives, with one respondent stating that full coverage could be achieved through legal mandates. Another respondent emphasized that government regulation and funding would be key to ensuring SLIs are incorporated more systematically.

Recommendations and Additional Reflections

To improve the availability and quality of sign language services, respondents suggested stronger government support, legal mandates for interpreter inclusion in media, and education of media staff on Deaf issues. They emphasized the need for proper incentives, better employment terms, and the creation of awareness about the importance of SLIs. Lack of institutional value and societal respect for SLIs was noted as a barrier to the growth of the profession. Poverty, lack of educational resources, and minimal visibility of sign language in lower education levels also hinder interest and enrollment in interpreter training programs.

Lastly, a respondent from TBC 1 encouraged interpreters to recognize the significance of their role as carriers of vital information to a marginalized group.

SLIs were urged to be more committed and integrated into production planning, ensuring they are informed of content ahead of broadcasts rather than reacting in real-time.

Analysis and Discussion

This section discusses the findings in relation to the four specific objectives of the study: (1) assessing the availability of sign language services to the hearing-impaired community in television media; (2) evaluating the adequacy of those services; (3) examining the extent to which interpreters meet the audience's demands; and (4) identifying the challenges facing sign language services in Tanzanian television media.

Availability of Sign Language Services to the Hearing-Impaired
      Community

The study found that a substantial proportion (73%) of hearing-impaired participants watch television, indicating television's centrality in information dissemination among this group. Among these viewers, 69.3% reported the presence of sign language interpretation on some programs, suggesting a degree of service availability. However, this availability is heavily skewed toward a single broadcaster, TBC 1, which was mentioned 52 times, whereas no other station was mentioned more than 20 times. Furthermore, 61.38% of interpreted programs were news, while educational and entertainment content were rarely covered.

These findings indicate that although services exist, they are neither equitably distributed across broadcasters nor diverse in content. The limited variety in programming restricts hearing-impaired viewers' access to a full spectrum of television content. Respondents from both the management teams and interpreters confirmed that few programs are interpreted, often restricted to news and urgent national updates due to limited interpreter availability.

This mirrors findings by Machado and de Oliveira (2020) and Baker and Lee (2019), who argue that the inconsistent implementation of sign language services in

television highlights a broader systemic neglect that demands policy intervention. Tanzanian scholars, such as Kisanga (2018) and Mwansoko (2022), similarly observe that the absence of legal mandates enforcing sign language services in media contributes to their limited presence.

Adequacy of Sign Language Services

Regarding adequacy, the study found that 38.61% of hearing-impaired respondents rated the quality of sign language services as "fair," while 27.72% rated it "excellent" and 22% as "good." Only 5% rated it as "poor." These responses suggest moderate satisfaction, with recognition that improvements are necessary.

Participants noted that many interpreters are trained to teach sign language rather than interpret it in fast-paced media environments. Several respondents emphasized the importance of non-verbal elements such as facial expression and body language often missing in current interpretations. Additionally, the study revealed cases where interpreters lacked formal certification, working instead through experience, which may compromise quality.

On the coverage of essential information, 45.54% of participants reported that sign language services rarely covered all critical content, while 17.82% noted partial adequacy. Only 16% believed that all essential information was fully communicated. These findings were echoed by management respondents and interpreters who acknowledged that limited interpreter capacity often leads to delayed or incomplete coverage, particularly during emergencies.

This aligns with a study by Microsoft Research (2023), which notes the frustration experienced by deaf individuals when sign language interpreters are absent during live broadcasts or emergency alerts. Similarly, Dewi and Rodly (2022) and Kurniawan (2017) emphasize that sign language must incorporate expressive, standardized gestures to ensure full comprehension, especially in fast-paced broadcast settings.

While 49.5% of participants believed interpreters were well-trained, 26.73% were unsure, and 16% disagreed. These mixed perceptions reflect the current informal and inconsistent training pathways. Supporting this, Dal Fovo (2016), De Meulder and Heyerick (2013), and Del Vecchio and Franchi (2013) note that many interpreters acquire their skills through on-the-job experience, mentorship, or short-term training, with few receiving formal education in media-specific interpretation.

Extent to Which Interpreters Meet the Demands of the Hearing-Impaired

On whether interpreters meet audience demands, the study revealed diverse responses: 31.68% felt services partially met their daily needs, 28.7% felt they did, and 30.69% reported that they did not. This indicates limited alignment between available services and the hearing-impaired community's expectations.

Key concerns included the small screen size allocated for interpreters, poor background-foreground contrast, and inadequate synchronization between the interpreter and the presenter's speech speed. These challenges often resulted in incomplete information delivery. Interpreters acknowledged these issues, explaining that fast-paced broadcasts leave little time for accurate translation.

These findings are consistent with Kurniawan (2021), who observes that corner-box interpreting often limits visibility and comprehension. Yunitasari (2019) further explains that due to these gaps, many hearing-impaired viewers resort to lip-reading, captions, and visual cues, underscoring the need for more robust and user-friendly interpreting practices.

Moreover, specific programming gaps were identified participants listed many programs and times where interpretation was absent despite strong viewer interest. The management teams confirmed that limited interpreter numbers restrict program coverage. Mgonda (2018) similarly found that despite Tanzania's policy goals for inclusive communication, interpreter availability remains inadequate, limiting television accessibility.

Satisfaction levels also varied: 7.92% were very satisfied, 28.71% satisfied, 16.83% neutral, 25.74% dissatisfied, and 9.98% very dissatisfied. This variance suggests that while some efforts are appreciated, the services fall short of meeting the holistic needs of the hearing-impaired audience. As Mweri (2014) notes, accessibility challenges persist in Tanzanian television, including interpreter shortages, poor service quality, and limited broadcaster awareness.

Challenges Facing Sign Language Services

The most pressing challenge identified was technological: 71.29% of respondents reported infrastructure issues affecting sign language service delivery. Issues included poor visibility due to lighting, low-quality equipment, or inconsistent power and internet supply, especially when interpreters joined remotely. Only 13.86% of respondents reported no technological issues, suggesting that smooth service delivery is currently the exception.

These issues were exacerbated by broader institutional limitations, such as the lack of training for cameramen on appropriate interpreter framing, insufficient interpreter availability, and funding constraints. At ITV, for instance, interpreters are paid per program, limiting expansion due to cost. Respondents also highlighted the absence of standardized attire guidelines and appropriate contrast settings, which impede visual clarity for viewers.

In addition to technical and logistical barriers, systemic neglect also emerged as a theme. Despite global legal frameworks such as the Americans with Disabilities Act and international inclusion efforts, Tanzanian media houses struggle to consistently implement inclusive practices. As Machado and de Oliveira (2020) note, even when interpreters are included, visibility and consistency are lacking.

Notably, some participants from the hearing-impaired group provided incomplete or irrelevant responses across all four objectives. For instance, 28.71% did not list TV stations offering sign language services, and 32.67% did not respond to questions about interpreter challenges. These gaps may reflect several deeper issues:

communication barriers, limited exposure to structured surveys, or skepticism about the value of their input. It also highlights the need for more inclusive and accessible data collection methods, such as visual aids, focus groups with interpreters, or moderated discussions.

Interestingly, some "irrelevant" responses mentioned domains such as hospitals, courts, and police stations indicating broader concerns about public accessibility beyond television. This suggests that, while not aligned with the study's media-specific focus, participants were expressing real accessibility concerns across social domains.

These findings point to a need for inclusive research methodologies and emphasize the importance of building trust with the hearing-impaired community. Future studies should employ simplified question formats, ensure cultural and linguistic appropriateness, and provide multiple channels for engagement to yield more comprehensive and meaningful responses.

FINDINGS, CONCLUSIONS AND IMPLICATIONS

Introduction

Access to media is a fundamental right, yet the hearing-impaired community in Tanzania faces barriers due to insufficient sign language interpretation on television. This study assessed how accessible these services are, focusing on ITV and TBC 1, and aimed to inform improvements in media inclusivity.

Summary of Key Findings

Four major findings emerged from the study:

    i)**Limited Availability**: Sign language services are not consistently provided across television stations, restricting hearing-impaired viewers' access to diverse content.

    ii)**Inadequate Quality**: Interpreters often fail to convey full and clear messages, undermining the utility of the services.

iii)Unmet Audience Expectations: Many respondents expressed dissatisfaction with the depth, clarity, and consistency of interpretation services.

iv)Systemic Challenges: Barriers such as lack of skilled interpreters, inadequate technology, and weak institutional support persist. Additionally, poor feedback mechanisms hinder service improvement.

Conclusion

While sign language services are available in select programs, their reach and quality remain insufficient. The findings highlight a significant gap between the needs of the hearing-impaired community and the current capacity of broadcasters to meet those needs. Technical limitations, inconsistent interpreter visibility, and the absence of legal mandates further exacerbate the issue. Importantly, the study found that demand for sign language services extends beyond television to other public domains, including courts, hospitals, and markets.

Recommendations

To improve accessibility, the study recommends:

- Expansion of sign language services across all TV programs and channels.
- Enhanced training for interpreters and investment in modern broadcasting technology.
- Legal reforms mandating sign language services in all television programming.
- Public awareness campaigns and stronger regulatory oversight by TCRA, including clear guidelines for interpreter visibility and content delivery.

Areas for Further Research

Future studies should explore:

- A cost-benefit analysis of implementing widespread sign language services.
- The effectiveness of current legal frameworks in enforcing accessibility.
- Sign language service provision in public spaces beyond television.

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