EXPLORING CHALLENGES OF DISABLED PEOPLE IN ACCESSING EMERGENCY MEDICAL SERVICES IN GABORONE BOTSWANA

BY

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ABSTRACT

Access and use of Emergency Medical Services by disabled people has been declining, and this has been attributed in part to poor implementation of the World Health Organization Global Disability Action Plan. This is mainly due to a lack of knowledge by Policymakers about the total health needs of disabled people, a lack of political will from government officials, and a lack of interest among healthcare workers. In Botswana, EMS offers out-of-hospital or pre-hospital emergency medical and trauma services to the general public for free to attain equitable healthcare services by the Government of Botswana. However, statistics showed that the number of people living with disability accessing EMS had been declining over time, and there has been an increase in preventable morbidity, mortality, and self-referrals to hospitals. The study explored challenges experienced by disabled people in accessing Emergency Medical Services in Gaborone, Botswana.

The study employed a qualitative descriptive phenomenology method. Participants were selected using purposive sampling from those registered in the Home-Based Care Program. Data was collected using in-depth interviews, and saturation was reached after interviewing 7 participants. Data was transcribed verbatim and analyzed thematically using the 6 steps of the thematic analysis model to produce patterns or themes and sub-themes. The study yielded three main themes that is, social exclusion, fragmented information, and policy application challenges. A wide range of subthemes was also established. Some participants felt discriminated against, while others reported inadequate and fragmented information about the Emergency Medical Services. Some participants also had self-stigma and felt stigmatized. They also reported no confidence in EMS officers.

The challenges of disabled people in accessing Emergency Medical Services are diverse and therefore warrant collaborative efforts by policy makers, EMS officers, the affected group (disabled people) and other relevant stakeholders to overcome them and ensure equitable healthcare service provision at all times.

Key words: Challenges, Disabled people, Emergency Medical Services

DEDICATION

To my dearest God-fearing wife who supported me wholeheartedly during the period of my study while staying in Zambia. It was the most challenging times to leave the country barely 2 years after our blessed marriage but you supported me looking at the bigger picture. You remained home to perform the roles of the wife, mother, father, husband and also gave me the much-needed psychological support as the distance from the family was taking a toll on me. I present to you the results of my hard work and dedication. You are loved and appreciated and will forever be. Thank you, Mrs. Moatshe.

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LIST OF ABBREVIATIONS

UNZABREC	-	University of Zambia Biomedical Research Ethics Committee
MoH	-	Ministry of Health
GGDHMT	-	Greater Gaborone District Health Management team
CHBC	-	Community Home Based Care
EMS	-	Emergency Medical Services
HRDC	-	Health Research Development Committee
WHO	-	World Health Organization
ECT	-	Emergency Care Technician
PMH	-	Princes Marina Hospital
HBCC	-	Home Based Care Centre
DHMT	-	District Health Management Team
ER	-	Emergency Room

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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.0 INTRODUCTION

Access and use of EMS by disabled people had been declining and this has been attributed in part to poor implementation of the World Health Organization Global Disability Action Plan. This is mainly due to a lack of knowledge by Policymakers about the total health needs of disabled people, lack of political will from government officials and lack of interest of healthcare workers among other factors which is consistent to the findings by (Khan et al., 2018). In Botswana Emergency Medical Services (EMS) is an independent department for pre-hospital trauma and medical emergencies and not attached to any health facility. The Government of Botswana started EMS in 2012 and the service is rendered for free to everyone within Botswana regardless of nationality, race, age or social standing. Emergency Medical Services have been staffed with Emergency Care Technicians (ECT), Paramedics, Nurses and Doctors who respond to all out of hospital emergencies regardless of the location. The patients, next of kin or bystanders call an emergency toll free number "997" to report an emergency. The dispatcher (dispatching officer) at EMS would record the details of the emergency, request for the directions and dispatch an ambulance crew to attend to the patient to stabilize him or her before transporting him or her to the nearest appropriate Health Facility. EMS officers attends patients at the night clubs, churches, homes, stadium and on the roads when there are road traffic accidents. The EMS ambulances are equipped with monitor/life park, portable suction machine, oxygen, automated defibrillator, portable ventilator, emergency drugs and intubation set amongst others to be used during resuscitation on scene or en-route to the hospital.

Therefore, the main aim of this study was to explore the challenges experienced by disabled clients in accessing EMS services with the hope that the subsequent informed recommendations presented upon completion of this study would contribute to improving the accessibility of EMS by disabled people in Gaborone, Botswana and the entire of the country. Other participants have also reported that disabled persons do not receive equal opportunities and acceptance, particularly from the health service providers and the deaf have been noted to be among the group most likely to be subjected to these inequalities as attested by (Masuku et al., 2021).

This chapter includes the background information on the study topic, the statement of the problem, the study justification, the research question, the study objectives, conceptual and operational definitions as were used in this study.

1.1 BACKGROUND INFORMATION

Access to health care is a complex, universal concern and is identified as a basic human right. Globally, healthcare services and policies have been developed and introduced to improve access to quality healthcare services (World Health Organization, 2022). This entails enabling a patient in need to receive the right care, from the right provider, at the right time, in the right place, dependent on context thus ensuring quality health service provision (Saurman, 2016). Dassah et al., (2018) has noted that stigmatization is a major or prominent access barrier for disabled persons and as a result, they often feel reluctant to access healthcare services despite them having serious health conditions that may require urgent health care intervention.

Affordability, awareness and accommodation are the main domains that influence the accessibility of services (Khan et al, 2018). The diverse needs of the disabled population need to be recognized by policymakers, commissioners, health service managers, and practitioners alike to institute appropriate measures to improve access to care for this vulnerable population (Paisi et al., 2020). Disabled persons have resorted to self-referral to the Emergency Department at referral hospitals and local clinics. This often leads to delayed healthcare service provision due to congestion and subsequently resulting in developing complications in their ailments/conditions and the possibility of mortality. Persons with intellectual disability tend to attend Hospital Emergency Departments but only a few of them end up being admitted (Brameld et al., 2018).

There are different types of disabilities including the deaf and dumb who use sign language for communication, the blind, and the severely handicapped people. It was noted that since 2019, the number of disabled people accessing EMS in Botswana were reducing while the numbers of disabled people attended at Emergency departments of referral hospitals and local clinics were increasing. Park & Park (2023) argue that unmet healthcare needs are higher among people with disabilities than the general population and they occur when people need healthcare services but cannot receive them for various reasons. It has also been reported that the deaf and hard of hearing frequent the Emergency Department of referral hospitals even for non-emergency conditions (James et al., 2021). This leads to congestion and longer waiting periods at Emergency Departments which can lead to exacerbation of the conditions and more complications. Accessibility of EMS would help disabled people to get appropriate and timely emergency services especially because there are Doctors, Nurses and paramedics at EMS and will also decongest the referral hospitals.

The study by (Masuku et al., 2021) at South Africa argue that the alienation, exclusion, marginalization, discrimination, invisibility, lack of independence and autonomy of persons who are deaf are some of the barriers when accessing healthcare services by disabled people. This suggests that disabled people are generally excluded from equitable healthcare services. It is on this note that a study shall be carried out to identify the exact challenges of accessing EMS for

disabled people so that evidence-based measures can be employed to curb this anomaly and ensure equitable Emergency Medical Services and healthcare provision in general.

Structural barriers encountered by disabled persons in accessing education, employment, health services, social events, and leisure pursuits are inherent in the service facilities in Botswana (Mukhopadhyay & Moswela, 2020). Challenges of access to EMS by disabled people directly lead to their exclusion from healthcare service for this vulnerable group which puts them at greater risks of morbidity and mortality. However, in their study, Ookeditse et al., (2022) argue that 84.3% of the patients with acute stroke can access EMS during Emergencies. Adequate access to quality health care is a fundamental human right for all, therefore any barrier which prevents access to healthcare for a certain group is tantamount to denying them their human rights, it is, therefore, empirical to explore those barriers or challenges with this study so that we can eliminate them and curb unnecessary health complications and death and to provide disabled persons with their fundamental human rights to health.

EMS provides its services by quick triage on a phone call, which prioritizes the cases according to the severity of illness or injury and not whether the person is disabled or not. According to Masuku et al., (2021), it is difficult for EMS Management to implement the disability policy which states that disabled persons shall be prioritized at all service Centres including healthcare centres. The policy may therefore need to be amended. Sveikata et al., (2022) submit that urgent response to an emergency scene by EMS officers should be coupled with extensive knowledge to manage conditions like stroke among others which will improve the outcome and possibly reduce the hospitalization period.

According to Bright & Kuper., (2018), access to healthcare services is higher for disabled people than expected because they have underlying health conditions that cause some impairments. People who need to access EMS anywhere in Gaborone, Botswana have to call a toll-free number' 997' and speak to the dispatcher who will then dispatch an ambulance to go and attend to the emergency anywhere outside Health Facilities, stabilize the patient and transport him/her to the nearest appropriate Health facility. The health care system has not provided any alternative methods that the deaf and dumb can use to access the EMS in Gaborone.

The government has recently reviewed the disability policy which states that disabled people shall be prioritized at all health facilities and health services. (Ministry of Health, Botswana, 2020). There have been general outreach programs that teach the general public about EMS. Xu et al., (2021) suggest that extra efforts are needed from local to national levels of government to improve the recognition of the vulnerability of this vulnerable population and to provide more inclusive communication methods and mechanisms for people with disabilities for them to adequately access healthcare services. This is also echoed by Lee & Park, (2018) who submit that in Korea, ambulances, hospitals and other health facilities are well-equipped and disability-friendly and the

right to health for all is guaranteed with adequate access to all healthcare services by all, including disabled people.

World Health Organization (2022), in their annual Disability Report and Global Health equity report have emphasized the need for member states to ensure 100% access to Health Care Services including Emergency Medical Services by disabled people. The government Institution called Statistics Botswana estimated in their 2022 Population Census Report that in a population of 3 300 000 at least 3% are living with disability, which translates to about 61000 people and at least an estimated 15000 of them are not equitably accessing Healthcare Services including Emergency Medical Services. This translates to 24.5% of Disabled people having challenges in accessing Emergency Medical Services and other Health Care Services in Botswana. Despite all these efforts by concerned stakeholders in Botswana, the poor access of EMS by disabled people persists. Cochran, (2020) argues that it is critically important that those involved in emergency planning and response can effectively communicate with disabled persons and those with special health-care needs. There is currently no specific intervention that the author is aware of in Botswana to address this specific problem but there is a general Disability Policy which states that vulnerable groups including disabled persons shall be given priority at all service centres and the policy has proved to be ineffective because despite being given the priority, the disabled people are still having challenges in accessing EMS and other healthcare services.

The researcher aimed to develop evidence-based recommendations that would help policymakers make inclusive and robust health and disability policies. The study was also expected to help the EMS managers and other facility managers with short-term solutions to the identified challenges for immediate consideration.

1.2 STATEMENT OF THE PROBLEM

Despite the Government’s efforts to improve disabled people's accessibility to quality health services as depicted in the General Disability Policy which has long been in place before the inception of Government EMS in 2012, Table 1.1 below illustrate that there is a notable decline on access of EMS by disabled persons in Gaborone, Botswana.

Table 1.1 Illustrates the access of EMS by disabled people in Gaborone, Botswana

Year	All patients attended to by EMS	Disabled people attended	Percentage
2019	5400	**56**	1.04%
2020	6127	**61**	1.00%
2021	5881	**39**	0.66%
2022	5993	**24**	0.40%

From the table above, there has been a continued decrease of zero-point six percent in the number of disabled people attended to by EMS between 2019-2022 when compared to the general population. It has also been noted that the number of disabled people alone attended to by EMS providers has decreased from 56 in 2019 to 24 in 2022, a decline of 32, which amounts to 42% which is a significant decline. It has further been reported that from 2019-2022, the total number of disabled people accessing EMS had declined from ten point three to four percent which translates to a six-point three percent decline as compared to the increase of access to various health facilities. The causes of this decline were initially not clearly understood although some studies suggested that the decline could be attributed to EMS employees' attitudes towards disabled people and the continuing communication barriers between the employees and disabled people (Masuku et al., 2021). There has been a 42% decline in EMS access by disabled people in Botswana between 2019 and 2022. Disabled people congest referral hospitals due to self-referrals which leads to prolonged waiting times, inadequate service provision, risk of complications and longer hospital stay(Siamisang 2020).There have been an increase of mortality rate of preventable deaths of disabled people from 2019 to 2022 from 12 to 16 which is 25% increase (Mukhopadhyay & Moswela, 2020).Challenges in accessing EMS has been attributed to communication barriers, attitudes of healthcare officers, poor implementation of policies and structural barriers (Masuku et al., 2021; Mukhopadhyay & Moswela, 2020).

Lack of access to EMS by disabled people may lead to complications of their conditions thus increasing the risk of their morbidity and mortality rates which could have otherwise been prevented by the trained Emergency personnel. This lack of access by disabled people to EMS has its effect on the disabled people, the health facilities, their families and their communities because if disabled people are unable to access EMS when they have medical and trauma emergencies it will affect their families financially and emotionally as they have to find their private cars to urgently transport their patients to a health facility. When they rush the patients to

the health facility with private cars the family might endanger themselves and other road users as they will not be having sirens therefore no right of way but their driving might be influenced by their emotions.

The government is affected financially if disabled people do not access EMS during emergencies because when there are complications and they have to be hospitalized the government assumes the whole responsibility of the patients including medications and food. More avoidable deaths of people living with disability also could lead to reputational harm to the government of the day. This is in affirmation with the findings of Muchatuta et al., (2022) in Zimbabwe who submits that EMS have reduced the unnecessary death rate by 25%. The study therefore sought to explore the challenges experienced by disabled persons when accessing EMS in Gaborone, Botswana.

1.3 JUSTIFICATION OF THE STUDY

As a World Health Organization member state, Botswana has the responsibility to abide by the recommendations of providing equitable access to healthcare and universal health coverage to all. The World Health Organization has stated that the guidelines provided in the WHO Global Disability Action Plan (2014 -2021) is a significant step in achieving health, well-being and human rights for persons with disabilities. Some Authors have noted that disabled people access emergency healthcare services less often than abled people and incur higher health costs as compared to able people (Friedman, 2021). Others have suggested that despite the growing body of evidence, our understanding of barriers to healthcare encountered by disabled persons remains limited (Malik-Soni et al., 2022). However, these studies have not addressed the challenges that disabled people experience in seeking EMS. The study therefore was undertaken to explore challenges experienced by disabled persons as they seek EMS. Given that healthcare navigation is critical to a person's involvement in his/her care and related health outcomes, addressing barriers to navigation in vulnerable populations may be essential to reducing health disparities and improving population health in general (Ryvicker, 2018).

It was envisaged that the results from the study would provide the Government with evidence-based information to improve access to EMS by disabled people and enable Government to formulate a robust disability policy or enhance the component of health in the existing policy which will ensure the purchasing of Disability user-friendly ambulances and other Emergency equipment, and plan for Emergency Medical Services considering the needs of disabled persons. The findings of this study also contributed to the body of knowledge on emergency medical services and access to these services by disabled persons.

1.4 RESEARCH QUESTION

What are the challenges faced by disabled people in accessing Emergency Medical Services in Gaborone Botswana?

1.5 STUDY OBJECTIVES

1.5.1GENERAL OBJECTIVE

To investigate the challenges of disabled people in accessing Emergency Medical Services in Gaborone, Botswana.

1.5.2 SPECIFIC OBJECTIVE

1. To explore challenges of disabled people in accessing Emergency Medical Services in Gaborone, Botswana.

1.6 CONCEPTUAL DEFINITIONS OF KEY TERMS

Disabled persons: According to the World Health Organization (2019), disabled persons are those with Impairment in body structure or function, or mental functioning, loss of a limb, loss of vision or memory loss and have activity limitation, such as difficulty seeing, hearing, walking, or problem-solving (WHO, 2019)

Emergency Medical Services: According to (Lawn et al., (2020) Emergency Medical Services is an essential first responder service to emergencies in the communities, it comprises paramedics, emergency technicians and dispatchers for urgent pre-hospital or out-of-hospital care (Lawn et al., (2020)

Access: Access is about enabling a patient in need to receive the right care, from the right provider, at the right time, in the right place, dependent on context (Saurman, 2016).
In the model, regular care is considered a form of health behavior; this includes wellness and screening visits, and treatment of chronic conditions with primary and specialist providers (James et al., 2021).

CONCLUSION

This chapter have articulated the Introduction and the background of this dissertation and it clearly elaborated the statement of the problem, the justification of this study and the objectives of the study. The above-mentioned subtopics have guided the researcher while carrying out this study and the objectives and the research question have been used to gauge the study finding to determine if they answered the research question or consistent with the objectives.

The study has managed to explore the challenges of disabled people in accessing Emergency Medical Services. The challenges emanated from different sectors and therefore warrant multifaceted approach to eliminate. The research question and the objectives have guided this study to achieve the desired results. The problem was Identified and the need for this study was thoroughly justified.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this review was to analyze evidence existing in literature on challenges experienced by disabled persons in accessing emergency medical services. Ultimately, gaps inherent in the literature were identified. In order to establish conceptual clarity, the chapter begins with an overview of the access to emergency medical services. Subsequent sections of the of the chapter have literature on challenges encountered by disabled people and interventions to ensure access to EMS by disabled people and ends with a discussion on Implications of not accessing EMS. Among the literature reviewed were published and unpublished research articles and reports, systematic reviews, conference reports, legal documents and Books. Data bases searched included Science Direct, CINHL JSTOR, PubMed, Hinari, EBSCO and Google Scholar. The key words used to search data was disabled people, access and Emergency Medical Services. Where there were limited published information specific to EMS the Investigator used the key words "health services" instead of "Emergency Medical Services".

2.2 Overview of Access to EMS by Disabled Persons

The declining access to EMS by disabled people over the years has been noted. This phenomenon is of concern as there is an equal increase of self-referrals to local clinics and Princes Marina Referral Hospital by disabled persons (Siamisang et al, 2020). This not only congests a referral hospital and delays or compromises efficient service delivery, but it also puts disabled persons at risk of complications of their illness due to delayed healthcare. It is likely to cause more preventable deaths or increase hospitalizations of disabled persons because of complications (Mukhopadhyay & Moswela, 2020). EMS is operated by trained healthcare professionals like Doctors, Nurses and Paramedics who can timely respond to a scene, stabilize a patient, then either discharge him or her on the scene or refer the patient to the nearest appropriate healthcare facility after thorough assessment and with pre-knowledge of where the patient can get which service promptly, this was consistent with the findings of Muchatuta et al., (2022). For example, EMS officers would know which clinics have functional X-rays and scans and which medical specialists are found at which health facilities such as Neuro Surgeons and Cardiologists etc. A plethora of literature has been reviewed concerning on access to EMS.

Chen et al., (2020) have argued that time from the emergency scene to the hospital is not associated with the patient's outcome but rather the intervention performed on the patient will determine the outcome therefore they dismissed the EMS golden hour which suggests that patients shall be attended and transported urgently for better outcome as this will have a direct impact on the outcome of their management. However, this assertion EMS Officers like Trauma Nurses, Medical Doctors and Paramedics rush to an emergency scene to stabilize patients before referring them

then it will lead to a good outcome. According to (Nguyen, 2023) healthcare access is recognized as the key influential factor for improved population health outcomes and healthcare system sustainability. For persons with disabilities, this is crucial in ensuring they have access to EMS. In a report on disability, WHO has noted that emergencies increase the vulnerability of persons with disabilities and are often overlooked in emergency risk management (WHO, 2015). Further, WHO has reported that persons with disabilities are rarely consulted or represented in the design of emergency risk management policies and programmes.

The European Emergency Number Association has reiterated the importance of disabled persons accessing EMS not only through voice call but through other means as well. In a report by Vivier et al., (2020), it has been postulated that disability affects a high proportion of the population, but many countries in Europe and globally still do not provide accessible emergency services for disabled persons.

They further argued that limited communications options often leave persons with disabilities in particularly dangerous situations in times of emergency, particularly as many emergency services are only accessible via voice call (Vivier et al., 2020). Similarly, in a scoping review carried out to understand the situation of people with learning disabilities in emergency care York, Wechuli & Karbach (2022) found that some studies they reviewed reported increased use of EMS while others reported patients with intellectual disabilities to have increased odds of needing emergency care for and dying from ambulatory care sensitive in sub-Saharan Africa, access to emergency services by disabled persons has been a challenge. According to the WHO, about 75% of people with disabilities are living in the developing countries In Nigeria, for instance, WHO estimates put the number of people with disability at 19 million or approximately 20% of the country's population (Oduoye et al., 2022). A study conducted in Ghana found that inaccessible healthcare facilities and equipment were among the biggest barriers to access healthcare services (Imoro, 2015). Another study conducted among South Africans with disabilities reported that healthcare challenges aggravate the existing health conditions in them. They concluded that numerous layers of injustice, inequity, and prejudice exist due to the historical policies of racial segregation and discrimination, which exacerbate the daily challenges faced by individuals with disabilities (Vergunst et al., 2017). Therefore, access to EMS in Africa still remains a challenge and requires concerted efforts from all stakeholders to improve accessibility. conditions. does not undermine the importance of EMS because when skilled

In Botswana, access to EMS by individuals with disabilities is little understood. Studies have been conducted and have focused on access to general health care. For instance, Chinkonono et al (2020) concluded that poor communication between health care professionals and individuals who are deaf and hard of hearing act as an impediment to acquiring proper health care services by individuals who are deaf and hard of hearing. This might prevent individuals with disabilities from utilizing any health services, including emergency medical services. Moreover, disabilities that

could necessitate the use of specialized equipment like ambulances might dissuade disabled individuals from utilizing this equipment.

2.3 Challenges encountered by disabled people

Brown et al., (2023) State that it is highly unlikely that disabled people will receive high-quality healthcare in such settings where they are physically inaccessible, lack resources to address communication needs and taking into consideration the negative attitudes and lack of knowledge about health and social needs of this vulnerable population. There are many factors outlined by the literature that affect access to healthcare by disabled people and it is important to explore the local challenges specifically for accessing EMS. Access to healthcare by disabled people is determined by social, religious, cultural and supernatural beliefs and costs (Adugna et al., 2020). Despite a plethora of information or literature about access to general healthcare, there is still limited information that is specific to Emergency Medical Services, therefore the problem persists, which should ignite more research to propose problem-specific solutions.

Mukhopadhyay & Moswela, (2020) assert that the main barriers to disabled people accessing healthcare Services in Botswana are the poor attitude of the healthcare workers and the lack of budgeting for proper equipment from the government. Emergency Medical Services was started in 2012 by the Botswana Government as per the recommendations of the World Health Organization to all its member states. The main reason for starting the EMS programme is to ensure adequate accessibility of EMS by all populations including disabled people to reduce high morbidity and mortality rates among these populations during medical and trauma emergencies outside the hospital like in households, bars, clubs, churches and any other place where an emergency can occur. It has been noted that the declining EMS access triggers an increase in self-referrals to referral hospitals thus causing congestion at the Accident and Emergency Department of a referral hospital.

2.4 Implications of not accessing EMS

Vecchio et al., (2018) suggest that the implication of inadequate access to Emergency Services by disabled people is the self-referral to Emergency Room (ER). This sentiment is shared by other authors who pointed out that self-referrals will congest ER thereby hindering efficient service delivery which may lead to complications, morbidity and mortality. Muchatuta et al., (2022), reported that EMS in Zimbabwe have reduced mortality of traumatic injuries by up to 25%, therefore it needs to be capacitated and be made readily available and accessible to all the communities including disabled people. This is a clear indication that lack of access to EMS could lead to deaths which could have otherwise been prevented.

Siamisang et al., (2020) assert that the relatively poor performance of Princess Marina Hospital Emergency Department is due to the overwhelmed health system. The authors continued to suggest

that the average waiting time for triage is 4.45 hours while the average waiting time to be consulted by the Medical Officer at PMH Accident and Emergency Department is 27.08 hours. The EMS programme facilitates urgent response to any medical and trauma cases in the community by trained personnel who can either treat and discharge patients on the scene or refer them to the nearest appropriate health facility like a local clinic or referral hospital after thoroughly assessing and stabilizing the patients. Therefore, adequate access to EMS reduces self-referrals and overcrowding of the Emergency department of our tertiary referral hospital.

It is, therefore, worrying to note that disadvantaged groups in our society are not adequately accessing this free lifesaving service hence the need to conduct this study which will facilitate the understanding of the contributing factors or challenges of accessing EMS from the point of view of both the disabled persons as well as the Emergency Medical Officers.

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2.5 Interventions to ensure access to EMS by disabled people

Guidry-Grimes et al., (2020) argue that while catastrophic health emergencies demand immediate responses that often preclude addressing underlying systemic discrimination, there is a moral duty to shine a light on structural disability bias that may distort how crisis standards of care are put into practice. This is an emphasis that measures shall be put in place for equitable distribution of healthcare services and elimination of the existing disparities of access to services particularly by disabled people.

In their submission, Carroll et al., (2022) state that the availability, appropriateness and affordability of resources, in combination with service communication and competency, can facilitate or hinder access based on an understanding of personal (such as needs) and interactional factors. If this is not addressed it will lead to health complications and a possible increase in mortality rate for disabled persons. This also affects the immediate families of disabled persons financially and emotionally when they are transporting them to health facilities when EMS could have taken that responsibility. Scholz et al., (2022) suggest that artificial intelligence like the installation of Automatic Speech Recognition can help EMS dispatchers to be able to pick what the patients with speech disability are saying over the phone and be able to urgently respond to the scene. There shall be alternative ways for disabled people to access to ensure equitable service delivery.

literature alerts us that “despite all the policies and legislations implemented to address these challenges, access to healthcare services for marginalized and vulnerable groups remains a challenge, particularly for persons with disabilities in developing countries (Eide et al. 2015). The study intends to come up with specific problem-orientated recommendations which will enhance the component of health in disability policy formulation which will, in turn, affect mind-set change on Emergency Medical Service Care providers as well as policymakers and thus eradicate the barriers between EMS and disabled persons.

Motoye, (2018) emphasized that there shall be a review and amendment of existing legislature to ensure that disabled persons are included in health, social, economic and other service sectors, therefore removing barriers or disadvantages facing disabled persons. The study will provide more problem-specific suggestions to address the challenges that will be explored and identified.

Since the government provides Emergency Medical Services for free for the whole nation and the services are currently offered in the Capital City, Towns and Major Villages only, it is, therefore, not expected for its access to decline because of the population density in the above-mentioned areas, the knowledge and other resources at their disposal. This phenomenon, therefore, warranted the research to explore the challenges encountered by disabled people in accessing these services in Gaborone Botswana. Access to EMS is critical as it was emphasized by Muchatuta et al., (2022), that in Zimbabwe it has reduced mortality by 25%. Access to EMS could help disabled people benefit from on-spot or on-scene high-quality services by highly trained Paramedics, Nurses and Doctors which may reduce complications, unnecessary hospital Emergency Room congestion, morbidity and preventable mortality among others. It is evident that despite certain general measures to address problems of this nature they persist. The study used information from various pieces of literature that were reviewed together with the personal experiences of the study participants to come up with solid recommendations. However, there is an information gap due to the fact that Emergency Medical Services is a relatively a new health service in Sub Saharan Africa and therefore the articles that are specific to EMS are very few thus far. There was a need for more research in this area to develop knowledge related to it. It has also been noted that mechanisms put in place to address these challenges have not been adequate to address the situation, therefore there was a need for this study so as to bring out robust implementable mechanisms that can enhance the access to EMS by disabled people and not only defining the challenges. The researcher has made progressive recommendations for more EMS specific research and funding to close down the notable gap of shortage of relevant information or scarcity of literature the relevant specific literature.

2.6 CONCLUSION

In this chapter different literatures related to this study were reviewed to get the context of other authors from different regions. It was apparent that majority of the literature reviewed have concluded that disabled people around the world have a lot of challenges in accessing healthcare services and the challenges were attributed to different factors like resources, healthcare workers and existing policies among others.

CHAPTER THREE

3.0 METHODOLOGY

3.1 INTRODUCTION

This chapter presents the methodology that was used in the study. The chapter describes the study design, study setting site, study population, target population, accessible population, inclusion and exclusion criteria. Other sections include the sampling technique, data collection plan and tool, data collection technique, rigor, trustworthiness and bracketing, data analysis plan, data management and storage, plans for dissemination of study findings and plans for utilization of study findings amongst others.

3.2 STUDY DESIGN

This study utilized a qualitative descriptive phenomenological design which intended to explore the challenges experienced by disabled persons in accessing EMS so that there could be evidence-based recommendations to solve it. It was an appropriate design because it enabled the participants to share their experiences in relation to challenges that they have faced as they seek EMS. The study participants had the leeway to tell their own stories in their own words which was later transcribed verbatim by the Investigator. Phenomenology emphasizes the participant's interpretations of their experiences and it describes a common meaning for the individuals who have lived the experiences of the same phenomenon. The descriptive phenomenology describes the essence of participants experiences as they are, without interpretation and allows for bracketing the researcher's own assumptions. The practice of phenomenology is rooted in the idea that all of us construct our reality (Poth, 2018).

3.3 STUDY SETTING

The study was carried out at Home Based Care Centre at Gaborone, Botswana on disabled people. Home-Based Care Centre/Office is a government department within DHMTs which is frequented or used by disabled people from all corners of Gaborone who have registered for a Home-Based Care programme after being assessed by a Medical Doctor, that is where they get some of their healthcare services like physiotherapy, those who use diapers or any other equipment and other therapies also get them from that department. Home Based Care Service have people born with disabilities and disabled patients who are discharged from the hospitals but still need to be cared for and they are cared for by Home Based Care nurses (focal persons) at their respective homes. Anything they need to use like, diapers, wheel chairs physiotherapy services amongst others, are provided by the Government through Home Based Care Centre. It was therefore chosen because it is the only one in Gaborone and it was easier and convenient for the researcher to meet different

disabled people from different parts of Gaborone at the Centre/department when they come for their services and some of them were easily traced and located with the help of the department.

3.4 STUDY POPULATION

The study population for this research consisted of all disabled people at Home Based Care Centre/department in Gaborone, Botswana. Different types of disabilities were considered in this study including physical disability, blindness, deaf and dumb. The population was chosen because it had the characteristics that the Researcher was interested in.

3.4.1 TARGET POPULATION

The target population is the entire population or group that a researcher is interested in therefore the target population for this study was disabled persons in Botswana. The target population is the universe of units from which the sample is to be drawn (Zehnalová & Kubátová, 2019).

3.4.2 ACCESSIBLE POPULATION

The disabled persons who were available at HBCC during the data collection period, who met the criteria i.e., except those above 18 years old but mentally unstable constituted the accessible population. The accessible population is the portion of the target population the researcher can access (Fetzer, 2020).

3.5 SAMPLING TECHNIQUE

Purposive sampling method which is a non-probability technique was used to choose the participants because it allows the selection of the participants who are most relevant to the study and therefore ensuring collection of adequate and relevant data. The participants were chosen based on ability to engage meaningfully, e.g., their mental capacity.

3.5.1 INCLUSION CRITERIA

All disabled persons, 18 years and above who had previously accessed EMS and were willing to take part in the study were included.

3.5.2 EXCLUSION CRITERIA

All disabled persons who had previously accessed EMS but displayed signs of mental illness were excluded from the study.

3.6 SAMPLE SIZE

The sample size was determined by data saturation. Staller, (2021) submits that the researcher should stop interviewing participants when reaching theoretical saturation, when no new information is collected from the study participants or at a point when the researcher does not "see new information in the data related to codes, categories and themes. Data saturation was reached on the 7th Participant, therefore the total sample size for this study was 7 Participants. Different philosophers suggest different ranges of sample sizes in qualitative research, (Staller, 2021) quoted Guetterman, (2015) who recommended that in phenomenological studies sample size should not be more than 21.

3.7 DATA COLLECTION TOOL

Data was collected using an unstructured interview guide. The unstructured interview consisted of one core question which was followed by prompts that came up from the respondents' responses to the core question. The participants were given time to express or elaborate what they meant. The interview questions were translated to Setswana by the Researcher and the Research Assistant before submitting at Human Research and Development Committee(HRDC)for approval.

3.8 DATA COLLECTION TECHNIQUE

Face-to-face in-depth interviews were conducted with disabled persons with the help of the Research Assistant who is a qualified Emergency Care Technician and a sign language interpreter with level 3 sign language certificate. The interviews were guided by one core open-ended question and follow-up questions depending on the responses of the participants, therefore exploring the depth of the phenomenon. The interviews were conducted in Setswana as it was the preference of the participants.

The process of collecting data started with explaining the study's purpose, procedures, and the importance of participation. The interviews took place at Bontleng Guest House. It's a very beautiful, noise free and therapeutic place. It is roughly 800 metres away from Home Based Care Centre which is also situated in Bontleng area within Gaborone. It was chosen because of its proximity to Home Based Care and it was preferred by the participants as it is beautiful and therapeutic. Appointments were set with the participants to attend the interview, one at a time to ensure confidentiality. Every participant was welcomed, the process explained and participants' rights emphasized. Their consent for participation and audio recording was confirmed. The interview guide was followed, with audio recordings made securely. Each interview lasted less than one hour. At the end the participants were thanked for their participation and were assured

that confidentiality will be upheld forever and the research was purely for study purposes. There were debriefs to ensure that the participants were not affected or disturbed during the interview.

Throughout the process the researcher bracketed self to minimize personal experiences or thoughts and preconceptions. This was achieved by documenting all the experiences and thoughts and keeping them separately in journal to avoid mixing them with the findings of the study. This was enforced to prevent being biased or influencing the findings. The Research Assistant played a critical role of interpretation when interviewing the deaf. Two of the disabled people were transported from their respective homes to the venue of the interview while others were transported from Home Based Care Centre. Prior arrangements were made with the participants.

3.9 DATA MANAGEMENT

Data was collected using digital voice recorders and the collected data was transcribed verbatim. The data was translated to English by the Principal Investigator with the help of the research assistant, the Language expert was also consulted though his input was minimal. NVivo software was used to facilitate to generate themes, facilitate coding and organization of data, however because of its limitations data was transcribed manually by the researcher and the transcription was made to be anonymous and codes were used as an effort to protect the participants. Manual transcription was chosen for its robustness in handling qualitative data and its ability to provide a detailed understanding of the participants' perspectives. The transcribed data was then reviewed and cleaned to correct any errors or inconsistencies. This meticulous processing was chosen to ensure that the data is accurate and ready for thorough analysis, maintaining the integrity of the research findings (Muzari, Shava and Shonhiwa, 2022). Digital files were stored on an encrypted, password-protected computer, while the papers for transcribed data were kept in a locked cabinet. This storing approach was chosen to protect the confidentiality of participants and comply with ethical standards, ensuring that only authorized personnel have access to the sensitive data (Muzari, Shava and Shonhiwa, 2022).

3.10 RIGOR AND TRUSTWORTHINESS.

The TACT framework also includes Bracketing which entails the researcher distancing him/herself by influencing the study participants' sharing of their experiences thus ensuring that Rigor and Trustworthiness are maintained. The researcher has maintained Bracketing, Trustworthiness, Auditability, Credibility and Transferability, throughout data collection phase and the whole of this study. The TACT framework is developed as a guide for students to think about issues of rigor in qualitative research studies and provide a general understanding of strategies that can be used to achieve rigor (Daniel, 2019). The Researcher has ensured that he maintain trustworthiness and rigor of the study by abiding by the laid down strategies as documented below:

3.10.1 BRACKETING

In Descriptive phenomenological research design, (Creswell, 2013) defines bracketing as a way of distancing the researcher's preconceived ideas, beliefs and assumptions about the phenomenon under study. This is a very important step that the researcher has employed to ensure that he does not influence the data collection and analysis in any way thus ensuring that the data collected is completely from the study participants. This was achieved by acknowledging the interests and experiences of the author and documenting them separately in a journal.

3.10.2 TRUSTWORTHINESS

The author's prior assumptions and experience has been acknowledged. Categorizing of themes and verifying the preliminary findings with the participants was performed to ensure that the outcome of this study truly represents the views of the sample or participants.

3.10.2.1 AUDITABILITY

The researcher has ensured that there is a systematic procedure of collecting data, analyzing and interpreting data so that it can be easier for an audit if necessary;
Internal auditability: The researcher has aligned the research question with the research design, analysis of data, and conclusions.
External auditability: The users of research outcome can find it easy to carry out an audit if necessary.
All records for data collection, analysis etc. have been kept for audit purposes should it be necessary. Further to ensure auditability the author has described who was involved in the study, how data was collected, where and when data was collected, and how the analysis was undertaken.

3.10.2.2 CREDIBILITY

Credibility has been ensured by using appropriate tools, processes and methods to collect data for this study. The use of appropriate research design, appropriate questions, proper application of data collection method, analyses and outcome reporting.

3.10.2.3 TRANSFERABILIY

The participants of the study were knowledgeable in the phenomenon under study as it directly affects them. According to (Daniel, 2019), Another means of ensuring transferability is to compare the characteristics of the participants or informants to the demographic information available on the group being studied. Thick descriptions of real-life settings and understandings of participants (providing adequate details on the site, participants and methods or procedures used to collect data during study).

Other additional aspects were Conformability which is ensuring that the research was not influenced by the researcher's assumptions or biases and dependability which is the measure of the reliability of the study results whereupon external auditors can be used.

The researcher has used NVIVO software 14 to aid for generating themes which were later sorted manually by the researcher.

3.11 ETHICAL CONSIDERATION

The study adhered to ethical research standards by seeking permission to conduct the research, obtaining informed consent from all participants, ensuring confidentiality and anonymity. These measures were in place to ensure that the study is conducted ethically and responsibly, respecting the rights and welfare of all participants. Permission was sought from UNZABREC and the National Health Research Authority (NHRA). The researcher has obtained a Certificate from NHRA: Registration number NHRAR-R-1421/18/03/2024 and a clearance certificate from UNZABREC. REF. No. 5572-2024. Ethical approval was also sought from Botswana Ministry of Health, Human Research and Development Committee (HRDC) and the permission was granted. REFERENCE NO: HPRD/6/14/1. Another Ethical approval was sort from Greater Gaborone District Health Management Team and the permission was granted on the 06th December 2024. REF: GGDHMT 6/17/1V (138) before the commencement of data collection. Prior to data collection or interviews the participants were briefed about their rights and were also given the information sheet to read and the consent forms which were all explained to the participants. The re searcher ensured that when reading the Information sheet and signing the consent forms the participants were with their witnesses. They were also assured that even though the study has no known physical harm there was a possibility of emotional harm and if any participant was to be emotional before, during or after the interview the researcher would have to pause everything and attend to him or her, offer something to during, console, be empathetic and reassure the participant. The disabled people were also briefed extensively about the importance of this study so that they acknowledge its positive effects in their health or lives so that they do not feel victimized in anyway.

3.12: CONFIDENTIALITY AND AUTONOMY

Participants' autonomy and confidentiality have been ensured. Interviews were carried out in carefully chosen quiet and isolated areas. One participant at a time was taken to the interview venue. Real names or any form of identity were not used, codes were used during transcribing process. The cultural values and religions of the participants were taken into consideration and were respected by the researcher.

3.12.1: FAIRNESS

The consent forms were read to the participants and explained in their preferred language, clarity was accorded when needed so that they could make an informed decision whether to participate in this study or not. Participants were assured that they are free to leave the study at any point and there won't be any form of punishment or blackmailing to them. The was no coercion towards the participants to take part in this research, they participated willingly when they fully understood the importance of this study.

3.12.2: BENEFICENCE

The researcher has taken all steps to protect the participants before during and after the study. The study had no anticipated or known physical harm but some questions were expected to cause emotional discomfort and the researcher was ready to offer emotional support or allow the interview to break if the participant could be emotional. Luckily no participant was harmed either physically or emotionally at any stage of this research, this could also be attested to the highest professionalism of the researcher and the research assistant. The data collection was within a reasonable time so it did not inconvenience the participants that much. Participants, were also made aware that the is not remuneration for the participation, but were briefed on the importance of the findings of the research which will benefit them in the long run and which will be shared to them.

3.13 CONCLUSION

This chapter dealt with Methodology of this study. It has outlined the type of study that was carried out, the setting site and its rational, method of data collection, data collection tool and process, management and storage amongst other things. It is in this that where the plan to collect that was initiated and sufficient data was collected because of efficient mechanisms that were put in place.

CHAPTER FOUR

4.0 PRESENTATION OF RESULTS

4.1 INTRODUCTION

The results of this study from disabled people are presented in this chapter. The study aimed to explore the challenges of disabled persons in accessing Emergency Medical Services at Gaborone, Botswana. The codes and Main themes have been identified on the findings and subthemes have been derived from the main themes of participants. The respondents or participants' responses have also been outlined in this chapter. Data is presented in narration and demographic forms.

4.2 DATA ANALYSIS

Data was transcribed and thematically analyzed. Thematic analysis is used to analyze open-ended data (for example from a survey or interview) to identify and generate patterns from within it (called themes) (Karavadra et al., 2020). Themes were developed using the model of thematic analysis proposed by Braun and Clarke (2006) with the following six steps;

Step 1. Data familiarization: The researcher familiarized himself with the details of the transcribed data. The interviews were conducted in Setswana and were audio recorded for the researcher to listen to them several times at a later stage before translating them to English. The Researcher did this with the Research assistant for the purposes of cross checking and transcribing correctly. The transcribed data was further scrutinized to ensure efficiency and deep understanding or familiarization.

Step 2. Initial coding generation: The researcher developed initial codes and showed an understanding that a higher analytic effort contributes to better research. This was achieved by dividing the data into meaningful units that were summarized. The summarized meaning units were abstracted and labelled with codes. The researcher then read through the data several times in order to identify codes which are similar or linking. The codes were listed and different categories of codes were identified.

Step 3. Search for themes based on initial coding: The researcher looked for the patterns by asking 'what are the patterns among the codes. Themes were developed by interpreting categories of coded data for their underlying meaning. The researcher combined some codes into similar ideas that depict or closely depict the data; thereby preliminary themes and sub-themes were generated.

Step 4. Review of themes: The researcher organized the data around the themes to finalize them for the following step. Some major themes were identified during the search for themes so they were now inspected or scrutinized further to ensure that they are appropriate.

Step 5. Theme definition and labelling: The researcher ensured that the extent to which a particular theme was identified was different from all the other themes. The researcher has therefore identified 5 major themes with various subthemes for final analysis.

Step 6. Report writing: The researcher has modified the analysis according to the identified thematic relationships and patterns there by reporting the challenges of the disabled persons and the experiences or challenges of the EMS officers.

4.3 CHARACTERISTICS OF PARTICIPANTS

Table 2 PARTICIPANTS (n=7)

Participants	Characteristics	Average Number
Gender	Male	5
	Female	2
Age	20 to 30	3
	30 to 40	2
	40 to 50	1
	50 to 60	1
Type of Disability	Deaf	2

	Blind	1
	Physical Disability	4
Marital Status	Single	5
	Married	1
	Divorced	1
Educational Status	Uneducated (No formal education)	1
	Secondary School	4
	Tertiary	2

Table 2 shows the participants who are disabled people registered for a Home-Based Care programme at Gaborone Botswana. They are staying in different parts of Gaborone but getting their healthcare resources from one HBCC. It was men and women of different educational standard and marital status as showed on the above table. The participants had an age range of between 20 and 60 years and presented different types of disabilities.

4.4 MAJOR THEMES, SUB THEMES AND CODES

Table 3

MAJOR THEMES	SUB THEMES	CODES
1.Social Exclusion	1. Discrimination	A. Bias in Service Delivery
		B. Prejudice in Communication
	1. Inadequate Social Support	A. Lack of Support System
		B. Neglect of Disability Needs
	2. Self –Stigma	A. Internalized Stigma
		B. Self-Exclusion
	3. Non-Inclusive Ambulances	A. Inaccessible Transport
		B. Physical Barriers in EMS
	4. Negative Perception	A. Societal Stigma
		B. Misconceptions about Disability
Fragmented Information	1. Unfavorable Media and Communication	A. Lack of Inclusive Media
		B. Information Accessibility Barriers

	2. Limited Information about the Service	A. Lack of Awareness B. Uncertainty about Available Services
	3.Sign language limitation	A. Communication Barriers B. Lack of Sign Language Services
Challenges in Understanding policy	1. Disabled people not prioritized	A. Lack of Prioritization B. Policy Gaps in EMS
	2. Inadequate Skill in caring for the disabled	A. Lack of Disability Training B. Insufficient Medical Knowledge

4.5 THEME 1: SOCIAL EXCLUSION

Some of the participants were of the view that they are socially excluded and are unable to access majority of the healthcare services including Emergency Medical Services. While others blame healthcare officers for unfairly discriminating them because of their disabilities some have blamed the Government and its systems which are not adequately considering them as equal beings. They have common or general view that even though most of the services are free they would not have the capacity to fully access them unless and until they are tailor made for them.

"And the problem with EMS officers is that they discriminate against us, even if I can call them now, they will only come to help me after a very long time but at the hospital they count 5 people then I get assisted" (P 1)

4.5.1 Sub theme 1: DISCRIMINATION

Disabled people with physical to severe physical disability feels discriminated against or ignored by EMS employees because they are not given any special dispensation when accessing the service. They are of the opinion that they are treated better when they referred themselves to the referral hospitals because they are prioritized there.

"I feel like my disability makes people assume I don't need urgent care."(P3)

"They talk to my caregiver instead of addressing me directly, as if I don't exist."(P4)

A participant with hemiplegia also shares almost the same sentiments with the severe physical disabled one. He accused the EMS officers of lack of support or at least empathy towards them and labels it as discrimination which hinders them from accessing the service as they should.

"Your officers never put themselves in our shoes, they do not treat us like other people hence why we find it better to ask private cars to take us to the facility if we have some emergencies or just need to see the doctor" (P 1)

"When I arrive at the hospital, they attend to others first, even if I arrived before them."(P2)

"Healthcare workers sometimes act as if my life is less important than others." (P6)

4.5.2 Sub theme 2: INADEQUATE SOCIAL SUPPORT

Majority of the participants have decried lack of social support especially from EMS providers and family members. There was also notable lack of knowledge from the participants.

"I don't have anyone to help me get to the hospital during emergencies."(P1)

"Emergency responders don't seem to understand the extra help I need.". (P2)

"When I call for an ambulance, they assume I can manage on my own.". (P3)

"I struggle because my family members don't know how to assist me properly.". (P5)

4.5.3 Sub theme 3: SELF STIGMA

Some of the participants have displayed some elements of self-stigma as they believe that they are a burden and the Emergency Medical Service is not for them;

“Hesitate to call an ambulance because I feel like I am bothering people."(P1)
"I feel ashamed asking for help because I don’t want to be a burden."(P2)
"Sometimes, I convince myself my condition is not serious, even when I know I need medical help."(P4)
"I avoid going to the hospital because I feel like I will just slow everyone down."(P7)

4.5.4 Sub theme 4: NON-INCLUSIVE AMBULANCES

The physical and Severe physically disabled participants are of the view that the ambulance used are not user friendly as they are too high and are uncomfortable with no enough protection from falling off the ambulance stretcher. They decry lack of support or help from the EMS officers.

“I am unable to use your ambulances because the last time I used it I nearly fell from the stretcher when the driver applied brakes and getting into that ambulance was a challenge as it was high even when the officers decided to take me with the stretcher, they also struggled to put it back into the ambulance because it was high” (P1)
"The ambulance doesn’t have a ramp, so I struggle to get inside."(P1)
"There’s no space for my wheelchair, and they don’t know how to carry me safely."(P2)
"I had to wait longer for a special private ambulance because yours don’t cater for us.” (P3)
"They don’t have adjustable stretchers or seats that accommodate my needs."(P5)

4.5.5 Sub theme 5: NEGATIVE PERCEPTION

Some of the participants have already developed resistance and negative perception towards the service as they feel that the service is not meant for them, they feel side-lined in favor of non-disabled community.

“Contacting EMS when you have emergency is a waste of time, they do not help us on time, it’s better to use a private car to the clinic if you need help”. (P2)
“I have used EMS before but they ask a lot of questions and keep you waiting forever, I don’t think I will use it again, some1 can die waiting for the”. (P3)
"And People think I am exaggerating when I say I am in pain."(P6)
"Even emergency staff assume my condition is not life-threatening just because I always look ‘sick’."(P7)

4.6 THEME 2: FRAGMENTED INFORMATION

This study has established that information dissemination and general communication between healthcare officers and disabled people remains among the serious challenges of access to healthcare services by disabled people despite some interventions by the government. Majority of them complained that communication barrier between them and EMS officers and other healthcare officers is a health threat to them. They also highlighted that the medium of communication does not always cater for them therefore they miss critical information.

> *"I never see information about emergency services that includes people like me.". (P3)*

4.6.1 Sub theme 1: UNFAVORABLE MEDIA AND COMMUNICATION

The deaf and the blind participants have reiterated that it is difficult for them to access information about EMS or any other healthcare programme because most of the time the medium used to disseminate such information is a barrier to them and they also mentioned that interacting with healthcare professionals including EMS officers is a challenge to them hence most of the time they lack information or knowledge.

> *"Even you can see that I am blind so when you write something about EMS without translating it to brail how am I going to read it? I am educated and I can read for myself if information is availed in the right medium.". (P4)*
> *"They use language that is too complicated, and there are no sign language interpretations on TV." (P7)*

The participants also reported that some of the reason why they are not actively accessing the EMS service is that it is not clear to them how EMS works and when are they eligible to access the service and when not.

> *"And some time when we call your office you tell us that we are no emergency and we should transport ourselves to the nearest facility even though we could feel that we are very sick so we don't know when to and when not to call you for assistance". (P1)*
> *"There are no TV or radio announcements explaining how disabled people can get help during emergencies.". (P4)*
> *"Emergency numbers are advertised, but I don't know if they accommodate people with disabilities.". (P5)*

4.6.2 Sub theme 2: LIMITED INFORMATION SERVICES

There is no adequate information provided to the disabled or vulnerable community about the services provided by Emergency Medical Services. Some of the participants thought this was just

a temporary arrangement to transport them during covid 19 pandemic as the movement restriction was imposed to curb the spread of the virus. This is evidenced by this comment;

"We are behind with information because I used to think that you were only transporting us during covid, so even today we are not paying? you people must come and teach us about EMS so that we can know how and when to use it." (P3)

"We can be able to use the service if we have enough information and the means to contact you, you see I speak with sigh language and this sister is interpreting for you, so how can I call your office if I have emergency when I am alone?" (P5)

"I don't know what type of medical emergencies qualify for an ambulance.". (P6)

"No one has ever explained to me how to use emergency services as a disabled person.". (P6)

"I am not sure if ambulances in Botswana have staff trained to assist disabled people.". (P7)

4.6.3 Sub Theme 3: SIGN LANGUAGE LIMITATION

Most of the officers cannot speak or understand sign language which makes it a communication barrier between officers and the deaf community.

"...for us to speak to the officers we need to write in a piece of paper because they can't speak sign language therefore, I cannot call emergency line for help, because I only use sign language which they do not understands sign language."(P2)

"EMS don't have sign language interpreters, so I have to depend on my family to explain my condition."(P4)

"I feel helpless because I can't explain my pain to medical staff without an interpreter.". (P2)

4.7 THEME 3: CHALLENGES IN POLICY UNDERSTANDING

The disabled people decried lack of support from the leaders who were supposed to protect them with the laws and policy. Most of them were not even aware of the Disability Policy they just think that leaders or lawmakers are overlooking them because they do not have the representatives in those forums.

"It's like we don't exist in the emergency response plan.". (P7)

4.7.1 Sub theme 1: DISABLED PEOPLE NOT PRIORITISED

The participants hold the view that the existing disability policy is not protecting them enough because it is not adequately being applied by the service providers as it is not legally binding by nature.

"Today if you cannot help me on time there is nothing I can do, I cannot hold you liable or responsible for your actions but the policy dictates that you should count

5 people and help me, that is not the case with EMS, they will tell you that they are prioritizing emergencies and they will help you after 2 hours.".(P3)

"The EMS doesn't have any rules about prioritizing disabled patients in emergencies.". (P4)
"There's no fast-track system for people with mobility issues or chronic conditions.". (P6)

4.7.2 Sub theme 2: INADEQUATE SKILLS FOR CARING FOR DISABLED PEOPLE

The service provides are skillful and knowledgeable in terms of caring out their duties but the problem lies with their attitudes and being inconsiderate towards disabled people.

"And I do not doubt the competence of the EMS officers, they are good the problem is the attitude they display while assisting the disabled person, they forget that we have emotions too, they have no sense of empathy, they just want to work against time without considering that you are disabled and cannot be as fast as they want.". (P3)
"Some of them are not yet competent and you will only be told after the person prick you with the needle many times that he/she is an intern. I want to be assisted by skillful and experience officers". (P4)
"...Paramedics don't know how to lift or move me properly, and it causes me pain.". (P4)
"Some nurses and doctors don't seem trained to handle patients with disabilities.". (P5)
"Emergency responders always look confused when dealing with someone like me.". (P6)

4.8 CONCLUSION

The researcher wanted to explore the challenges of disabled persons in accessing Emergency Medical Services in Gaborone, Botswana. The study had assumed in-depth interview style to collect data from disabled people who are registered for Home Based Care in Gaborone. On the data collected from disabled persons there were 3 distinct or major themes that were identified and 10 sub themes with several codes. This study has established that there are a wide range of challenges that hinders disabled persons from adequately access EMS. Some of the challenges attested to the conduct of EMS officers and their knowledge or skill set. Most of the challenges appears to be caused by lack of information or knowledge by the disabled community. Lack of knowledge is perpetuated by lack of proper or inclusive information dissemination mediums and communication barriers between disabled people and service providers.

CHAPTER FIVE

5.0 DISCUSSION OF FINDINGS

5.1 INTRODUCTION

The aim of this study was to explore challenges of disabled people in accessing Emergency Medical Services in Gaborone, Botswana. The study implored a qualitative descriptive phenomenology method whereupon Disabled people were interviewed using in-depth interview method until data saturation was achieved on 7th participant. The findings of this study have been discussed in narration in this chapter.

5.2 SOCIO DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Of the total participants three were females while four were males. Two of the participants had a tertiary education while four had secondary education and one had no formal education, however, there is no evidence to prove that lack of formal education or not being educated have contributed to the challenges encountered by disabled people. The diversity of this characteristics was essential to provide different perspectives of the matter in discussion. All the participants were within the age bracket of 20 to 60 years and the age factor is not associated with the challenges of accessing Emergency Medical Services. The factors that are hindering the adequate access to EMS by disabled people have been identified and categorized into themes and sub themes.

5.3 SOCIAL EXCLUSION

The study has established that disabled people feel discriminated against by healthcare providers because of being differently abled from the rest of the nation, this is consistent with (McBride-Henry, 2023) who argued in their study that the socioeconomic status of disabled people naturally leads to their discrimination against accessing Emergency Medical Services. However, this notion may be real or perceived because the disabled people might be feeling that they have a privilege all the time without necessarily fully understanding the mandate of Emergency Medical Services. In contrary (McKinney, 2021) is of the view that there is no difference in access to Emergency Health Services between the disabled people and abled people but they agree that disabled people need more preventative care part of which is offered through Emergency Medical Services. The disabled people have not really expressed that they are mistreated by the officers but they interpret the delay to help them as discriminatory. Could there have been an effective communication between the EMS staff and disabled people perhaps they would appreciate the challenges that the officers are encountering in terms of rendering the services to them.

On the other hand, it could be true that the officers are deliberately or by chance or unaware discriminating against the disabled community, this can be due to the officers being overwhelmed an or lacking the necessary skill set. Abou-Abbas et al (2024) reiterate that disabled people find it difficult to access Emergency Medical Services mainly because of financial difficulties, fear and lack of service information targeted to disabled people. This study also found that disabled people are deprived of essential information that could help them to access EMS services, however, their social standing did not come out clear in this study as a major factor that contributes to the barriers of accessing the service. All the ambulances used by EMS are just standard ambulances that can easily be used by abled people but pose significant challenges to disabled people particularly to those with severe physical disability. There is no special ambulance designed for them. As a result, some disabled people resort to using family members' private cars with much guarantee of their safety and much comfort and more user-friendly than EMS ambulances.

There is a growing negative perception towards Emergency Medical Services by disabled community because they are dissatisfied with the service as it does not seem to priorities them like other service points, this is in consistent with (Rotoli, et al 2021) assertion that disabled people are dissatisfied because they feel vulnerable and they also have safety concerns in relation to accessing EMS or the use of ambulances. The challenges besieging Government Emergency Medical Services have forced others to look for alternative private EMS which comes at a cost to them. Private EMS is a Healthcare business which services much fewer people and they are an option to people who can afford medical aids. However, this trend further strains the trust of Government EMS by disabled people as they feel that the privates are helping them far much better than the Government EMS.

5.4 FRAGMENTED INFORMATION

It has been noted that poor information dissemination or communication barriers have been identified as a challenge that leaves the disabled community without any or enough information about the services offered by EMS, this is consistent with the study by (Cournane et al, 2018) who opined that disabled people are discriminated from emergency health services access mainly due to communication barriers.

When the people who are supposed to access a service do not have information about the same service it is almost practically impossible to adequately access or use it. There are also issues of patients' or clients' rights that are attached to these communication barriers, the main one being violating their right to healthcare and others being compromising their right to confidentiality and privacy as we might need a third party for translation. Communication came across as a challenge particularly for the deaf community when they have to access the Emergency Medical Services and even during consultation or interaction with the officers when someone has called the ambulance for the deaf person. This is mainly due to officers not being equipped with sign

language skills which compromises the quality of care rendered to the patient. The same also erodes trust between the officers and the disabled person. (McBride-Henry, 2023) have submitted and reiterated communication barrier is a major challenge for EMS officers to sufficiently and adequately render services to the disabled community.

Knowledge about EMS is still lacking amongst disabled people mainly due to communication problem however (Li et al, 2019) argues in their submission that it is not necessarily the lack of if information which perpetuate in-access to EMS but rather the individual attitudes or believes or behavior like choosing to wait for family to assist rather than contacting EMS. Najafi et al (2022) have emphasized the importance access to EMS in all trauma and Medical Emergencies than using private vehicles, they pointed out that the mortality rate is lower when using EMS ambulances with trained personnel. Some disabled people thought that provision of EMS services was limited to the period of covid 19 and have now been abolished. This was one of the unfortunate assertions from this vulnerable group which was expected to access this service like everyone else and it can be pointed to lack of adequate knowledge or information. Sometimes the EMS officers can provide the medical or healthcare direction and some advices over the phone while the ambulance is enroute to the scene but this is almost impossible when dealing with patients who cannot speak over the phone. According to (Rotoli et al, 2021), EMS officers have expressed challenges while dealing with the deaf people and have claimed that most of the important information is lost on communication between them and the deaf people which affect service access and delivery.

5.3 CHALLENGES IN POLICY APPLICATION

Government Emergency Medical Services was established in 2012 in Botswana and up-to-date the EMS policy have not been approved yet, so EMS is basically functioning with a policy draft. The disability policy was supposed to be aligned with EMS policy and all other existing policies in an effort to enhance service delivery to disabled people. It is currently difficult for EMS officers to implement contents of Disability policy because they will derail them from the core mandate of EMS. It was established that the officers who are supposed to render services to the disabled people are not well established to care for this vulnerable group which requires special care. The study by (Alharthy, 2023) argues officers who had enrolled for some Courses or any form of learning about taking care of disabled people are producing positive results in terms of disabled patients care.

In this study officers have been found not to show much empathy as expected by the disabled people and the issue of confidentiality continued to crop up because at times there will be students in the ambulance who needs to learn from the registered officers and some disabled people views that as a breach of their confidential right of privacy. The same thing happens when there is a need for an interpreter because most if not all Gaborone EMS officers does not know sign language. This creates a gap between service delivery and access to service. It has appeared from the interaction with the disabled people that a lot need to be done to orient EMS officers on how to render service to disabled people and with the general principles of respect and empathy. This

would go a long way into rebuilding trust and respect amongst EMS and disabled community. There is a general believe from the disabled people that the Organizations is not doing enough to improve the response time when contacted despite adequate roads in the city, however the same was asserted by (Alanazy, 2021) who then clarified that an ambulance may be delayed by many factors to arrive at the scene including congested traffic and lack of cooperation among other road users. Clinical knowledge, experience, and skills contribute to emergency care personnel's professional capabilities in making clinical decisions (Bijani, 2021). This have proved to be a serious challenge which also borders on ineffective information dissemination to the deaf community and serious difficulties when consulting them when they have medical emergencies.
Some of the disabled people decried that there are no conducive ambulances for them and they are often told that there is general shortage of both ambulances and staff as well as other equipment that is necessary for efficient and effective service delivery to them. This can be attested to poor policy and lack of political will to extend these services to the disabled people. The landscape of EMS operations is constantly evolving, posing a number of challenges that require rigorous research and innovative solutions (Basnawi, 2024). The is a high likelihood that EMS officers are generally demotivated which might be evident and apparent to the patients or disabled people who would interpret it as being moody or lack of respect and empathy to some extent.

5.4 UTILIZATION OF STUDY FINDINGS

The findings of this study were disseminated to Botswana High Commission in Zambia, Ministry of Health in Botswana and The University of Zambia Medical Library as well as the School of Nursing Science's library. A manuscript has been submitted to a peer reviewed journal for publication.

The author hopes that these study findings will contribute to solving the challenges encountered by disabled persons in accessing and utilizing EMS therefore helping them to meet the stipulated highest standard of health. The findings will also direct policymakers to include disabled persons at each level of healthcare as well as reduce the burden on the immediate relatives of disabled persons thus achieving the World Health Organization's aim of Universal Health Coverage. It is also expected that these findings be used by other University of Zambia students in the future, for reference when they are undertaking their research work. The Ministry of Health both in Zambia and Botswana and other relevant stakeholders will also use the study findings for policy formulation on the access and utilization of EMS by disabled people and other vulnerable groups. The findings will also be used by the EMS office and Disability office at Gaborone Botswana to appreciate the challenges faced by disabled persons at an operational level and to implore appropriate measures to ensure equitable healthcare provision.

5.5 IMPLICATIONS TO NURSING

Implications have their significance on different aspects which include education. research, practice and administration. These insights provide a framework for understanding the challenges endured by both the disabled people and Emergency Medical Service offices on accessing and providing the service.

5.6 NURSING EDUCATION

These findings imply that there is an urgent need to incorporate the other forms of communication like sign language to the syllabus of healthcare workers especially EMS officers or the relevant courses can be provided as post basic course. There is also an immediate need for EMS officers to enroll a comprehensive targeted outreach programme that will sell their services to disabled communities. It is also upon the disabled people who are able to hear, read and write to educate themselves about programmes which are designed to save lives like Emergency Medical Services among others.

5.7 NURSING RESEARCH

There is a provision for more research to be undertaken at a wider or larger scale so that there can be an appreciation of more significant and reliable findings that can be generalized to the whole country. The fact that Emergency Medical Services is relatively new in Botswana and in Africa in general should trigger even more interest to researchers to explore this new service and how it is accessed or utilized or accepted by different groups of people on different geographical locations and different social and economic standing as well as the entire healthcare workforce.

5.8 NURSING PRACTICE

The findings of this study implies that Emergency Medical Service officers shall be capacitated in order to effectively render their services to all, including disabled people. While performing their duties the officers have to always be empathetic to all their clients or patients because the nature of their duty is very delicate and sensitive but can be the bridge between life and death. EMS officers and all other healthcare workers must always treat their clients with respect and avoid discriminating against anyone and they shall observe all the ethical principles at all times.

5.9 NURSING ADMINISTRATION

There is a need for administrators or managers to accept that there are special group of people who need special considerations when making decisions like the type of ambulances to buy and the methods of accessing health services. This implies that the management shall do away with blanket approach decision making strategies and incline more on evidence-based decision in order to provide timely and effective healthcare services to all including disabled people and other

vulnerable groups. Disabled people encounter a wide range of challenges on accessing Emergency Medical services. The inability to timely access adequate EMS services has some serious implications on the lives of disabled people ranging from complication of their conditions or exacerbation of their injuries, preventable morbidity, preventable mortality as well as congestion of referral hospitals due to unwarranted self-referrals. Since the healthcare is totally free in Botswana, when many people are hospitalized, it has financial implications on the Government and congestion at the referral hospital slows down the services rendered. EMS officers are not spared from these challenges because they are equally hindered from delivering or rendering the service effectively to the disabled people. All these can be worsened or resolved by the administrators with their well-informed decisions.

5.10 CONCLUSION

This was a qualitative descriptive phenomenological study which aimed to explore the challenges of disabled people in accessing Emergency Medical Services in Gaborone, Botswana. The methodology implored was effective as it managed to bring out relevant themes and subthemes that were related to the research question and the objectives of the study. In overall there are overlapping challenges and they border on communication barriers, lack of adequate equipment or resources and lack of knowledge among others. The challenges are diverse and need multifaceted or collective approach from all stakeholders in order to achieve the WHO Universal coverages or equitable healthcare. The study has made some recommendations to the challenges that were explored.

5.11 RECOMMENDATIONS

Based on the findings of this study, the following recommendations are proposed to address the challenges of access to EMS by disabled people.

5.12 TO THE GOVERNMENT

1. The government of Botswana through Human Research Development Committee (HRDC) should invest more on research which is inclined to disabled people and their access to healthcare services which will guide them during national budget and formulating policies.
2. The existing EMS policy draft shall be finalized and approved and shall be aligned to Disability Act to enhance service delivery to the disabled community.
3. Policy makers shall be in a position to accept recommendations from different researchers, scrutinize them and implement those that are deemed appropriate, feasible and applicable. The government was also advised to include the disabled people representatives in decision making forums so that they can be able to articulate their issues more efficiently.

4. The government shall provide adequate resources for including well trained human resource and user-friendly modified ambulances to optimize the access to EMS by disabled people and other vulnerable groups.
5. Introduce alternative mediums of contacting EMS other than a phone call e.g. an option of an SMS or uploading a simplified software that can be readily accessible and easily used by any 1 to access EMS services, this will help those who can no speak properly or at all to have other means of contacting EMS ambulances when they have an emergency.

5.13 TO EMS OFFICERS

1.In an effort to eradicate communication barriers EMS officers should engage in self-development courses like the sign language short courses where the government have financial shortfalls which will enable them to communicate with the deaf people without interpreters.
2.EMS officers should engage in a robust targeted outreach services tailor made for disabled people in order to improve information dissemination and restore trust and confidence to the affected group.

5.14 TO EMS DEPARTMENT/ OFFICE(MANAGEMENT)

1. The department should engage experts in protocol, etiquette and ethical issues to train their staff about the importance of abiding to ethical considerations especially when dealing with the disabled people, this will be able to help them to always be empathetic and respectful to all their patients not only the disabled people hence customer satisfaction.
2. The department shall engage Botswana Telecommunication to detach the Emergency toll free line from the power grid so that it is not inactivated during power cuts, this is crucial for the emergency service to be accessed anytime regardless power situation.
3. The Institution shall source a readily available and accessible psychologist for EMS officers due to their traumatizing nature of duty and being overwhelmed because of shortage of staff and right resources which psychosocial problems and poor service delivery.

5.15 TO DISABLED PEOPLE

1.It is recommended that disabled people accept their conditions and avoid self-discrimination because it takes a person to accept his or her situation for others to accept him or her then given the opportunity, they will be able to access all the services that are accessed by the abled people.
2. Disabled people are encouraged to participate in community programmes or decision-making forums and to open up about their challenges so that they can be part of the solutions of their challenges and therefore will be able to benefit from what is intended for them and improve their health or lives.
3.The disabled people should change their attitude towards the EMS or healthcare, acknowledge the gaps and positively embrace the efforts to improve the services with their input.

5.16 STRENGTHS OF THE STUDY

The study was able to get the views or experiences of disabled people from almost all corners of Gaborone because they all get their services from one Community Home Based Care Centre.
Methods implored in data collection, and analysis made it to be authentic and valuable as there were systems in place to ensure adequate data collection and efficient analysis resulting in the best finding.

5.17 LIMITATIONS OF THE STUDY

The results might not be a true reflection or representation of all people leaving with disability because of the small sample size.
Confidentiality was to some extent compromised because the principal investigator had to be joined by the research assistant who was also the interpreter.
There was a delay in collecting data as the process was elongated by multiple research committees that had to grant the permission.
There was a challenge of literature review because of the fact that EMS is a new concept in Africa therefore few studies have been undertaken about it.

5.18 OVERCOMING THE LIMITATIONS

After waiting for the permission from Ministry of Health Human Research Development Committee (HRDC) and GDHMT Research Committee which were given on 14th of October and 06th of December respectively and the data collection process was expedited with the help of the research assistant.
A recommendation has been made for this research to be undertaken at a larger scale funded by HRDC to get the true picture of the challenges at Botswana.
Related literature was reviewed to augment the shortage of specific literature.

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APPENDICES

Appendix I: Participant Information sheet 01-Disabled people and Key informant

STUDY TITLE: EXPLORING CHALLENGES OF DISABLED PEOPLE IN ACCESSING EMERGENCY MEDICAL SERVICES IN GABORONE BOTSWANA

Principal Investigator: Mr. Collen Mactover Moatshe

Participants Information Sheet

Purpose of the research project

I am a final year Master of Science Emergency and Trauma Nursing student at the University of Zambia. I am supposed to undertake a research project as part of my training. Therefore, my research project aims to explore the challenges of disabled people in accessing Emergency Medical Services in Gaborone, Botswana. This study intends to bring out the challenges that hamper the efficient access of EMS by disabled people with the hope of eradicating them through the relevant stakeholders and improving healthcare equity.

Why are you being asked to participate

In this study, we need to interview disabled people in Gaborone and you have been recognized as a suitable participant since you are one of the disabled people. I will be interviewing other disabled persons as well until I am satisfied that I have exhausted all the information from you but I hope to interview less than 10 of you.

Procedure

If you agree to take part in this study, I will request you to sign a consent form which will be a declaration that you willingly took part in this study. I will interview you face to face at your convenient private space /place and at your convenient time. The interview will not last longer than 1 hour. You will be allowed to withdraw from this study anytime you wish. With your permission, I will be audio recording our interview so that I will be able to effectively analyze our conversation at a later stage without distorting the experiences, you have shared with me. Your name or any other form of your identity will not be recorded in this study. The findings of this study will be shared with you, the University of Zambia and the Zambia and Botswana Ministry of Health.

Risks/Discomforts

There are no known obvious physical risks associated with this study directly or indirectly. However, some questions may trigger some emotional discomfort and you are assured of My maximum support should you feel emotional before, during and after the interview.

Benefits

This interview is part of my research in which I want disabled people to equally benefit from healthcare, particularly EMS. If achieved this will be a great benefit to the disabled people, the government and your families as you will have to worry less about accessing EMS in case of emergency and other healthcare services in general. There is no tangible immediate benefit for you from this interview but it may have some positive emotional aspects after sharing and offloading that which have been tormenting you.

Payments

There will be no payments for your participation in this study. However, you will be transported to and from the place of the interview and you will be offered a snack.

Protecting information/Confidentiality

The information you will provide will be locked in a secure place and it will only be accessible to the Researcher. Your name or any other form of your identity will not appear in this information.

What happens if you do not participate in the study?

If you decide not to participate in this study you are free to do so and you are assured that there will not be any form of punishment, blackmailing or sabotage to yourself, if you want to withdraw from this study, you are free to do so and there will be no repercussions.

Who do you contact if you need clarity or have problems?

You can contact me, Collen Mactover Moatshe at 76971364/+260770758644
Po Box 2103 Mochudi, Botswana or Roma Flats 39, Lusaka Zambia
collenmactovermoatshe@gmail.com

OR

University of Zambia Biomedical Research and Ethics Committee on Telephone: 256067, Email: unzarec@unza.zm

OR

My Principal Supervisor Dr Marjorie-Kabinga Makukula at marjorie.kabina@unza.zm or +260977889430

OR you can contact

The Chairperson
University of Zambia Biomedical Research Committee Ridgeway Campus

PO Box 50110
Lusaka Zambia

Appendix II: Consent form

Factors contributing to a decline in access and utilization of Emergency Medical Services by disabled people in Gaborone Botswana.

I _____, agree to take part in this study voluntarily and without any form of coercion. I am a legally consenting adult with a sound mind. I understand the purpose of the study as well as the usefulness of the findings. My rights as a participant have been clearly explained to me and I also know the risks and benefits of this research.

Participant's signature/ thumbprint: _____ Witness signature/ thumbprint: _____

Date: _____

*For further enquiries or clarification do not hesitate to contact UNZABREC by

Telephone: at 256067, Email: at unzarec@unza.zm

OR

Mr. Collen Mactover Moatshe on 76971364/+260770758644 Gaborone Botswana or Roma Flats, Lusaka Zambia.

OR Dr Majorie Kabinga-Makukula contact details are +260977889430.

Appendix III: Data collection tools

In-depth Interviews Schedule/Guide
Interview for Disabled people and their key informant
Challenges of disabled people in accessing Emergency Medical Services in Gaborone Botswana.
Date: _____
Interviewee Study ID: _____
Interviewer name: _____
Facility: _____
Age: Gender:

OPENING
Good morning, Madam/Sir
My name is Collen Mactover Moatshe, a Master of Nursing student from the University of Zambia and I would love to ask you a few questions about accessing Emergency Medical Services.
The purpose of this interview is to gather as much information as we can on the challenges of disabled people in accessing EMS and we hope that the outcome of this research will bring the much-needed solutions that can help both the Ministry of Health and the disabled people so that there could be an equitable access to health care and EMS in particular. This research can be made successful by your participation. The interview will take a maximum of 45 minutes. You are encouraged to feel free and ask questions where you need clarity and I will also be asking you follow-up questions where I need clarity. As you answer the questions, I will be writing down your answers in your own words and I am kindly asking for permission to also record the interview so that I can listen to it later and make sure that I have captured your answers in your exact words. If you are ready, we can start.

Thank you.

INTERVIEW GUIDE

ONE CORE QUESTION that was be followed by prompts

What are the challenges of disabled people in accessing EMS?

Answer

What do you know about Emergency Medical Services?

Answer:

How do you access EMS?

Answer:

What are the challenges of accessing EMS by disabled people that you know of;

1. At the policy level
2. At the facility level.
3. At the individual level.

Answers and follow-up questions depending on the answers given:

What is your take on the use of EMS ambulances or private vehicles when you have an emergency?

Answer:

How can you describe the attitudes of EMS employees in your own words?

Answer:

What is the distance from the EMS base to your home?

Answer:

What is the importance of EMS that you know of?

Answer:

What can you say about the response time of EMS to an emergency scene?

Answer:

What can be done to improve EMS access to disabled people in your opinion?

Answer:

Can you briefly describe your experience with EMS?

Answer:

CLOSING

We are now concluding our interview.

How did you feel before this interview and how do you feel now?

Answer:

I want to thank you for taking part in this interview I may call you and meet you again if I need some clarity if you are comfortable with that. This interview will be used for research purposes only because the aim is to close all the gaps that we find in our health system and to ensure that disabled people equally benefit from our health system. Is there anything that you want me to clarify?

Thank you.

Appendix IV: permission to collect that from disabled people in your department

P o Box 2103
Mochudi
Botswana

30th October 2024

The Coordinator
District Health Management Team
Private Bag X28
Gaborone
Botswana

Dear Sir

RE: REQUEST TO COLLECT DATA FROM DISABLED PEOPLE REGISTERED FOR HOME BASED CARE PROGRAME

The above subject matter refers;

I Collen Mactover Moatshe, a Master of Science Emergency and Trauma Nursing student at University of Zambia request for a permission to collect data from disabled people at Home Based Care Centre in Gaborone DHMT. The purpose of the research is for fulfilment of the Masters programme and is only for academic purposes.

Your positive response will be appreciated.

Yours Faithfully

Collen M.Moatshe

Appendix V: Timelines (Gantt Chart)

Table 4

Activity	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	FEB
Proposal writing										
Submission of proposal										
Ethical clearance										
Data collection and entry										
Data analysis and dissertation defence										
Writing of the final report										
Submission of final report										

Table 9: The timeline is that the final submission should be on February 2025.

Appendix V1: Budget

Table 5

ITEM/SERVICES	QUANTITY/DURATION	COST IN KWACHA
National Health Research Authority	Once	**2040**
Ethical approval (UNZABREC)	Once	**1500**
Internet	1 Month	**1600**
Printing and stationery	Assorted	**2500**
Petrol	1 Month	**7000**
Accommodation and food	1 Month	**5500**
Participants' snacks and lunch	During interactions	**3600**
2 Research assistant (i.e., who know sign language and to read rail)		**1000**
Other Miscellaneous expenses	As the need arises	**1000**
		TOTAL 25,740

Table IX: This table shows all the funds used for this study from the ethical approval stage to the final submission.

Budget Justification

This budget was intended to facilitate the carrying out of the study, it has helped to meet all costs that was expected in undertaking this study. The costs included; ethics clearance, stationary and secretarial services, logistics and contingency (10%). Ethics costs facilitated the submission and approval of the study while secretarial and stationary costs facilitated data collection, submission of report and dissemination.

Logistics had ensured the feasibility of the data collection process. The study was partially funded by the researcher and partially funded by the Botswana Government through the Botswana High Commission in Zambia.

Appendix VII: Ethical Approvals

The Approval from UNZABREC was granted on 22nd August 2024.

Reference number: **5572-2024**

The Approval from Health Research and Development Committee (HRDC) was granted on 14th October 2024.

Reference number: **HPRD/6/14/1**